

TRIAL TRANSCRIPT OF DR. GEORGE VINCENT DIGIACINTO; 2001 Trial Trans. LEXIS 1132

SUPERIOR COURT OF MASSACHUSETTS, SUFFOLK COUNTY, DEPARTMENT OF THE TRIAL COURT

SUCV98-3119

April 11, 2001

Reporter

2001 Trial Trans. LEXIS 1132 *

BRENDA CARDARELLI, Individually and as Guardian of MICHAEL J. CARDARELLI, Plaintiff v. EMAD ESKANDER, M.D., DAVID M. FRIM, M.D., JOHN K. PARK, M.D., RAFAEL H. LLINAS, M.D., EBEN ALEXANDER, III, M.D., AND R. MICHAEL SCOTT, M.D., Defendants

Expert Name: Dr. Vincent DiGiacinto, M.D.

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Counsel

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Judges

BEFORE Justice Catherine A. White, Suffolk Superior Court, Boston, Massachusetts

Proceedings

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	T	SS	T	SS
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[1] PROCEEDINGS

[2] Wednesday, April 11, 2001

[3] THE FOLLOWING PORTION OF THE AFOREMENTIONED TRIAL

[4] HAS BEEN ORDERED:

[5] THE COURT: All right, Ms. Ristuben.

[6] You are going to be calling the next witness?

[7] MS. RISTUBEN: Yes, Your Honor.

[8] THE COURT: All right.

[9] MS. RISTUBEN: Dr. DiGiacinto.

[10] THE COURT: Okay. Ladies and

[11] gentlemen, we are now starting the evidence,

[12] and I will remind you what I said about notes.

[13] If you want to take them, you can. You don't

[14] have to. If they help you, go ahead.

[15] Ms. Ristuben, for your planning, we

[16] will probably take our break at about 11:00.

[17] MS. RISTUBEN: Thank you, Your Honor.

[18]

[19] GEORGE V. DIGIACINTO, M.D. SWORN

[20]DIRECT EXAMINATION BY MS. RISTUBEN:

[21]Q Good morning, sir.

[22]A Good morning.

[23]Q Would you please tell the Court and

[24]jury your full name.

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[1]A George Vincent DiGiacinto.

[2]Q And you are a doctor?

[3]A Yes.

[4]Q Where do you live now?

[5]A I live in Bronxville, New York.

[6]Q And where are you employed?

[7]A At the St. Luke's Roosevelt Hospital

[8] **[*3]** Center in New York, New York.

[9]Q You might have to keep your voice up

[10]just a little bit.

[11]Would you briefly outline for the

[12]Court and jury your educational background

[13]starting with college.

[14]A I attended Columbia College in New

[15]York city and graduated in 1966 with a B.A.

[16]Degree. I graduated from the Harvard Medical

[17]School in 1970 with an M.D. Degree.

[18]From 1970 to 1972, I was a general

[19]surgery house officer at the Roosevelt Hospital

[20]in New York city. From '72 to '74, I was a

[21]medical officer in the United State Navy.

[22]Starting in 1974 and finishing in July of 1978,

[23]I was a neurosurgery resident and fellow at

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[1]Columbia Presbyterian Medical Center in New

[2]York.

[3]Q So as a doctor you went through

[4]medical school and graduated from Harvard here

[5]in this area in 1970?

[6]A Yes.

[7]Q And then -- would you explain to the

[8]jury what you go through as a resident? You

[9]first had a surgical residency and then a

[10]neurosurgical residency?

[11]A That's correct.

[12]Q Describe what those involve.

[13]A The two years of surgical residency

[14]was exactly [*4] that. It involved rotations on

[15]general surgery and a number of the

[16]subspecialties including neurology, gynecology,

[17]medical rotations, and mostly the practice of

[18]general surgery at a first and second year

[19]resident level.

[20]Q Now by the time you get through

[21]medical school can you put an M.D. next to your

[22]name?

[23]A You can put an M.D. next to your name,

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[1]yes.

[2]Q Okay. And then you have additional

[3]training beyond that time; is that right?

[4]A Yes.

[5]Q Now from the time you finished

[6]neurosurgical residency in 1978, since that

[7]time have you been employed full-time as a

[8]neurosurgeon?

[9]A I have been in the practice of

[10]neurosurgery since then, yes.

[11]Q And where has that been?

[12]A I have been since 1978 an attending at

[13]St. Luke's and Roosevelt Hospital in New York

[14]city, which are not one hospital. For the

[15]first several years, I was an attending at

[16]Columbia Presbyterian where I did my training.

[17]At times along the way for twenty years, I was

[18]an attending at Harlem Hospital in New York

[19]city. Currently in addition to St. Luke's

[20]Roosevelt I **[*5]** am attending at Beth Israel in New

[21]York city and Lenox Hill Hospital. But my

[22]primary practice and overwhelmingly all of my

[23]practice is at St. Luke's and Roosevelt.

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[1]Q And are you the director of the

[2]neurosurgery service there?

[3]A I have been director since 1992. I am

[4]currently co-director. We have added two new

[5]neurosurgeons, and I am co-director with them.

[6]Q And as director -- you have been

[7]director since 1994 in that capacity?

[8]A Acting since '92, I believe, and

[9]appointed since '94, yes.

[10]Q Okay. And in that capacity what do

[11]you do?

[12]A I am obligated now with the other

[13]neurosurgeons to oversee all neurosurgical

[14]procedures, to train general surgery house

[15]officers and any medical students that rotate

[16]through the hospital in the field of

[17]neurosurgery and to supervise their management

[18]of patients.

[19]Q So you have direct supervisory

[20]responsibilities over the resident staff?

[21]A Yes.

[22]Q And are you board certified?

[23]A Yes, I am.

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[1]Q When did you receive board

[2]certification?

[3]A In 1981.

[4]Q [*6] And that in neurosurgery?

[5]A Yes, it is.

[6]Q What does that mean that you are board

[7]certified?

[8]A To become board certified, you have to

[9]complete an accredited neurosurgical residency.

[10]During that residency, you are allowed to sit

[11]for part one of the boards, which is the

[12]written portion. Having completed

[13]that and completing your residency after, at

[14]the time I took the boards, at least two years

[15]of practice, you are qualified to sit for part

[16]two, which is the so-called oral examination.

[17]If successfully completing that, which

[18]I did in 1981, you are then board certified.

[19]Q And in part of your duties are you an

[20]instructor?

[21]A Yes.

[22]Q And where do you do your teaching?

[23]A At times in my practice I have done

Page 11

[1]instructing at Columbia, at Harlem Hospital.

[2]Now it's exclusively at St. Luke's Roosevelt

[3]Hospital.

[4]Q And you have certain publications to

[5]your name?

[6]A Yes.

[7]Q In the area of neurosurgery?

[8]A That is correct.

[9]Q On a variety of topics?

[10]A Yes.

[11]Q And I have been counting on your

[12] [*7] re' sume' there are about twenty such

[13]publications?

[14]A I think that's about right.

[15]Q Including a chapter in a book?

[16]A Yes, co-author of a chapter in a book.

[17]Q Now describe, if you would, what the

[18]field of neurosurgery encompasses?

[19]A The field of neurosurgery encompasses

[20]the evaluations of problems involving the

[21]brain, the entire central nervous system, which

[22]would include the spinal cord and nerves

[23]emanating from the spinal cord.

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[1]It would involve the diagnosis of

[2]those problems by evaluation of the patient,

[3]evaluation of laboratory studies, radiographic

[4]studies, electrical studies, a variety of types

[5]of studies to give information as to any

[6]abnormal problem involving the nervous system.

[7]Once that diagnosis was made, either

[8]by the neurosurgeon or in conjunction with

[9]other physicians, if appropriate surgical

[10]intervention would be involved, and that also

[11]comes completely under the realm of

[12]neurosurgical treatment.

[13]Q And so you do -- as a neurosurgeon,

[14]you operate on the brain?

[15]A Yes.

[16]Q And operate on the rest of **[*8]** the central

[17]nervous system including the spinal column.

[18]A Yes.

[19]Q And you have a full-time neurosurgery

[20]practice in an office in New York?

[21]A Yes, I do.

[22]Q And describe what that practice is

[23]like in a general sense. Do you see patients

Page 13

[1]every day?

[2]A I either see patients or operate on a

[3]daily basis basically year round. I'm not sure

[4]how to describe it beyond that.

[5]Q Okay. Does your typical day include

[6]going to the hospital and seeing patients in

[7]the office?

[8]A It would involve making rounds on any

[9]patients in the hospital, seeing any consults

[10]that I was called to see, seeing office

[11]patients either for consultation pre-

[12]operatively in preparation for surgery or post-

[13]operatively after surgery. It would also

[14]involve being available for any emergency call

[15]at one of the hospitals where I was working if

[16]I was on call at that time.

[17]Q And you also do consulting work as you

[18]are doing here today, correct?

[19]A Yes, I do.

[20]Q And for how many years have you been

[21]doing this kind of work as an adjunct to your

[22]practice?

[23] **[*9]** A Probably since about 1987 or '88,

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[1]something like that.

[2]Q And in the work that you do for

[3]lawyers, such as myself, do you do that on your

[4]own time, nights and weekends?

[5]A If I have time during the day, I might

[6]read a case or consult with an attorney during

[7]the day, but all of the above, yes.

[8]Q And do you from time to time consult

[9]with attorneys who represent physicians?

[10]A Yes, I do.

[11]Q And sometimes you consult with

[12]attorneys who represent patients or their

[13]families?

[14]A Yes, I do.

[15]Q And approximately what percentage do

[16]you do for either of those?

[17]A Very roughly I would break it down,

[18]seventy-five percent for defense and twenty-

[19]five percent for plaintiff or patients.

[20]Q So about seventy-five percent of the

[21]work you do as a consultant on legal matters,

[22]or medical legal matters, is for physicians?

[23]A Yes.

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[1]Q And about what -- do you have an

[2]estimate of how much percentage of your total

[3]income you derive from this type of work?

[4]A It's probably around five or ten

[5]percent. I don't keep any separate **[*10]** records as

[6]all the income from both my practice and from

[7]any medical legal work is collected by the

[8]hospital. I never actually see it.

[9]Q And from time to time if a lawyer,

[10]such as myself who represents a patient or the

[11]family of a patient, sends you records to

[12]review, do you from time to time tell them that

[13]they don't have grounds for a medical

[14]negligence action?

[15]A I offer that opinion if it's

[16]appropriate, yes.

[17]Q Okay. And from time to time have you

[18]received medical records that you are reviewing

[19]on behalf of a physician, do you tell them that

[20]in your opinion that there was evidence of

[21]medical negligence?

[22]A Yes, I do.

[23]Q And you give depositions from time to
Page 16

[1]time and for testimony?

[2]A Yes.

[3]Q And at times is that in your capacity

[4]as an expert consultant as you are doing here

[5]today?

[6]A Yes.

[7]Q And at times is that in your capacity

[8]as a treating doctor as well?

[9]A Yes.

[10]Q Now in order to be here with us today

[11]and help educate the jury about the issues in

[12]this case, what did you have to do in your

[13] **[*11]** practice?

[14]A Wednesday is my full office day.

[15]Usually I see patients from about 7:30 in the

[16]morning until 5:00 or 6:00 at night. And so

[17]that group of patients, which would include

[18]both new patients and follow-up patients, would

[19]have to be canceled, and hopefully the new

[20]patients would be rescheduled and the follow-

[21]ups would be rescheduled.

[22]Q And about how many patients had to

[23]canceled for today?

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[1]A I usually see a total of about thirty

[2]patients on a day like this; whether that was

[3]the exact number, I'm not sure.

[4]Q And you arrived in Boston last night

[5]from New York?

[6]A That's correct.

[7]Q And you will be leaving at the end of

[8]today?

[9]A Yes.

[10]Q And what is the amount that you charge

[11]for this service that you are providing to us

[12]today?

[13]A Five thousand dollars.

[14]Q For the day?

[15]A Yes.

[16]Q Now on my request a few years ago did

[17]you review materials having to do with Michael

[18]Cardarelli's care and treatment?

[19]A Yes, I did.

[20]Q What did you review?

[21]A Initially my recollection is I

[22]reviewed [*12] the hospital chart revolving around

[23]the admission of July 2nd or 3rd, as well as
Page 18

[1]two or three CAT scans, and an MRI scan, which

[2]were done in sequence around that time. I

[3]believe that was the majority of what I

[4]reviewed at that time.

[5]Q And subsequently, did you review

[6]depositions in the case?

[7]A Yes, I have.

[8]Q And have you read the depositions of

[9]all of the physicians who are involved and are

[10]defendants in the case?

[11]A I believe I have, yes.

[12]THE COURT: I'm going to stop you for

[13]a minute.

[14]You have heard this term "deposition,"

[15]ladies and gentlemen. Depositions are

[16]procedures that take place before trial at

[17]which a witness or a party is called into a

[18]lawyer's office. They are questioned by the

[19]lawyer who set up the deposition or requested

[20]it, and then they may or may not be questioned

[21]by the other lawyer or other lawyers.

[22]All of that testimony is put down in a

[23]transcript or in a booklet form, what we call a

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[1]transcript. It looks kind of like that.

[2]And in the course of this trial, there

[3]will be reference to depositions, [*13] and there may

[4]be -- transcripts may be referred to, witness

[5]may look -- may read or look at transcripts.

[6]And sometimes even depositions can be on a

[7]videotape so that there is both a transcript

[8]and a video of the testimony.

[9]And it's all under oath and taken

[10]down, as I said, by a reporter, just as

[11]everything in this courtroom is taken down.

[12]MS. RISTUBEN: Thank you, Your Honor.

[13]Q In reviewing the materials on my

[14]request, were you attempting to determine

[15]whether the standards of good neurologic care

[16]were complied with in the care that was

[17]rendered to Michael Cardarelli?

[18]A If I substitute the word neurosurgical

[19]care, I will say yes.

[20]Q Thank you. And you reached certain

[21]conclusions in that regard?

[22]A Yes, I did.

[23]Q Now I would like to start discussing

Page 20

[1]the anatomy of the brain, and I'm going to be

[2]using some of the chalks, so let me bring them

[3]to you.

[4]A Do you want me to get up?

[5]THE COURT: Yes. But let's figure out

[6]where they -- this is a difficult courtroom to

[7]use exhibits in, so let's -- why don't you put

[8]it up, **[*14]** see how big it is and figure out where

[9]it should go.

[10]The witness can step down if you want

[11]to.

[12]THE WITNESS: I might be able to -- do

[13]you have a pointer?

[14]MS. RISTUBEN: I do have a pointer.

[15]THE COURT: Okay.

[16]THE WITNESS: Perhaps I can stay here

[17]by the microphone.

[18]Q Okay. Would you describe for the jury

[19]what the basic parts of the brain are?

[20]A We have two very schematic or

[21]simplified views of the brain, one looking from

[22]the side, kind of slicing the head down the

[23]middle. And we can see the nose. We can see
Page 21

[1]secondthe mouth. And the large areas, which

[2]are numbered, are the frontal, parietal, the

[3]temporal and the occipital lobe, the portions

[4]of the brain and the main portion of the brain

[5]cavity.

[6]Q Before you move on, you just described

[7]the frontal lobe, the parietal lobe, the

[8]temporal lobe, and the occipital lobe. The

[9]occipital is in the back?

[10]A Yes.

[11]Q And the frontal is in the front. And

[12]there are the same lobes on either side of the

[13]brain?

[14]A Correct. I was going to refer to the

[15]second diagram, which is, [*15] as I'm facing you a

[16]so-called coronal section is made. The head is

[17]sliced right down. And again, this area cuts

[18]through probably about this area. So if I make

[19]a slice here, we would again see the lobes of

[20]the brain. This is the temporal lobe. If it's

[21]far enough forward, this is the frontal lobe.

[22]The additional things we see here,

[23]which are perhaps better demonstrated on this,

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[1]are number one, fluid spaces inside the brain.

[2]They are made of nice blue water. These are

[3]called ventricles.

[4]We also see a rigid structure called

[5]the falx, f-a-l-x. It's labeled here. This is

[6]a relatively non-movable structure. We also

[7]see another rigid structure which divides the

[8]big cranial fossa from the smaller cranial

[9]fossa, the supertentorial and infratentorial to

[10]be more technical areas.

[11]Q Supertentorial meaning above the

[12]tentorium?

[13]A Yes. And the tentorium is another one

[14]of these tough membranes which you might

[15]picture as having a circle -- circular opening

[16]in the middle of it through which the portion

[17]of the brain called the brain stem passes. It

[18]is seen in this **[*16]** view and in this view. And the

[19]significance of this is that this compartment

[20]above the tentorium is somewhat separate from

[21]the compartment below it, and this is again a

[22]relatively rigid structure.

[23]Q Now what is a brain made up of?

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[1]There's brain tissue.

[2]A Well, there's -- the contents of the

[3]brain cavity or brain tissue, we call this gray

[4]matter and white matter. They are made up of

[5]multiple types of cells. There are also blood

[6]vessels feeding the brain. There are fluid

[7]spaces called ventricles filled with cerebral

[8]spinal fluid which really looks like water.

[9]And then there are any other number of lining

[10]structures, the so-called ependyma, the dura,

[11]the skull itself out here.

[12]Q So the basic contents of a brain are

[13]brain tissue and a blood supply?

[14]A Brain tissue, blood vessels and

[15]cerebral spinal fluids, spaces with cerebral

[16]spinal fluid in them.

[17]Q Okay. And what does cerebral spinal

[18]fluid do?

[19]A I don't know if we really know. It

[20]circulate around the brain.

[21]Q And it goes down into the spinal

[22]column?

[23]A Yes. It's formed [*17] by structures within
Page 24

[1]a number of ventricles, including the so-called

[2]lateral ventricles. It circulates through the

[3]brain in a fairly complex system and then

[4]circulates over the surface of the brain and

[5]gets reabsorbed in special structures on the

[6]surface of the brain.

[7]Q And the second diagram, if you would

[8]just describe what it shows for basic anatomy.

[9]A This is another view of the sagittal

[10]side of the brain, but I think the one that we

[11]are affect about is more this one. And this is

[12]a schematic diagram of what happens if you work

[13]your way through the -- from the surface down.

[14]It doesn't show skin which is outside,

[15]but then the skull is very obvious. There is a

[16]potential space between the tough lining

[17]membrane of the brain called the dura, and the

[18]inside of the bone, which we call an epidural

[19]space.

[20]For the most part the dura tends to be

[21]stuck right to the bone in the skull, so it's a

[22]so-called potential space that may fill up with

[23]something, but very often doesn't exist.

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[1]Inside the dura, there is a space

[2]between the first and the [*18] second and third

[3]layers of the meninges, or lining of the brain,

[4]called the arachnoid and pia. There is a

[5]layer, which this I think tends to really

[6]exaggerate, of spinal fluid on the surface of

[7]the brain between the arachnoid and the pia and

[8]then the brain itself.

[9]Q Okay. Now the brain stem is in the

[10]middle of the brain. If you could point to

[11]that area.

[12]A Well, if you call this the middle of

[13]the brain, the brain stem runs here and runs

[14]down until it forms the spinal cord.

[15]Q Okay. And the spinal column, what

[16]does that contain?

[17]A The spinal column, which is not really

[18]drawn here, is comprised of bones or so-called

[19]vertebral bodies. Inside that, the dura

[20]continues to line the central nervous system

[21]which now becomes the spinal cord. Exiting

[22]from the spinal cord and making its way out

[23]through the dura between each set of bones are
Page 26

[1]nerve roots. There are associated blood

[2]vessels and spinal fluid running around the

[3]spinal cord down there too.

[4]Q So does the spinal cord provide the

[5]nervous system for the rest of the body?

[6]A It provides [*19] a pathway for the nerves

[7]and the nervous impulses to get from the brain

[8]through the brain stem down to the body.

[9]Q Okay. Now in your work you deal with

[10]brain tumors from time to time?

[11]A Yes.

[12]Q And there are a number of different

[13]kinds of brain tumors?

[14]A That is correct.

[15]Q And in this case we are dealing with a

[16]tumor that has elements of ependymoma?

[17]A That's what it's been called on

[18]pathology, yes.

[19]Q And have you in your practice operated

[20]on tumors that were ependymoma tumors?

[21]A Yes.

[22]Q Describe for the jury, please, what an

[23]ependymoma is?

Page 27

[1]A The ependyma is the lining of the

[2]ventricles and of the inner structures of the

[3]brain. An ependymoma is an overgrowth of cells

[4]of that ependyma lining. It can form a

[5]consolidation of solid tumor or can, as in this

[6]case, be associated with the development of so-

[7]called cystic fluid. It's not like spinal

[8]fluid. It tends to be much yellower and full

[9]of protein.

[10]Q And are some types of brain tumors

[11]more operable than others?

[12]A I think that depends on the type **[*20]** of

[13]tumor and the location of the tumor.

[14]Q And why is the location important?

[15]A Accessibility is an important

[16]consideration. If we want to call this the

[17]middle of the brain again, getting there is a

[18]lot harder than getting to the surface of the

[19]brain and the frontal lobe and a relatively

[20]silent area of the brain. The structures

[21]involve what those structures do in terms of

[22]neurological function. How much brain you have

[23]to go through to get to a tumor are all

Page 28

[1]considerations in terms of how location can

[2]affect difficulty of surgery.

[3]Q Now we talked a few minutes ago about

[4]what's contained in the brain and the skull

[5]itself. There's the brain tissue, the vascular

[6]system feeding the brain, and then there is the

[7]cerebral spinal cord. If there is a tumor in

[8]there what happens?

[9]A Depending, again, exactly where the

[10]tumor lies, it will displace some of those

[11]structures. The word tumor itself I believe

[12]means mass. Tu mors is a lump. So as the mass

[13]or the lump takes up space, something has to

[14]move out of the way.

[15]And depending on whether it's growing

[16] **[*21]** from, for example, the meninges or the surface

[17]of the brain, it may push the brain away. If

[18]it's growing within the substance of the brain,

[19]it will push the brain away from within.

[20]Rather than just pushing it down, it will

[21]expand within and probably in the process

[22]destroy some of the brain tissue.

[23]Q What is a tumor made up of?

Page 29

[1]A A tumor can be made up of any type of

[2]cells. Technically, if someone stuck a rock in

[3]there, you could call that a tumor because it's

[4]anything that takes up space that shouldn't be

[5]there. It can be made up of cells. It can be

[6]made up of blood vessels. It can be made up of

[7]small fluid collections, or in the case we are

[8]going to deal with today a larger solitary

[9]fluid collection. It may also contain blood or

[10]hemorrhage within that fluid collection or

[11]within the tumor tissue itself.

[12]Q And tumors grow over time?

[13]A Yes.

[14]Q How do tumors grow?

[15]A I'm not sure I can give you a

[16]scientific method. They have a blood supply

[17]which allows cells to multiply, and that will

[18]cause the number of cells to increase the

[19]tumor. The **[*22]** tumors which contain cystic fluid,

[20]the fluid is formed by the tumor, and that mass

[21]of tumor that's taken up by the cyst will

[22]gradually increase as that fluid increases as

[23]well.

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[1]Q And do certain tumors grow more

[2]quickly than others?

[3]A Yes.

[4]Q And in this case, we are dealing with

[5]an ependymoma, and from what we know about it,

[6]can you say if that was a slow or a quickly

[7]growing tumor?

[8]A I think it certainly grows faster than

[9]some very indolent slow growing tumors, but

[10]it's much, much slower than a very rapidly

[11]dividing, very malignant tumor.

[12]Q Now is there a concept that

[13]neurosurgeons are trained in that has to do

[14]with intracranial pressure, the pressure

[15]relationship within the brain?

[16]A Yes.

[17]Q Describe that and why it's important.

[18]A The brain is a closed vessel. We have

[19]seen pictures of the skull. And I have

[20]described earlier that in the big hemispheres,

[21]or the bigger portion of the brain, there is a

[22]fairly rigid structure called the tentorium

[23]that has a circular opening. So there is a

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[1]compartment. You can call [*23] it a jar with a

[2]small opening.

[3]There is a second area called the

[4]cerebellum or posterior fossa, that again leads

[5]to another opening called the foramen magnum.

[6]Again, the skull is a rigid structure, and the

[7]only real opening is at this lower end here.

[8]But the compartments within the skull also are

[9]contained.

[10]The concern about pressure is that if

[11]pressure builds up because something is

[12]expanding. It may be the brain itself

[13]swelling. It may be a blood clot growing. It

[14]may be a tumor with or without a cyst, or it

[15]may be just a cyst growing.

[16]As it grows, it's going to take up

[17]space. And since the jar is tightly closed,

[18]that growth is going to cause pressure around

[19]it, and the bigger the growth, the more the

[20]pressure.

[21]Q Now you mentioned cyst. What is a

[22]cyst?

[23]A A cyst is a collection of fluid.

Page 32

[1]Q And do some tumors produce cysts and

[2]others don't?

[3]A Yes.

[4]Q And if a tumor produces a cyst, what

[5]is inside it?

[6]A Usually fluid which contains a high

[7]protein content. There may be some cells of

[8]the tumor, some [*24] cells of the lining wall of the

[9]cyst. But it is mostly what I will call

[10]proteinaceous or yellowish fluid for the most

[11]part.

[12]Q Okay. And that comes from the cells

[13]in the brain secreting into the --

[14]A It's probably produced by the cells of

[15]the tumor secreting into this space.

[16]Q And can there also be some blood that

[17]is contained within a cystic component?

[18]A It can be, yes.

[19]Q And how does that happen?

[20]A If there is a hemorrhage within the

[21]tumor, the blood, if it hemorrhages from, for

[22]example, the wall of the cyst, the blood would

[23]go into the cyst and mix up with the cyst fluid

Page 33

[1]itself.

[2]The blood actually has the ability to

[3]settle down so that the red cells, if they are

[4]still formed, will settle down to the bottom

[5]and form what we call an hematocrit effect.

[6]You will actually see a layer where the red

[7]cells -- for example, if you have a plain tube

[8]of nothing but blood, you might see the red

[9]cells settle to the bottom and the serum settle

[10]to the top.

[11]Well that can happen if there is

[12]hemorrhage into a cyst with the red cells

[13] [*25] settling through the serum and the cystic fluid

[14]itself.

[15]Q And does the hemorrhage -- does the

[16]tumor bleed because of the nature of the blood

[17]supply to the tumor?

[18]A I'm not really sure how to answer that

[19]question. Sometimes tissue will outgrow its

[20]blood supply, and the blood vessels will die,

[21]and you will get some hemorrhage. That's one

[22]mechanism that is thought to apply.

[23]Q Now if a tumor has a cystic component

Page 34

[1]to it that contains the fluid, as you have

[2]described, do you assume that fluid will

[3]continue to secrete into that cystic component

[4]as long as the tumor is there?

[5]A I think that's a safe assumption, yes.

[6]Q Now in terms of intracranial pressure

[7]caused by the presence of a brain tumor or

[8]cystic brain tumor, why is that a risk to a

[9]patient?

[10]A The presence of pressure and an

[11]expanded mass causing displacement of

[12]structures can lead to a term that we will get

[13]familiar with called "herniation."

[14]I mentioned this whole idea that this

[15]is a closed jar. And in the supertentorial

[16]space, or in the big hemispheres of the brain,

[17]if pressure [*26] builds up and a mass is building up

[18]pressure to the point that the brain has to

[19]leave this compartment, it's got to go through

[20]something, and the only opening available to it

[21]is through this thing called the tentorium.

[22]Pushing, forcing brain tissue through

[23]that structure is called herniation. It causes

Page 35

[1]pressure on the brain stem. It causes pressure

[2]on nerves going through there. It causes

[3]pressure on blood vessels going through there

[4]which can lead very suddenly to very sever and

[5]very often, unfortunately, irreversible damage

[6]to structures.

[7]Q What does the compression of nerves

[8]and the blood supply due to herniation what

[9]does that do to the brain's ability to

[10]function? How does it cause damage?

[11]A Well, if I understand the question,

[12]pressure may cause -- for example, there is

[13]something called the third nerve, which

[14]controls the pupillary function and the lid

[15]function. If there is enough compression at

[16]the tentorium of that structure, the pupil may

[17]become dilated. The lid may droop. Also eye

[18]movements may be affected so that the eye

[19]doesn't move properly. **[*27]**

[20]If there is pressure on the blood

[21]vessels coming through here, it may cause an

[22]infarction of the brain up here. If it's part

[23]of the carotid artery, if it's something called

Page 36

[1]the posterolateral cerebral artery, it may cause

[2]infarction down here. It's hard to

[3]give you a single answer because any of the

[4]structures, nerves, blood vessels, or the brain

[5]stem itself, can -- which is composed of nerve

[6]and nerves carrying impulses, any loss of

[7]function may cause damage to any of multiple

[8]neurological functions that exist.

[9]Q So the risk of herniation is the risk

[10]of getting severe brain damage to any one or

[11]all the parts of the brain?

[12]A Yes.

[13]Q And that's about the most serious risk

[14]that a patient could be under with increasing

[15]intracranial pressure?

[16]MR. DAILEY: Objection.

[17]THE COURT: Sustained. Want to

[18]rephrase that question again?

[19]MS. RISTUBEN: Thank you, Your Honor.

[20]Q Is the risk of herniation one of the

[21]most serious outcomes of increased intracranial

[22]pressure?

[23]A It certainly is, yes.

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[1]MS. RISTUBEN: This would be [*28] a good

[2]time to break.

[3]THE COURT: At this point we will take

[4]our morning recess, ladies and gentlemen.

[5]

[6](Whereupon, court was in recess.)

[7]

[8]THE COURT: Ms. Ristuben.

[9]MS. RISTUBEN: Thank you, Your Honor.

[10]Q Now, Dr. DiGiacinto, just before we

[11]took a break we were affect about herniation

[12]and the risks of brain herniation in a brain

[13]tumor patient; do you recall?

[14]A Yes.

[15]Q Now are the sign of intracranial

[16]pressure that could lead to a herniation

[17]something that medical students learn in medial

[18]school?

[19]A Yes.

[20]Q And so they learn to detect and be

[21]vigilant for signs of increasing intracranial

[22]pressure?

[23]MR. DAILEY: Objection, Your Honor.

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[1]THE COURT: Sustained.

[2]Q In medical school, doctors are trained

[3]to recognize and act upon the signs of

[4]intracranial pressure?

[5]MR. DAILEY: Objection.

[6]THE COURT: I think the objection is

[7]leading?

[8]MR. DAILEY: Right.

[9]THE COURT: Would you not lead the

[10]witness, please.

[11]MS. RISTUBEN: Thank you, Your Honor.

[12]Q When a doctor is **[*29]** in medical school,

[13]what do they go through to learn about the

[14]signs of intracranial pressure and the risks?

[15]A One of the parts of medical school

[16]training would involve teachings in neurology

[17]and neurosurgery. And part of that instruction

[18]would be to learn what the clinical signs are,

[19]what the complaints are, what the findings on

[20]examination are to facilitate the diagnosis of

[21]brain herniation.

[22]Q And what are the signs of increasing

[23]intracranial pressure and herniation?

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[1]A They can vary a great deal from

[2]complaining of headache, complaining of nausea

[3]and vomiting, being confused, being sleepy, or

[4]uptunded is a term we use, having trouble with

[5]vision, trouble with light, being irritated by

[6]light, being unsteady. And again, depending on

[7]what neurological findings might be found, they

[8]may notice weakness. They may notice double

[9]vision or blurring of their vision among other

[10]things.

[11]Q Is the term papilledema something that

[12]medical students learn in the course of their

[13]training?

[14]A Yes, they do.

[15]Q And what is that?

[16]A Papilledema is **[*30]** a finding on

[17]examination that is made by looking into the

[18]eye and looking at something called the fundus

[19]what an ophthalmoscope. Looking into the eye

[20]gives us a view in a sense inside the brain.

[21]And papilledema is a finding where the so-

[22]called fundus becomes abnormal and shows signs

[23]of pressure within the brain itself.

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[1]Q And is that because the nerves leading

[2]the eye have become affected from pressure?

[3]A Well, the pressure is transmitted to

[4]the optic nerve, which is really like an

[5]extension of the brain.

[6]Q And how does one detect papilledema?

[7]A It's detected by direct observation

[8]into the back of the eye. The most commonly

[9]used instrument is an ophthalmoscope.

[10]Ophthalmologist and optometrists obviously have

[11]more sophisticated instruments, such as

[12]slitlamps to get a better look, but normally in

[13]the office or hospital setting the so-called

[14]ophthalmoscope would be used.

[15]Q And is an ophthalmoscope something

[16]that neurologists and neurosurgeons commonly

[17]use to detect papilledema?

[18]A Yes.

[19]Q Is an ophthalmoscope something that

[20]nurses [*31] generally have available to them to use

[21]to detect papilledema?

[22]A I think they would have it available.

[23]I'm not sure that I would be qualified to say

Page 41

[1]that they do or don't try to check for that

[2]though.

[3]Q And other signs of potentially

[4]increasing intracranial pressure there was

[5]mentioned the sixth nerve palsy. What is that?

[6]A Well, I mentioned that depending on

[7]what nerve wasn't working properly, what

[8]neurological structure wasn't working properly,

[9]you might find changes in neurological

[10]examination. The sixth nerve is a nerve that

[11]controls one of the movements of the eye,

[12]specifically looking to the side.

[13]And if a patient were noted to have

[14]some trouble looking to the side with one or

[15]both eyes, that would point to a diagnosis of

[16]the sixth nerve not working properly, and in

[17]the setting of the question of increased

[18]intracranial pressure that would be a sign that

[19]there was pressure.

[20]Q And the size of the pupil, could that

[21]be affected by intracranial pressure?

[22]A Really answering the same way, the

[23]third cranial nerve is another nerve which [*32] can

Page 42

[1]become compressed as a result of herniation,

[2]and that controls the size -- one of the things

[3]that controls the size of the pupil.

[4]Q So if a pupil is found to be -- if one

[5]pupil is found to be larger than the other,

[6]that could be a sign of increasing intracranial

[7]pressure?

[8]A As I mentioned, increased intracranial

[9]pressure can result in compression of the third

[10]nerve. That could be seen on examination as an

[11]enlargement of the pupil.

[12]Q And can increasing intracranial

[13]pressure also have an effect on the reflexes?

[14]A Yes, it can.

[15]Q And what is hyperreflexia?

[16]A Reflexes are obtained by taking a

[17]reflex hammer or an instrument and tapping at

[18]various points along the body, the elbows, the

[19]arms, the knees. And we have a normal range of

[20]how much the knee jumps, from just a little to

[21]swinging off the table. The more active, the

[22]higher the number. Hyperreflexia is a somewhat

[23]subjective statement that says: Gee, that

Page 43

[1]reflex is a lot more active than the normal

[2]range.

[3]Q And is that something that

[4]neurologists and neurosurgeons **[*33]** look for in

[5]determining whether there is increasing

[6]intracranial pressure?

[7]A Again, it's one of the findings that

[8]may correlate with increased intracranial

[9]pressure.

[10]Q And what is ankle clonus?

[11]A Hyperreflexia has just been described.

[12]Ankle clonus is another way of eliciting

[13]hyperreflexia. Instead of taking a reflex

[14]hammer and tapping the back of the ankle, a

[15]physician, or a nurse, or person might take the

[16]foot and push it upward, that stretches the so-

[17]called achilles tendon. And in the face of

[18]hyperreflexia, the ankle will bounce down. And

[19]this bouncing may be one beat, two beats. It

[20]may be sustained or continuous beating, and

[21]that's called clonus. It's another

[22]manifestation of hyperreflexia.

[23]Q And are these tests for papilledema

Page 44

[1]and hyperreflexia and pupillary asymmetries

[2]things that physicians learn about in medical

[3]school?

[4]A Yes.

[5]Q And certainly as a working neurologist

[6]or neurosurgeon, you would know that these are

[7]potential signs of intracranial pressure?

[8]A I would certainly expect so, yes.

[9]Q And you also **[*34]** noted continuing pain as

[10]a sign of increasing intracranial pressure,

[11]describe that please.

[12]A I think the term would most

[13]appropriately be headache. Patients may say

[14]head pain. But one of the hallmarks of

[15]increased intracranial pressure is headache.

[16]Q And if a patient is vomiting, what

[17]significance does that have?

[18]A Vomiting is another sign that is

[19]correlated with increased intracranial pressure

[20]and would be another piece of information that

[21]would be important to include in the picture.

[22]Q Now you have reviewed the whole

[23]Children's Hospital chart of Michael Cardarelli
Page 45

[1]from July 2nd to the 4th of 1995?

[2]A To my knowledge everything that I have

[3]had available, I have looked at, yes.

[4]Q Okay. And are you familiar then with

[5]the signs and symptoms that he presented with

[6]on July 2nd?

[7]A Yes.

[8]Q If we can look at those for a moment.

[9]You have the chart in front of you with the

[10]numbered pages.

[11]A I have a copy, yes, and it has numbers

[12]in the lower, right-hand corner.

[13]MS. RISTUBEN: Would this be a good

[14]time to pass out the [*35] books to the jury?

[15]THE COURT: All right. Are you ready

[16]to pass out these notebooks to the jury?

[17]MR. DAILEY: Yes, Your Honor.

[18]THE COURT: Okay. While these are

[19]being passed out, these notebooks contain

[20]portions of some of the exhibits, is that

[21]right, but not the whole thing?

[22]MS. RISTUBEN: Portions of the medical

[23]records, Your Honor, of Children's Hospital.

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[1]THE COURT: All right. Portion of the

[2]medical records. When you get to the jury

[3]room, you will have the whole -- all of the

[4]medical records, but these are going to be

[5]records that will be referred to frequently.

[6]Q Okay. If you would look at the first

[7]page of what you have in your notebook, the

[8]Emergency Department record, you reviewed this

[9]record in reviewing this case, did you?

[10]A I have reviewed all of these pages,

[11]yes.

[12]Q And this contains the findings and the

[13]history that Michael presented with on July

[14]2nd?

[15]A Yes.

[16]Q Okay.

[17]THE COURT: Could I just stop you a

[18]minute.

[19]MS. RISTUBEN: Yes.

[20]THE COURT: These notebooks are yours,

[21]ladies and [*36] gentlemen. For example, if somebody

[22]defines a term and you want to remember it,

[23]feel free to write it on these records.

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[1]Q If you would tell the jury please and

[2]the Court what in your review of this record

[3]from the ER what were the significant findings

[4]when Michael presented on July 2nd to

[5]Children's Hospital?

[6]A Going over this page 1, or the sheet

[7]that is shown here, it's mentioned that patient

[8]claimed of "two weeks of severe headache,

[9]constant" in nature, "worst headache of life,

[10]wakes with it, lasts through the whole day."

[11]All of those are very significant

[12]findings. The positive -- there are negatives --

[13]such as no blurring. He does note "throbbing."

[14]He notes "photophobia," which is sensitivity to

[15]light.

[16]Q What does that mean exactly?

[17]A If you are in bright light, you will

[18]close your eyes and cover because it causes

[19]pain, it causes irritation.

[20]It notes, and I'm just going through,

[21]it says, "Dizzy positive, dizzy plus weak."

[22]Actually, I'm not sure whether I can

[23]read that with certainty. I think it says,

Page 48

[1]"Dizzy plus **[*37]** weak." So I believe that's a

[2]positive.

[3]Other positive relative to increased

[4]pressure. It's mentioned under "General, tired

[5]appearing, moderate distress," which I think is

[6]a more non-specific finding. But those are the

[7]major findings in the history, which certainly

[8]are consistent with increased intracranial

[9]pressure.

[10]Q Okay. And the record states that it's

[11]a constant and new pain and the worst headache

[12]of his life?

[13]A Yes, as I pointed out.

[14]Q Okay. And there was a history of

[15]vomiting as well, noted?

[16]A Yes, that's correct.

[17]Q Okay. And there was a note also that

[18]he had taken Tylenol? It's on that record

[19]somewhere in the first note?

[20]A Again, I'm sure it's there. I recall

[21]it. I will keep reading it and finding it

[22]specifically. But I do recall, yes, he was

[23]taking Tylenol.

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[1]Q Okay. Now did you -- when you read

[2]the record, did you come to an understanding as

[3]to whether there was any papilledema noted in

[4]the first ER visit?

[5]A Whether it was on this sheet or not,

[6]my recollection is that the fundi were felt to

[7]be **[*38]** clear. There was not any papilledema noted

[8]on examination.

[9]Q Okay. And did you come to an

[10]understanding as to whether his reflexes were

[11]tested in these early stages?

[12]A In reading the chart it appears that

[13]it's noted under "Neuro., deep tendon reflexes

[14]two plus out of four." So they were tested and

[15]they were listed as two plus out of four.

[16]Q What does two plus out of four mean?

[17]And could you point out on the chart next to

[18]you where you read that so the jury has a

[19]reference point.

[20]A There is an "neuro" and then an "X"

[21]and then it says "DTR's," which stands for deep

[22]tendon reflexes, "two plus out of four." We

[23]grade reflexes in a variety of numbers, but
Page 50

[1]this examiner has decided that four would be

[2]the maximum. And you might grade them zero as

[3]not findable, one plus, two plus, three plus,

[4]four plus, obviously implying more and more.

[5]Two plus out of four is middle of the

[6]road and indeed would be normal. My

[7]interpretation of this would be that they were

[8]felt to be normal reflexes.

[9]Q And would those have been the reflexes

[10]that you get by [*39] tapping a hammer?

[11]A Again, deep tendon reflexes are by

[12]tradition elicited by tapping the hammer at

[13]specific points.

[14]Q Okay. And this record also notes next

[15]to that note it says, "CN II through VII" --

[16]Roman Numeral II through VII -- "intact." Does

[17]that refer to the cranial nerves?

[18]A I believe it says Roman Numerals "II

[19]through XII intact."

[20]Q Okay.

[21]A But it does refer to the cranial

[22]nerves, yes.

[23]Q Thank you. Okay. So this is how he

Page 51

[1]presented in the ER on July 2nd, correct?

[2]A Yes.

[3]Q All right. And as a result of this

[4]presentation, some tests were ordered including

[5]a CAT scan?

[6]A That's correct.

[7]Q And you reviewed the CAT scan films

[8]and the CAT scan report from those films?

[9]A Yes, I have.

[10]Q Okay. So this CAT scan was done at

[11]what time?

[12]A These are two slices or pictures from

[13]a CAT scan performed on July 3rd, 1995. There

[14]is a notation on the bottom "1:28 a.m." I

[15]believe that represents the time that the study

[16]was done.

[17]Q Okay. Now he was admitted -- came

[18]into the Emergency Room, **[*40]** the record notes, at

[19]10:50 p.m., is that right?

[20]A On the 2nd of July, yes.

[21]Q And so these CAT scan were done within

[22]a few hours of him getting to the ER?

[23]A That's correct.

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[1]Q And what you have in front of you

[2]aren't the actual CAT scan themselves, are

[3]they? They are not the actual films?

[4]A No, that's correct.

[5]Q Okay. Those are positive images made

[6]of the films?

[7]A Yes.

[8]Q So that we can view them without the

[9]use of light box?

[10]A Yes.

[11]Q And now you were describing how these

[12]images appear. They are slices of the head?

[13]A Yes. I think -- I'm sorry.

[14]Q Would you describe how it's done.

[15]A I guess there's not a question. The

[16]question is?

[17]Q Would you describe how a CAT scan

[18]produces images like this?

[19]A It's an X-ray study, and I'm not going

[20]to even claim to understand how the X-ray beams

[21]are passed through the brain and recorded. But

[22]they are designed to allow what we will

[23]commonly call slices of the head to be taken.

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[1]So as the X-ray beam passes, it will choose one

[2]level and **[*41]** cut through all of those structures.

[3]And the X-rays will be recorded on a screen and

[4]then printed on a film to show us a so-called

[5]cross-section of the brain.

[6]Q And when you see a CAT scan film

[7]produced by the Radiology Department, you

[8]actually see a whole lot of images side by

[9]side; is that right?

[10]A The pictures are usually printed up

[11]twelve, or eighteen, or nine to a sheet

[12]depending on what size they are reproduced in

[13]and what size the sheet is.

[14]Q And do they correspond to different

[15]levels of the head?

[16]A Usually -- well, they do correspond to

[17]different levels of the head. When we obtain

[18]the CAT scan, in addition to the slices, we

[19]will have available a so-called scout film,

[20]which will be an X-ray of the head looking from

[21]the side or from the front, and then delineated

[22]on that picture will be lines with numbers that

[23]correspond, for example, to image 9, which is

Page 54

[1]the one that this is labeled.

[2]That enables us to look at the scout

[3]X-ray and know where it is. We can also tell

[4]by looking at the structures that are seen

[5]where the study is, what **[*42]** level in the brain the

[6]study is.

[7]Q Now when a patient goes in for a CAT

[8]scan, is he lying on his back?

[9]A Routinely for a brain CAT scan the

[10]patient is lying on his back.

[11]Q How -- when we look at these images

[12]that are next to you there, would you describe

[13]to the jury how it is that we come by those

[14]images? How -- strike that.

[15]There was a left tumor diagnosed in

[16]Michael Cardarelli, was there not?

[17]A Yes.

[18]Q Was that a frontal tumor?

[19]A Yes.

[20]Q Okay. Would you explain to the jury

[21]why it looks like the tumor is on the right of

[22]these images?

[23]A The tumor picture shows it on the
Page 55

[1]right side. We are seeing a mass. By

[2]convention since very early in the days of CAT

[3]scan imaging, left is right, and right is left.

[4]And routinely on the study to be extra certain

[5]that that's correct, we have labels that show

[6]left and right.

[7]But just as with chest X-rays that we

[8]are used to looking at and almost all

[9]radiographic images, with exception but in

[10]general, a physician is accustomed to looking

[11]at a film where the right is the [*43] left, and the

[12]left is the right.

[13]Q Thank you. Now would you describe for

[14]the jury please what you see on these CAT scan?

[15]A What we are seeing is the cross-

[16]section of the brain going through the frontal

[17]lobe. This is the so-called posterior fossa.

[18]And the very white is bone, and then the sort

[19]of gray-white that is varied in intensity is

[20]the substance of the brain.

[21]The area that we are going to focus on

[22]is in the left frontal region just under the

[23]surface -- just on the surface of the

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[1]brain underneath the bone. I'm outlining a

[2]lump, a mass. It's composed of what looks like

[3]a balloon almost, a thin lining, which has a

[4]white area up front and a very flat line and a

[5]white area down here.

[6]We are also seeing a curving structure

[7]here. Let me break it down a little bit. When

[8]I pointed to some of the earlier pictures, I

[9]mentioned a structure which I said was

[10]relatively unmovable called the falx, f-a l-x.

[11]And what we are seeing here is the falx

[12]demonstrated on the CAT scan, but we are

[13]noticing that it is curved, and that is

[14]indication that the falx **[*44]** is pushed away. So

[15]this relatively unmovable structure is pushed

[16]from left to right.

[17]In addition, if we follow the falx, it

[18]ends about here, and the next thing we see is

[19]this little bowing here. What this indicates

[20]is that when the relatively unmovable structure

[21]of the falx ends, this mass is actually

[22]ballooning out past that area.

[23]Then looking at the structure itself,

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[1]it looks like an oval balloon. I'll keep using

[2]that term. The area up here, and this is a

[3]scan that was taken after the administration of

[4]contrast material, that's an iodine compound

[5]that is designed to turn tissue that might be

[6]gray white if it's tumor, as is the case here.

[7]There is enhancement in this area indicating

[8]this is tumor, indicating that this is tumor.

[9]The dark area in here is this thing

[10]that we have been calling a cyst all along, and

[11]it has inside it something called a fluid fluid

[12]level. This very sharp line exists because the
[13]patient is lying on his back, and something has
[14]settled out. These are very probably red blood
[15]cells. And I use the term I think earlier the
[16]hematocrit **[*45]** effect. Just like with a tube of
[17]blood if it sits still, the red cells will drop
[18]to the bottom, and the serum will sit on the
[19]top.

[20]Well in this case the red cells, which
[21]is very probably what this is, have dropped to
[22]the bottom, and the serum plus cystic fluid
[23]lies over it. If you took this patient's head
Page 58

[1]and literally shock it, this would disappear,
[2]and they would spread out here. But this is
[3]that so-called hematocrit effect.

[4]We are also seeing another area of
[5]abnormality on this picture. These little
[6]black areas that actually look even darker than
[7]this fluid are the ventricles. They are a
[8]little bit better seen on this film, which we
[9]will look at in a second. And these are so-
[10]called mid-line structures. This is probably
[11]the third ventricle, which is one of the fluid
[12]spaces in the brain. And it's pushed away from
[13]the middle probably by about a centimeter or
[14]something like that, a little less than half an
[15]inch.

[16]So we are seeing a large mass, the
[17]word tumor certainly applies here, with a big

[18]cyst in it, which is causing a shift of the

[19]relatively immovable **[*46]** falx, which is causing

[20]herniation of tissue next to the falx, and

[21]causing shifting of structures that should be

[22]in the middle off to the side.

[23]The second scan image, which is a

Page 59

[1]little higher up in the skull I think, yes, I

[2]believe it is, is showing again this mass. We

[3]are seeing it looking a little smaller because

[4]we are cutting higher up on the balloon. We

[5]again see that hematocrit effect. We again see

[6]the balloon-like structure. We see this

[7]whitish area in here right under the surface of

[8]the skull, and we see again this pressure on

[9]the falx itself.

[10]There is also some so-called asymmetry

[11]of the ventricular system. It's pushed across

[12]the middle. And we don't see the ventricle as

[13]well here, most likely because it's pushed away

[14]a little bit by that mass or the tumor.

[15]Q Now this is a fairly large tumor?

[16]A I believe it measures -- this is a

[17]scale of one, two, three, four, five

[18]centimeters, and I believe it was measured at

[19]about seven by five centimeters. It's a good

[20]size tumor for inside the head, yes.

[21]Q And relatively how much of it is made

[22] **[*47]** up of fluid as opposed to tumor tissue?

[23]A Well, I think the jury can guess as

Page 60

[1]well as I can. If I said it was -- if this is

[2]all fluid, seventy-five percent fluid and

[3]twenty-five percent brain, I guess I would be

[4]within the ballpark.

[5]Q Now there were some other radiographic

[6]images taken of Michael Cardarelli's brain in

[7]the course of his treatment. The next one

[8]being in the morning of the 3rd of July. Do

[9]you recall seeing that?

[10]A Yes, I do.

[11]Q All right. And what is that film that

[12]is front of you now?

[13]A These are two slices of an MRI scan of

[14]the patient, Michael Cardarelli, done on the

[15]3rd of July of 1995.

[16]Q And what is the difference between

[17]that MRI and the CAT scan that was taken

[18]earlier?

[19]A The similarity is, there again, the

[20]same type of slices of the brain. They are

[21]slightly different levels. But the images are

[22]obtained in a very different fashion. The CAT

[23]scan, as I mentioned, is an X-ray study.

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[1]The MRI scan is a so-called magnetic

[2]resonant imaging study, and the images are

[3]obtained by exposing the brain [*48] to a very high

[4]magnetic field and then turning it off. And as

[5]a result of that, certain radial signals are

[6]emitted from the brain. That's an

[7]oversimplified explanation. But it's not

[8]really an X-ray study. It's a different type

[9]of way of obtaining information that in some

[10]ways is the same and in some ways is different

[11]than a CAT scan.

[12]Q And the MRI that's in front of you

[13]shows what?

[14]A I think very much the same type of

[15]description can be given. We are seeing a

[16]mass. In this case, the cystic fluid is very

[17]bright and the -- what we described as blood,

[18]again that so-called fluid fluid level, is

[19]somewhat grayer, and the area that appeared to

[20]be tumor appears darker.

[21]In the second image, again, we are

[22]seeing the big cyst, and we are seeing the more

[23]solid tissue more consistent with tumor. We

Page 62

[1]are again seeing that there is shifting of

[2]structures. We are seeing that the ventricle

[3]here is pushed away from where it should be.

[4]But it gives pretty much the same information

[5]that the CAT scan did.

[6]Q Is it clear in both the CAT scan and

[7]in this MRI **[*49]** that there is some degree of

[8]intracranial pressure in his brain?

[9]A There is certainly mass effect. And

[10]the fact that the falx, seen better here, and

[11]on the CAT scan has shifted, and that's there's

[12]a shifting of structures from the midline means

[13]that around this mass there is significant

[14]pressure, yes.

[15]Q Okay. You said "mass effect." What

[16]does that mean?

[17]A A mass is something that takes up

[18]space, a tumor. And so mass effect is the term

[19]we use when a mass is causing the effect of

[20]shifting brain structures away from where they

[21]should be.

[22]MS. RISTUBEN: I would like to

[23]introduce both this MRI and the CAT scan into
Page 63

[1]evidence. The ones that we have just been

[2]referring to.

[3]THE COURT: Any objection?

[4]MR. DAILEY: There's no objection.

[5]THE COURT: All right.

[6]So the CAT scan will Exhibit 1. Is

[7]that right?

[8]THE COURT REPORTER: Yes, Your Honor.

[9]THE COURT: And the MRI will be

[10]Exhibit 2.

[11]

[12](Exhibit No. 1, marked; July 3, 1995

[13]CAT scan of Michael Cardarelli.)

[14](Exhibit No. 2, marked; July 3, 1995

[15]MRI of Michael **[*50]** Cardarelli.)

[16]

[17]Q Now going back to the records for a

[18]minute. If you would refer to I believe it's

[19]pages 10 and 11 in your tabs, which is the --

[20]it says, "Children's Hospital Admission H&P

[21]Form." And this is it on a larger board.

[22]Did you review this in the course of

[23]your work on the case?

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[1]A Yes, I did.

[2]Q And did you come to understand that

[3]this was the history and physical done by Dr.

[4]Llinas

[5]A That is my understanding.

[6]Q Okay. What was your understanding as

[7]to what role Dr. Llinas was playing in this --

[8]caring for this patient?

[9]A My understanding was that Dr. Llinas

[10]was a neurology resident who saw the patient

[11]and wrote this history and physical examination

[12]on -- he dated it July 3rd, 1995.

[13]Q And this history and physical

[14]examination -- strike that.

[15]You read Dr. Llinas' deposition too?

[16]A Yes, I did.

[17]Q Okay. And did you come to an

[18]understanding as to approximately what time

[19]this was done?

[20]A I believe it was done sometime in the

[21]late hours of July 2nd or early on July 3rd. I

[22]apologize for not **[*51]** knowing the precise time. It

[23]was done after the CAT scan because he reports

Page 65

[1]the results of that CAT scan on this

[2]examination.

[3]Q So it would have been done after 1:28

[4]a.m.?

[5]A That would be the best marker in terms

[6]of time that I have.

[7]Q All right. And according to the

[8]record he notes a boring bioccipital headache

[9]for two weeks?

[10]A Yes.

[11]Q And was there -- were there

[12]significant findings on this H&P form that you

[13]thought were significant to your analysis of

[14]the case?

[15]A Well, in terms of the history he

[16]certainly noted the boring bioccipital headache

[17]for two weeks. Without precipitating factors

[18]and not relieved by analgesics except Tylenol

[19]initially. He also noted several episodes of

[20]nausea and vomiting. But he came to the

[21]Emergency Room with severe headache and

[22]increased nausea and vomiting without relief of

[23]analgesics.

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[1]He makes mention of the CAT scan,

[2]which we will talk about later. But in terms

[3]of further findings, his neurological

[4]examination indicates that he has a

[5]quote/unquote "plus-minus Rhonberg" which [*52] to me

[6]means he may have been somewhat unsteady on his

[7]feet. He had active but not pathological

[8]reflexes not hyperreflexia. And no real

[9]findings that were markedly abnormal on this

[10]examine.

[11]Q He noted in his description of what

[12]the reflexes were that it was three plus on the

[13]right and two plus on the left?

[14]A I'm sorry. I failed to notice that.

[15]He does note an asymmetry that on the right

[16]side the knee jerk is three, and on the left

[17]it's two.

[18]Q And what significance does that have?

[19]THE COURT: Ms. Ristuben, what page

[20]are you on?

[21]MS. RISTUBEN: I'm sorry. Page 11,

[22]Your Honor.

[23]Q If you could point --

Page 67

[1]A I apologize. We are looking at the

[2]little stick figure on page 11. Which again,

[3]just like X-rays, right is left and left is

[4]right, so the knee jerk on the left is reported

[5]as two, and the right as three.

[6]Q And what significance does that have?

[7]A Asymmetry in reflexes may be

[8]indicative of some pathological process.

[9]Q And those were the reflexes that were

[10]noted a few hours earlier as being two plus and

[11]two plus? **[*53]**

[12]A I believe that was the initial

[13]recording made on the ER sheet, yes.

[14]Q Now as of the time this history and

[15]physical was taken in the early morning hours

[16]of July 3rd, was Michael Cardarelli at risk for

[17]the effects of increasing intracranial

[18]pressure?

[19]MR. DAILEY: Objection.

[20]THE COURT: Rephrase, please. The

[21]objection is sustained.

[22]Q As of the early morning hours of July

[23]3rd when this record was made, what risks were

Page 68

[1]presented to Michael Cardarelli?

[2]MR. DAILEY: Objection.

[3]THE COURT: Overruled. What risks, if

[4]any. And with that would you please answer.

[5]A At this point we were aware that the

[6]patient was symptomatic with headache described

[7]as the worst in his life, nausea and vomiting.

[8]He had minimally focal findings on examination,

[9]but on CAT scan was found to have a large mass,

[10]which we have looked at, causing a shift of

[11]structures and pressure inside his head. He

[12]was at risk at that very point for suddenly

[13]developing a marked increased in his

[14]neurological deficit. The term herniation is

[15]the one that is appropriate.

[16] [*54] Q And would you describe for the jury

[17]how herniation or how the increase in

[18]intracranial pressure progresses to cause

[19]herniation?

[20]A We have a mass. We have seen it very

[21]nicely on both CAT and MRI scans. We know it's

[22]pushing structures out of the way.

[23]I mentioned earlier that that mass

Page 69

[1]which is demonstrating pressure, both by the

[2]patient's clinical complaints and by the fact

[3]that things are pushed away from where they

[4]should be, will cause trouble when it reaches a

[5]critical point where it's not only going to

[6]just push things out of the way, but it's going

[7]to cause things, if you will, to stuff through

[8]the hole, to stuff through this ring called the

[9]tentorium.

[10]That's something which the patient

[11]with this mass is at great risk of simply

[12]because it's there. And he is showing that he

[13]is trouble and reaching a point where his brain

[14]which probably for some time was tolerating

[15]this fairly well and then for at least the two

[16]or three weeks before coming into the hospital

[17]was not tolerating it very well, and by the

[18]time he had come in the hospital was barely

[19] **[*55]** tolerating this mass.

[20]He was more symptoms. The

[21]headache was clearly worsening. He had a

[22]couple of days of nausea and vomiting. All of

[23]these things combined with the findings on CAT

Page 70

[1]indicate that this big lump, which shouldn't be

[2]there, is not only in the wrong place but now

[3]really starting to cause a lot of trouble. The
[4]brain is not tolerating it any more.
[5]Now it's going to do something to the
[6]brain and specifically cause more things to get
[7]pushed away from where they should be or lead
[8]to herniation.

[9]Q Now Michael was referred to the
[10]neurosurgery team by the Emergency Room
[11]personnel?
[12]A That's correct.

[13]Q Okay. And that occurred obviously at
[14]some point before Dr. Llinas did his H&P
[15]presumably?

[16]A Yes.
[17]Q All right. Now in the context of a
[18]teaching hospital, like Children's Hospital,
[19]what is the concept of a neurosurgery team
[20]following a patient? How does that work?

[21]A The neurosurgery team would be
[22]comprised of a group of physicians of varying
[23]levels and varying degrees of training who in
Page 71
[1]sequence are progressively **[*56]** more responsible for
[2]taking care of the patient.

[3]The team in this case consisted of an
[4]neurology resident who had just started, a
[5]neurosurgery resident who had finished one year
[6]of training and was in his second, the
[7]neurosurgery resident who I think was in his
[8]third or had finished three years of training,

[9]a neurosurgery fellow who had completed his

[10]entire neurosurgical residency and basically

[11]was a fully trained neurosurgeon, and on top of

[12]all of that a neurosurgery attending.

[13]Q And did you come to learn in the

[14]course of your work on the case that the

[15]attending was Dr. Michael Scott?

[16]A It's believed that the attending was

[17]Dr. Michael Scott, yes.

[18]Q And the fellow who had several years

[19]of neurosurgery training was Dr. David Frim?

[20]A Yes, Dr. David Frim.

[21]Q And did you learn that the resident

[22]who had three years of training was Dr. Park?

[23]A That is correct.

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[1]Q And the doctor with two years of

[2]training was Dr. Eskander?

[3]A I believe he had two -- he was just in

[4]his second year, I think, of training.

[5]Q And the doctor **[*57]** who was in his first

[6]year of neurology training was Dr. Llinas?

[7]A Yes.

[8]Q And those physicians comprised the

[9]neurosurgery team to follow Michael Cardarelli?

[10]A My understanding is that those were

[11]the physicians who were directly involved and

[12]on the neurosurgery service at that time.

[13]Q Now given the presentation of Michael

[14]as of the early morning hours of July 3rd, what

[15]options were available to that neurosurgery

[16]team in terms of caring for him?

[17]A I think the options were very broad.

[18]They could have sent him home and said take

[19]some aspirin, obviously which would have been

[20]silly. They could admit him to the hospital to

[21]the floor to observe him. They could admit him

[22]to the hospital to the Intensive Care Unit to

[23]observe him. They could administer a variety

Page 73

[1]of medications designed to relieve the pressure

[2]inside his head, either longer acting or

[3]shorting acting. And/or they could have

[4]decided on a variety of surgical procedures to

[5]treat the problem.

[6]Q And going from the most -- the first

[7]one that you said, send him home and give him

[8]some **[*58]** aspirin, that would be the riskiest for

[9]him?

[10]A Well, obviously, no one even let that

[11]cross their mind. They did not feel that was

[12]appropriate.

[13]Q And going up the scale to the others

[14]that you mentioned, would doing surgery

[15]immediately be the safest the course?

[16]MR. DAILEY: Objection.

[17]THE COURT: Sustained. Rephrase.

[18]Q Out of the options that you just

[19]described, which ones had the least and the

[20]most risk to the patient?

[21]A Well, I --

[22]MR. DAILEY: Objection.

[23]A I'm sorry.

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[1]THE COURT: Overruled.

[2]A I think that we are affect about

[3]increased intracranial pressure, a mass, and a

[4]concern about herniation. The more aggressive

[5]the potential for herniation was avoided the

[6]less likely it was it would herniate. And if

[7]you define safe as -- in that fashion, taking

[8]the tumor out or draining the cyst would treat

[9]the problem. Treating the patient with

[10]Decadron might temporize the problem. Treating

[11]the patient with pain medication to treat one

[12]of the symptoms, which was headache, would do

[13]nothing except mask the problem.

[14] **[*59]** Q Now in your review and work on the

[15]case and based on your experience and expertise

[16]in the field of neurosurgery was there any

[17]reason in your opinion that surgery could not

[18]or should not have been done when he was first

[19]admitted?

[20]A That's two questions, but I don't --

[21]MR. DAILEY: Objection.

[22]THE COURT: All right.

[23]MS. RISTUBEN: I will rephrase.

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[1]THE COURT: Thank you.

[2]Q Based on your expertise and experience

[3]and your work on the case, was there any reason

[4]that surgery could not have been performed

[5]early in Michael's admission?

[6]A No. I don't feel --

[7]MR. DAILEY: Objection.

[8]A I'm sorry.

[9]THE COURT: Could I see you please.

[10]

[11]CONFERENCE AT THE BENCH AS FOLLOWS:

[12]MR. DAILEY: My objection, Your

[13]Honor --

[14]THE COURT: Yes.

[15]MR. DAILEY: -- is that this reply is

[16]an expert opinion. And the question isn't

[17]framed that way.

[18]THE COURT: Right.

[19]MR. DAILEY: And secondly, is there

[20]any reason why surgery could not be done? I'm

[21]sure there's no reason why surgery could not be

[22]done. The question is whether **[*60]** or not it would

[23]meet the standard of care.

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[1]THE COURT: I think -- all right. I

[2]agree with Mr. Dailey. We are getting into

[3]opinions here, so I think you have got to lay a

[4]foundation of whether he has formed an opinion

[5]to the standard required and then ask it from

[6]that -- you know, having laid that foundation.

[7]MS. RISTUBEN: I would be happy to do

[8]it that way. On the other point though, it's

[9]obviously going to be part of the defense that

[10]surgery couldn't have been done for various

[11]reasons. I'll be happy to ask it --

[12]THE COURT: That's what I thought the

[13]defense was.

[14]MR. DAILEY: And is. We are not

[15]saying you couldn't do the surgery. Of course

[16]you could do the surgery. The thing was you

[17]wouldn't do the surgery because it wasn't safe

[18]to do it. But I mean just in the abstract:

[19]Could you have done the surgery? Sure you

[20]could go ahead and do the surgery.

[21]THE COURT: All right. Having that

[22]distinction in mind.

[23]MS. RISTUBEN: I'll do that.

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[1]END OF CONFERENCE AT THE BENCH.

[2]

[3]THE COURT: Let me tell say a word

[4]about objections, [*61] ladies and gentlemen, that I

[5]didn't mention when I did my introductions.

[6]Lawyers have a duty to object to a

[7]question when they think it's improper, and

[8]that was done in this case. Sometimes I will

[9]rule right away, as I have already. If I

[10]sustain the objection, it means the question

[11]cannot be answered. You are not to guess or

[12]speculate about what the answer might have

[13]been. And sometimes the question is rephrased

[14]and answered.

[15]At other times when there is an

[16]objection that requires me to have further
[17]discussion with the lawyers, as I just did,
[18]that's why we go to the side. And it's usually
[19]because I'm not certain what the objection is,
[20]and it raises a legal issue that I have to rule
[21]on. That's why we go to the side because
[22]that's my job to rule on the legal matters, and
[23]you take care of the facts.

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[1]MS. RISTUBEN: Thank you, Your Honor.
[2]Q In your expertise and experience and
[3]in your work on the case did you form an
[4]opinion to a reasonable degree of medical
[5]probability whether surgery could have been
[6]safely performed upon Michael Cardarelli's
[7]admission? **[*62]**

[8]A Yes, I did form an opinion.

[9]Q And what is that opinion?

[10]MR. DAILEY: Objection.

[11]THE COURT: Overruled.

[12]A That surgery could have been safely
[13]performed on Michael Cardarelli at the time of
[14]his admission.

[15]Q And what is that opinion based on?

[16]A The patient had a tumor which was
[17]accessible, by that I mean it was on the
[18]surface of the brain. It was very far forward
[19]in the front of the brain. The very fact that
[20]he had a large mass, a large tumor, and yet a
[21]relatively normal, nonfocal neurological

[22]examination means that it was in a part of the

[23]brain and pressing on a part of the brain that
Page 79

[1]doesn't serve exquisite function.

[2]The potential to get to the tumor

[3]because it was right on the surface of the

[4]brain certainly existed. And because the first

[5]thing you would run into would be brain that

[6]was compressed and nonfunctioning and then

[7]tumor, it was certainly conceivable and very

[8]reasonable to think that the patient could have

[9]had surgery immediately.

[10]Q And as part of that surgery were

[11]you -- strike that.

[12]How would **[*63]** the surgery be performed if

[13]it was done at that time?

[14]A If the decision were made to do

[15]surgery, the choices might be to just drain the

[16]fluid or to actually remove the tumor.

[17]The surgery would be done under

[18]general anesthesia with the patient obviously

[19]in the operating room. An incision after the

[20]head was prepped and probably shaved. An

[21]incision would be designed to allow getting to

[22]the skull, in the so-called left frontal

[23]region. Removing the skin flap would then

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[1]allow a specialized drill to be used to elevate

[2]or lift up the cap of the skull and perform

[3]what is called a craniotomy.

[4]That would expose us to the layer of

[5]the brain membrane, outer membrane, called the

[6]dura, which is a tough membrane which serves a

[7]protective and containing function. That would

[8]be incised, and we would immediately be

[9]presented with swollen brain. Now if

[10]the craniotomy is properly designed, it is

[11]centered right over the tumor. The dura

[12]opening will be made directly over the portion

[13]of the tumor, which we saw on CAT scan, which

[14]was pushing right up against the dura. The

[15] **[*64]** reason to do that is to go through as little as

[16]possible in the way of functioning brain, and

[17]essentially no functioning brain would be gone

[18]through.

[19]The appropriate procedure in my

[20]opinion then would be to first aspirate the

[21]tumor, stick a needle in it, make a small

[22]opening in it so that the fluid --

[23]MR. DAILEY: Objection, Your Honor.

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[1]THE COURT: Could we have another

[2]question, please.

[3]MS. RISTUBEN: Sure.

[4]Q Would you describe what you would do

[5]if you were to aspirate the cystic part of the

[6]tumor?

[7]A Aspirating the cyst, which we saw on

[8]the CAT scan, would involve either sticking a

[9]needle or a catheter through the surface of the

[10]brain/tumor because we might encounter tumor

[11]right on the surface, and literally with a

[12]syringe or allowing the fluid just to run out

[13]decompress or suck out the fluid.

[14]I could also be accomplished by making

[15]a small opening right over the cyst to look

[16]right into it and let the fluid flow out in

[17]that manner.

[18]Q And what effect would that have?

[19]A As we mentioned earlier, the major

[20]volume of **[*65]** this tumor was cyst, and that would

[21]immediately collapse the tumor down. It would

[22]relieve the pressure inside the cavity and

[23]would profoundly reduce the local pressure

Page 82

[1]effect of the tumor.

[2]Q Now that wasn't done on the July 3rd,

[3]correct?

[4]A That's correct.

[5]Q What course of treatment was

[6]undertaken?

[7]A The patient was admitted to the

[8]hospital on a neurosurgery floor. He was given

[9]a bolus of, I believe, ten milligrams of

[10]Decadron, and then put on a standing order of

[11]four milligrams, I think, every four to six

[12]hours.

[13]In addition, he was given three doses

[14]of Dilantin. I think a total of six or nine

[15]hundred milligrams and then placed on a

[16]maintenance dose of Dilantin. He was placed on

[17]every four hour vital signs, meaning that the

[18]nurses would look at him every four hours and

[19]check him.

[20]In addition, he was placed on pain

[21]medication, initially Percocet, then morphine,

[22]and then Demerol later.

[23]Q What is --

Page 83

[1]A I'm sorry, the last thing. In

[2]addition, he was scheduled for and subsequently

[3]underwent an MRI scan of [*66] the brain.

[4]Q The MRI which was done the following

[5]morning?

[6]A That's correct.

[7]Q And what is Decadron, and what does it

[8]do?

[9]A Decadron is a steroid which has a very

[10]profound anti-inflammatory effect. It's

[11]designed to relieve very simply irritation of

[12]the brain, any swelling of the brain in this

[13]case that the mass or tumor was causing.

[14]Q And was it reasonable for them to put

[15]him on Decadron upon admission?

[16]A Yes.

[17]Q Now would the administration of

[18]Decadron reduce the size of the tumor?

[19]A It could, not profoundly though.

[20]Q And you said he was admitted to a

[21]regular floor which was not an ICU unit,

[22]correct?

[23]A I think I said, and I believe it was,
Page 84

[1]a neurosurgery floor, yes.

[2]Q And if he had been admitted to an ICU

[3]unit, what tools are available in such a unit

[4]to monitor a patient with a brain tumor like

[5]this?

[6]A I think any where from closer

[7]observation, more one-to-one nursing, more than

[8]likely being on various vital sign monitors,

[9]such as an EKG monitor, perhaps something

[10]called a pulse oximeter **[*67]** to make sure he is

[11]oxygenating well and breathing well. That type

[12]of equipment would be available. If it was

[13]felt appropriate and he were to be monitored in

[14]an ICU setting, it would also be possible to do

[15]what is called intracranial pressure

[16]monitoring.

[17]Q What is an intracranial pressure

[18]monitor?

[19]A An intracranial pressure monitor is a

[20]device which inserted through the skull either

[21]on the surface of the brain outside the dura or

[22]through the dura in the substance of the brain.

[23]It is then connected up to a monitoring device

Page 85

[1]that can measure how much pressure exists

[2]within the substance of the brain.

[3]Q Now given that surgery was postponed

[4]and the decision was made to admit him on

[5]Decadron, what duty or duties did the

[6]neurosurgery team have in complying with

[7]standards of good neurosurgical care for this

[8]patient?

[9]MR. DAILEY: Objection.

[10]THE COURT: Sustained.

[11]Q In your work on this case and based on

[12]your experience and expertise did you form an

[13]opinion as what duty or duties the neurosurgery

[14]team had toward Michael Cardarelli given the

[15] [*68] fact that surgery wasn't done on admission?

[16]A Yes.

[17]Q And what are those opinions?

[18]MR. DAILEY: Objection.

[19]THE COURT: Could I see you for a

[20]minute.

[21]

[22]CONFERENCE AT THE BENCH AS FOLLOWS:

[23]MR. DAILEY: My objection, Your Honor,

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[1]is that you can't just lump the members of the

[2]team together. For example, the deposition

[3]testimony I think clearly indicates, just

[4]taking one example, Dr. Llinas saw the patient,

[5]did the history and physical in the early

[6]morning of July 3rd, whether it was two o'clock

[7]or something like that.

[8]He then presented the patient at

[9]rounds at about seven o'clock and then had

[10]nothing more to do with the patient at all

[11]during the day and wasn't expected to until he

[12]joined the team and made rounds late in the

[13]day, whether it be five or six o'clock. So

[14]that's just one example. I could give a

[15]similar one on --

[16]MS. RISTUBEN: I would be happy to

[17]break it out.

[18]MR. DAILEY: I think you have to.

[19]MS. RISTUBEN: I would be happy to

[20]break it out at this point.

[21]THE COURT: Okay. There was one other

[22]thing I [*69] thought you were going to address, and

[23]that is, you asked the question could surgery

Page 87

[1]have been performed safely. But you -- and

[2]maybe you will, but you haven't yet asked

[3]whether the standard of care required it to be.

[4]Now maybe you are leading up that.

[5]MS. RISTUBEN: I will.

[6]THE COURT: Okay.

[7]MS. RISTUBEN: Thank you.

[8]END OF CONFERENCE AT THE BENCH.

[9]

[10]Q Now going back just for a minute to

[11]some of the options that the neurosurgery team

[12]had in caring for Michael Cardarelli once he

[13]was admitted, did they -- would they be

[14]required under the standards of care expected

[15]of them to read the chart, read notes of

[16]consultants that were in the chart?

[17]MR. DAILEY: Objection.

[18]THE COURT: Would you just not make

[19]that a leading question.

[20]MS. RISTUBEN: Certainly, yes.

[21]Q In terms of how the neurosurgery team

[22]was monitoring the patient, you had mentioned

[23]before the team would be monitoring the patient

Page 88

[1]once he was admitted. What measures would be

[2]taken to monitor him on the neurosurgery floor

[3]that he was admitted to? What should have [*70] been

[4]done?

[5]A It would be appropriate to set a time

[6]schedule in terms of checking vital signs, in

[7]terms of checking neurological examination both

[8]by nurses and physicians, and to really monitor

[9]any change in his status, to monitor ongoing

[10]complaints, to monitor any medication

[11]requirements. All of which are order by

[12]physicians and administered by nurses.

[13]Q Okay. And if there were notes of

[14]consultants in the file, what should they do as

[15]far as those notes are concerned?

[16]A It would be appropriate for them to be

[17]aware of those notes and to add that to the

[18]information they had in monitoring the patient.

[19]Q Now as of the morning of July 3rd,

[20]1995, what is your understanding as to what

[21]happened and who saw him during the morning

[22]hours of that day?

[23]A During the morning, it's my

Page 89

[1]understanding the patient was seen on rounds by

[2]the neurosurgery team.

[3]It is believed at some point during

[4]the morning the patient was seen by Dr. Scott,

[5]although my understanding is he has no

[6]recollection and couldn't be specific. Again,

[7]it's not clear if he saw [*71] the patient at all or

[8]exactly when. That's something that I think we

[9]will have to deal with.

[10]In addition, the patient was seen I

[11]think in the morning or right around noon by a

[12]neurooncologist, whose name you will help me

[13]with, if that's all right. I can't recall the

[14]name.

[15]Q Dr. Sutton.

[16]A That's right, yes. And during that

[17]time he was monitored. He was initially given

[18]Percocet during the day. It was found because

[19]he was vomiting that that would not be a

[20]tenable way of treating his persisting severe

[21]headache; and therefore, he was ordered to

[22]receive intravenous morphine.

[23]Q And at that point in the morning

Page 90

[1]hours, he was on -- the nurses were checking

[2]him every four hours; is that right?

[3]A I believe that's how the order was

[4]written, yes.

[5]Q And he had been given Decadron, and

[6]what time was that; do you recall?

[7]A My belief is that he was given a bolus

[8]of -- a single dose of ten milligrams of

[9]Decadron some time in the early hours of 2:00

[10]a.m. and then was receiving it every four or

[11]six hours, again, I don't recall, during the

[12] **[*72]** day.

[13]Q And was he also given pain

[14]medications?

[15]A Yes.

[16]Q Percocet?

[17]A He was initially given Percocet by

[18]mouth, yes.

[19]Q Okay. And through the morning hours

[20]how many doses of Percocet did he get?

[21]A I would have to check the record or

[22]have you refresh my memory. I believe one or

[23]two. I'm not certain.

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[1]Q And then in the morning hours, certain

[2]members of the team did rounds on him?

[3]A Yes.

[4]Q And what happens when a neurosurgery

[5]team does rounds?

[6]A Well, the neurosurgery team is

[7]obligated to assess the patients on the floor,

[8]assess their progress, their current situation,

[9]make plans for the day. And routinely, without

[10]being able to be specific about this case,

[11]various members of the team, perhaps the entire

[12]team or whoever was there that day and not in

[13]the operating room, would see and/or discuss

[14]those patients.

[15]Q And in a patient presenting like

[16]Michael Cardarelli was on the morning of July

[17]3rd, would it be incumbent on the neurosurgery

[18]team to discuss the particulars of his case?

[19]A My opinion it **[*73]** would be, yes.

[20]Q Including whether he was at risk for

[21]increased intracranial pressure?

[22]MR. DAILEY: Objection.

[23]THE COURT: Sustained.

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[1]Q What would the neurosurgery team

[2]discuss -- what should they discuss in a

[3]patient like Michael Cardarelli?

[4]A The issue of Michael Cardarelli was

[5]what his diagnosis was and what the plan for

[6]treatment was. In reaching a plan of treatment

[7]which did not include immediate or imminent

[8]surgery, it certainly is incumbent upon the

[9]staff to determine that his symptoms don't

[10]indicate that he is at significant risk for a

[11]possible imminent herniation.

[12]Q And that risk is something that the

[13]team itself should be discussing?

[14]MR. DAILEY: Objection.

[15]THE COURT: Overruled.

[16]A In a patient like this, that certainly

[17]would be an appropriate discussion.

[18]Q And how about discussing a plan for

[19]medications including pain medications, is that

[20]something the team should discuss?

[21]A I believe that's part of the day's

[22]plan; and therefore, should be part of that

[23]discussion, yes.

Page 93

[1]Q Including [*74] the risks of giving him

[2]particular medications?

[3]A I think that would be implied as part

[4]of the discussion.

[5]Q Now will you look at number 13 and 14

[6]in the booklets, which is Dr. Sutton's note.

[7]Do you recall reviewing this as part

[8]of the progress note in the case?

[9]A Yes, I do.

[10]Q And that note is written by a Dr.

[11]Sutton, did you come to understand that she was

[12]a neurologist who came as a consultant to the

[13]case?

[14]A Yes, that was my understanding.

[15]Q Okay. And what is your understanding

[16]of what role she was playing when she came in

[17]and examined Michael and made this note in the

[18]record?

[19]A Neurosurgery very often relies on

[20]neurology to offer thoughts about treatment of

[21]the patient to help with the evaluation of the

[22]patient. And her role was to assess the

[23]patient, look over the plan, make any

Page 94

[1]suggestions she might based on her findings and

[2]her suspicion as to what they were dealing with

[3]in terms of the pathological process.

[4]Q She wasn't part of the neurosurgery

[5]team, was she?

[6]A I wouldn't say directly, no. No. **[*75]** She

[7]wouldn't be making rounds or anything. She

[8]would be an outside, if you will, consultant.

[9]Q In your work on the case, did you come

[10]to an understanding that she was going to be

[11]following Michael after his surgery?

[12]A That was my understanding from her

[13]note, yes.

[14]Q Okay. Now looking at her note what

[15]findings did she make in her neurological

[16]examination of Michael that were of note?

[17]A Under her neuro. examination she

[18]noted, "alert, oriented, speech fluent, normal

[19]naming --"

[20]Q I'm sorry. If you could keep your

[21]voice up.

[22]A I'm sorry. I apologize, and I'll go

[23]more slowly too.

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[1]On looking --

[2]THE COURT: And let the jury know

[3]where you are reading from.

[4]THE WITNESS: Yes. I'm looking under

[5]"Neuro."

[6]A And she notes, as best I can read her

[7]writing, "Mental status, alert, oriented,

[8]speech fluent, normal naming, repetition,

[9]reading, writing."

[10]That one word is a problem for me as

[11]is the next one, something "calculations." And

[12]it looks like it says, "Slight inattentive (on

[13]Percocet)."

[14]Q Is that [*76] a significant finding?

[15]A The "slight inattentive" is one that

[16]again in this setting is of concern, yes.

[17]She goes on to note a number of other

[18]normal findings, and then notes, "Discs. slight

[19]blurring of superior margins."

[20]Q And what significance is that?

[21]A That's indicative of papilledema or --

[22]which is a reflection of pressure inside the

[23]head.

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[1]She goes on to note, "Mild right

[2]VIth," which means the sixth nerve paresis, and

[3]she in parenthesis says "(doesn't bury right

[4]sclera)."

[5]Q What does that mean?

[6]A That means that when the patient looks

[7]to the right the right eye doesn't go all the

[8]way as far as it is supposed to go. The

[9]function of the sixth nerve is to pull the

[10]right eye to the right side.

[11]I believe -- I'm sorry. I'm reading

[12]to myself. Again, the reminder of the findings

[13]appear largely normal until we get down to the

[14]stick figure on the bottom, and she notes three

[15]plus reflexes bilaterally in the lower

[16]extremities as well as I think three plus

[17]biceps jerks if I can read her writing. She

[18]also notes, "Positive crossed [*77] adductors," which

[19]is another sign of increased reflexes. The

[20]legs pull together when tapped. And in

[21]addition -- excuse me. Tapping on one side

[22]causes a pulling of leg on the other side,

[23]that's a cross-adductor response, again a sign

Page 97

[1]of increased reflexes. And she also notices

[2]four to five beats of clonus, which we

[3]described earlier. I believe that's a "b"

[4]which mean bilaterally.

[5]She notes that "Rhonberg is negative,

[6]gait is normal." And I believe that's the

[7]extent of her examination.

[8]Q Okay. And so the -- did she note

[9]whether his headache was continuing at that

[10]time, at the time of her visit?

[11]A Well, she mentions initially, "severe

[12]throbbing headache, headache present 'all the

[13]time.'" And then she again in "Impression" on

[14]the second page, I'm down here now, says,

[15]"presenting with nausea, vomiting and

[16]headache." And she notes, "Patient is still

[17]vomiting and unable to keep down p.o. meds. but

[18]it may improve with Decadron." I don't see

[19]another mention of headache unless I'm missing

[20]it.

[21]The last note I was reading was at the

[22]end of her consultation **[*78]** note.

[23]Q And then let's go on to the next note

Page 98

[1]on that same page. Did you come to an

[2]understanding as to that note and the fact that

[3]it was written by Dr. Dershwitz?

[4]A On my copy at least, the bottom is cut

[5]off. I can see "De" so I think it's Dr.

[6]Dershwitz.

[7]Q And he was Michael's primary care

[8]doctor?

[9]A That is my understanding, yes.

[10]Q Okay. In his note are there

[11]significant findings?

[12]A I am now looking at the note on the

[13]bottom of page 14, and he notes the significant

[14]finding, "continues to have severe headaches in

[15]spite of above meds. and most recently

[16]morphine." He goes on to note, "Briefly left

[17]pupil appeared (without flashlight exam) larger

[18]than right. However, when I checked reflexes

[19]by flashlight, pupils equal, reactive and

[20]symmetric."

[21]Q Okay. And then further in his note he

[22]said that he paged the team, the neurosurgery

[23]team?

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[1]A He notes, "Notified nurse. Will page

[2]neurosurgery team ... also."

[3]Q Now that notes indicates it was put in

[4]the record at 1:30 p.m., did you see that?

[5]A Yes. [*79]

[6]Q So it is reasonable to assume that Dr.

[7]Sutton's note was put in the record before that

[8]time?

[9]A If Dr. Dershwitz's timing is

[10]accurate, it is written afterwards, and

[11]therefore would have to be before that time,

[12]yes.

[13]Q Okay. Now in your work on this case,

[14]did you come to understand that Michael was

[15]given morphine at a particular time during the

[16]day on July 3rd?

[17]A Yes.

[18]Q And what time was he first given the

[19]morphine?

[20]A It's indicated by 1:30 he had had a

[21]dose of morphine. I thought it was some time

[22]around twelve o'clock for the first time.

[23]Q Now tell the Court and jury, if you

Page 100

[1]would please, what the potential effects of

[2]morphine are on a patient like Michael

[3]presenting with brain tumor?

[4]MR. DAILEY: Objection.

[5]THE COURT: Overruled.

[6]A Morphine is a narcotic analgesic which

[7]has the potential for several things. It

[8]can in and of itself increase intracranial

[9]pressure. It can cause a patient to breath
[10]less normally, and potentially lower the level
[11]of oxygen in his blood and increase the level
[12]of carbon **[*80]** dioxide in his blood. Both of those
[13]effects have a negative effect on intracranial
[14]pressure, that is, they can promote an increase
[15]in that pressure.
[16]In addition, it can mask one of the
[17]major symptoms, which the patient was
[18]presenting with, which is headache. You are
[19]not treating anything by giving them morphine.
[20]You are just making it go away. And losing the
[21]ability to monitor the severity of the headache
[22]is losing your ability to monitor what at that
[23]time was one of his major symptoms of
Page 101
[1]intracranial pressure.
[2]In addition, upturning the patient,
[3]making the patient more sleepy, which we call
[4]upturnation, can be an effect of the morphine,
[5]or it can be an effect of -- progressive effect
[6]of increased pressure leading to herniation.
[7]And it's impossible to know in this setting
[8]which of those two is the case.
[9]Q Why is it important that the effect of
[10]morphine can decrease a patient's
[11]arouseability, as you described -- or -- is it
[12]important -- strike that.
[13]In giving a patient morphine, does it
[14]effect, potentially effect, his neurological

[15]exam as being [***81**] done by nurses and doctors?

[16]A Yes, it does.

[17]Q Okay. And in this case you said that

[18]frequent and careful neuro exams should have

[19]been done?

[20]A Yes.

[21]Q Okay. And how does the administration

[22]of morphine effect that?

[23]A I think I mentioned two ways. Number

Page 102

[1]one, one of the major symptoms which the

[2]patient has is headache. And the morphine is

[3]not going to cure the headache. It's just

[4]going to mask it.

[5]Number two, level of wakefulness of

[6]the patient is very important, level of -- and

[7]I'll include in that communicability,

[8]confusion, etcetera. The potential

[9]for morphine to make the patient sleepy, make

[10]the patient more confused, make the patient

[11]basically impossible to interpret is a major

[12]reason not to want to use morphine in this

[13]setting, one of the major reasons.

[14]Q Now if you look at page 7 of the

[15]booklets, you will see the first order for

[16]morphine. And that is signed off by Dr. Park,

[17]do you see that in the middle of the page?

[18]A Yes, I do.

[19]Q Okay. And is that the one that you in

[20]your memory of looking at the record you

[21] [*82] believe was administered at around noon time?

[22]A I believe it was around noon time,

[23]yes.

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[1]Q Okay. And in fact it is noted by a

[2]nurse who signed off on it that it was signed

[3]off at twelve noon?

[4]A That is correct.

[5]Q Now in your experience and expertise

[6]and your review of the records in this file in

[7]forming your opinions about the case, did you

[8]form an opinion as to whether the physicians in

[9]this case, and I will start with Dr. Park, who,

[10]administered or ordered the morphine at twelve

[11]noon, did he depart from any standards of good

[12]neurosurgical care by doing so?

[13]MR. DAILEY: Objection.

[14]THE COURT: Overruled.

[15]A In my opinion, he did depart from

[16]standards of care by administering morphine to

[17]this patient.

[18]Q And what is that opinion based upon?

[19]A It is my opinion that a patient who

[20]has a mass causing increased intracranial

[21]pressure and who is showing signs of being

[22]very symptomatic from that mass should not be

[23]administered morphine which has the potential

Page 104

[1]to make it impossible to follow this patient's

[2]progress. [*83]

[3]This patient is being judged as being

[4]stable enough to be observed without having

[5]surgery, and yet to obscure one of the major

[6]findings, which is the complaint of headache,

[7]can certainly -- is in my opinion totally

[8]inappropriate.

[9]In addition, the administration of

[10]morphine can actually make the pressure worse.

[11]We have a patient who is very obviously

[12]balanced right on the edge of suddenly falling

[13]off the cliff and becoming unresponsive, on the

[14]edge of becoming more than just symptomatic

[15]with a severe headache from this mass.

[16]And to obscure and confuse the signs

[17]of increased intracranial pressure and to

[18]actually do something that can increase the

[19]severity of that pressure in this setting in my

[20]opinion is a departure.

[21]Q And you mentioned the term

[22]"stability," was Michael Cardarelli stable as

[23]of noon time on July 3rd?

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[1]A He seemed from the information

[2]available to be showing some fluctuation and

[3]signs. It appeared that he was showing more

[4]hyperreflexia. It appeared to the neurologist

[5]who examined him that he had a sixth nerve,

[6]which [***84**] at least hadn't been observed earlier.

[7]He was observed now to have papilledema,

[8]whether that represents a change from an

[9]earlier exam or not is hard to know.

[10]But all of these things put together

[11]with the persistence of the problem of the

[12]headache and the vomiting all are very

[13]significant and indicate that he is still in a

[14]lot of trouble. And as I -- I think I used the

[15]term he is teetering on the edge of getting

[16]into major trouble at this point.

[17]Q And is that defined as unstable?

[18]A I think that would fit a lot more with

[19]unstable or stable so close to the edge of the

[20]cliff that stable isn't a word that would be

[21]really safe to use.

[22]Q And so administering morphine in such

[23]a patient departs from the standard of good

Page 106

[1]neurological -- good neurosurgical care?

[2]MR. DAILEY: Objection.

[3]THE COURT: Sustained.

[4]Q Now Dr. Park was part of the

[5]neurosurgery team who was following Michael

[6]during the day on July 3rd, correct?

[7]A That is my understanding.

[8]Q Okay. And you said earlier that it

[9]was part of the team's duty to talk about what

[10] [*85] drugs they were going to be giving him as there

[11]admission plan, correct?

[12]A Yes.

[13]Q And that's something they would have

[14]done at the time of morning rounds on the 3rd?

[15]A It's part of the assessment and

[16]planning for the patient is to assess the

[17]appropriate drugs, their potential benefit,

[18]risks, etcetera. That's all implied as part of

[19]the rounding process.

[20]Q And so they should have been

[21]discussing the risks of giving morphine at that

[22]time as well?

[23]MR. DAILEY: Objection.

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[1]THE COURT: Sustained.

[2]Q Is the risk of giving morphine in this

[3]situation, as you have described it before,

[4]something that Dr. Park should have known about

[5]as a third year neurosurgical resident?

[6]MR. DAILEY: Objection.

[7]THE COURT: I'm going to overrule it,

[8]but you are leading the witness. Maybe you

[9]could rephrase that question.

[10]MS. RISTUBEN: Certainly, yes.

[11]Q As a third year neurosurgical

[12]resident, did Dr. Park have a -- should he have

[13]had a knowledge about the risks of giving

[14]certain medications to brain tumor patients?

[15]A Yes.

[16] [*86] Q And what would the knowledge base be

[17]for the average qualified third year

[18]neurosurgical resident at that time?

[19]A I think without question by that time

[20]in his training he should be aware of the

[21]potential risk of the use of morphine in the

[22]presence of increased intracranial pressure

[23]without question in my mind.

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[1]Q And would that be true -- strike that.

[2]In your work on this case and based on

[3]your experience and expertise do you have an

[4]opinion as to whether Dr. Llinas as part of the

[5]neurosurgery team departed from standards of

[6]care expected of him under the circumstances?

[7]A That's a more difficult question for

[8]me to offer an opinion on because of his level

[9]of training. In terms of -- I'm sorry. If the

[10]question is specifically about the morphine?

[11]Q As part of the neurosurgical team and

[12]giving morphine at twelve noon, did Dr. Llinas

[13]as part of the team depart from the standards

[14]of care required?

[15]MR. DAILEY: Objection.

[16]THE COURT: Can I see you.

[17]

[18]CONFERENCE AT THE BENCH AS FOLLOWS:

[19]MR. DAILEY: My objection is, Your

[20]Honor, that **[*87]** there is no evidence anywhere that

[21]Dr. Llinas was involved in the decision to

[22]administer or order the morphine at twelve

[23]noon.

Page 109

[1]This witness has indicated that he has

[2]reviewed the records, and he has reviewed the

[3]deposition testimony. There is no indication

[4]anywhere that Dr. Llinas was involved in any

[5]way with this morphine.

[6]They are all members of the team, but

[7]they have to be on duty at the time with regard

[8]to this patient. And Dr. Llinas didn't have

[9]anything to do with the patient after the seven

[10]o'clock rounds.

[11]THE COURT: Well, I think you should

[12]have to lay a foundation about what this

[13]witness understands to be Dr. Llinas'

[14]involvement on the team. And he has already

[15]said that's a difficult question for him to

[16]answer, so maybe -- I don't know but -- is Dr.

[17]Llinas a -- he's on the neurosurgical team --

[18]MR. DAILEY: Yes.

[19]THE COURT: -- but he is --

[20]MR. DAILEY: He's a neurologist.

[21]THE COURT: Neurologist, okay. Then

[22]that has to be cleared. That wasn't clear to

[23]me. Even though he is a neurologist he is on
Page 110

[1]the team? [*88]

[2]MS. RISTUBEN: He is on the team,

[3]right.

[4]THE COURT: Okay.

[5]END OF CONFERENCE AT THE BENCH.

[6]

[7]Q What is your understanding, Doctor, as

[8]to what role Dr. Llinas was playing in the care

[9]of Michael Cardarelli?

[10]A I think we have used the term he was

[11]part of the team. He, from my understanding,

[12]had just started days or a day before as a

[13]neurology resident. And I think if I described

[14]him as a junior member of the team and a

[15]rotator from neurology on neurosurgery without

[16]the capacity to operate that would be the best

[17]description I could come up with.

[18]Q And as we discussed before, it was the

[19]team function to do rounds in the morning,

[20]correct?

[21]A Yes.

[22]Q Including Dr. Llinas?

[23]A I would -- if he is on the team and he

Page 111

[1]is there, yes.

[2]Q Okay. And to discuss what the

[3]treatment plan would be, including the

[4]administration of medications, correct?

[5]A That should be part of the treatment

[6]plan, yes.

[7]Q Okay. Now Dr. Llinas as part of that

[8]process in determining what the treatment would

[9]be is held to certain **[*89]** standards of care, is he

[10]not?

[11]A Yes.

[12]Q And do you have an opinion as to

[13]whether he departed from standards of care

[14]under the circumstances as a team member?

[15]MR. DAILEY: Objection.

[16]THE COURT: Overruled.

[17]A I have a problem with the question,

[18]and I'll try to answer it if that's

[19]appropriate.

[20]THE COURT: Maybe the question could

[21]be restated or rephrased.

[22]MS. RISTUBEN: Okay.

[23]Q Do you have an opinion based on your

Page 112

[1]experience and expertise and your work on this

[2]case as to whether Dr. Llinas as part of the

[3]neurosurgery team departed from standards of

[4]care expected of him given the fact that

[5]morphine was given at noon time?

[6]MR. DAILEY: Objection.

[7]THE COURT: The question is just as to

[8]the morphine?

[9]MS. RISTUBEN: Yes.

[10]THE COURT: Overruled.

[11]A I have to question at that level of

[12]training whether Dr. Llinas -- I would like to

[13]think he should know that morphine shouldn't be

[14]given.

[15]MR. DAILEY: Well, objection.

[16]THE COURT: Sustained.

[17]Q I'm sorry. I have a problem with the

[18]question. **[*90]** I apologize for not being able to

[19]answer it.

[20]Q That's okay. I'm sorry if it's not

[21]clear enough.

[22]As a fully licensed medical doctor, as

[23]he was at the time, Dr. Llinas was through
Page 113

[1]medical school, correct?

[2]A Yes.

[3]Q And he was beginning his specialty

[4]training in neurology, correct?

[5]A Yes.

[6]Q And having been through medical

[7]school, he had learned certain things about

[8]diagnosing and treating brain tumors and

[9]looking for intracranial pressure and the

[10]effects thereof, correct?

[11]A That would be part of his medical

[12]training, yes.

[13]Q Okay. Now based upon that and your

[14]work on the case do you have an opinion as to

[15]whether he departed from the standards of care

[16]expected of him in his work as part of the

[17]team?

[18]A Yes, I do.

[19]Q And what is your opinion?

[20]MR. DAILEY: Objection.

[21]THE COURT: Overruled.

[22]A Based on the hypothetical that he had

[23]the exposure to that information we have
Page 114

[1]hypothesized, it would be a departure for him

[2]to participate in the administration of

[3]morphine in that setting. **[*91]**

[4]MR. DAILEY: Objection, and I ask that

[5]that be stricken.

[6]THE COURT: The -- well, the answer

[7]will not be stricken. But if it's based on a

[8]hypothesis, ladies and gentlemen, you have

[9]evidence for in the testimony and the evidence

[10]as the case proceeds. If the hypothesis has no

[11]basis in the evidence as the case proceeds,

[12]then that means you cannot accept this answer

[13]or give it any weight.

[14]MS. RISTUBEN: Thank you, Your Honor.

[15]Q Now did you come to an understanding

[16]in your work on the case that Dr. Llinas was

[17]there in the hospital for the entire day on the

[18]3rd?

[19]A That is my recollection, yes.

[20]Q Okay. And you said before that the

[21]team members, the doctors, should have been

[22]examining Michael Cardarelli carefully and

[23]periodically during the course of that day,

Page 115

[1]correct?

[2]A Yes.

[3]Q And reviewing notes in the chart as

[4]they did so?

[5]MR. DAILEY: Objection.

[6]THE COURT: Leading, sustained.

[7]MS. RISTUBEN: Thank you.

[8]Q Okay. I'll move on. The -- another

[9]dose of morphine was given to Michael

[10]Cardarelli after **[*92]** the one at noon time; do you

[11]recall seeing that in the records?

[12]A I do recall that, yes.

[13]Q And approximately what time was that?

[14]A I believe it was around four o'clock

[15]on that order.

[16]Q If we could refer to the time line

[17]that is -- if you would check first the record

[18]that is in front of you, it may be easier. In

[19]the record at page 26, there is what is called

[20]a "Patient Care Flowsheet." Do you see that?

[21]A Yes, I do.

[22]Q Okay. And would you look at the time

[23]number 12 under the "time" column. Does that

Page 116

[1]indicate the first dose of morphine?

[2]A "12:30 MS04" is what is written in the

[3]chart, yes.

[4]Q Okay. And that corresponds to the

[5]first dose of morphine?

[6]A That is correct.

[7]Q Now under the -- a couple lines down

[8]is there another note for morphine?

[9]A Yes, there is.

[10]Q And what time was that?

[11]A It's written on I believe line 8,

[12]"14:30 MS04." So I apologize. That would tell

[13]me that the next dose was given at 2:30.

[14]Q And who was that ordered by? If we

[15]look back at --

[16]A There was an order written **[*93]** on 7/3 for

[17]"Morphine II-4 mg IV q2-4 hours prn," which

[18]means as needed, and it was signed by Dr. Park,

[19]and it was noted at twelve noon. I would

[20]believe that would be the order on which that

[21]dose was based; so therefore, Dr. Park would

[22]have order it.

[23]Q Okay. Now there is a note on that

Page 117

[1]same "Doctor's Order Sheet" at page 7, that

[2]seems to be written at the hour 14:00, which

[3]corresponds to two o'clock?

[4]A 14:00 is two o'clock, yes.

[5]Q Okay. Can you tell what that

[6]corresponds to?

[7]A If I'm looking at page 7, there is

[8]something that says, "7/3" and it looks like

[9]"14" and then a check. There is a signature

[10]and then -- a nurse's signature. I don't know

[11]what that refers to.

[12]Q Okay. But in any event another dose

[13]of morphine was given at about 2:30, correct?

[14]A Yes.

[15]Q According to the record?

[16]A Yes.

[17]Q Now further on at a line further down

[18]on page 26, there was another pain medication

[19]given later in the afternoon; do you see that?

[20]A Yes, I do.

[21]Q And what was that?

[22]A The next notation is on line 10, and

[23] [*94] again, I'm looking on page 26. "16:15 Demerol

Page 118

[1]100 mg. with Vistaril." It says either I

[2]think, "25 mg. IM, left thigh."

[3]Q Okay. And Demerol and Vistaril are

[4]other narcotics?

[5]A Demerol is a narcotic, yes.

[6]Q And would they have the same effects

[7]of increasing intracranial pressure potentially

[8]as morphine would?

[9]A Demerol has the same basic

[10]pharmacological action as morphine, yes, and

[11]therefore, the same effect.

[12]Q Now there is another note for pain

[13]medication further down; do you see that?

[14]A Yes, I do.

[15]Q And is that again for Demerol and

[16]Vistaril?

[17]A On line 14, it is noted,

[18]"Demerol/Vistaril 75mg/25mg for pain." Yes,

[19]that's indicated.

[20]Q And what time is that for?

[21]A Time "21," which would be 9:00 p.m.

[22]MS. RISTUBEN: Your Honor, if I may

[23]use the time line at this point?

Page 119

[1]THE COURT: Yes.

[2]Q I realize it is hard for the jury to

[3]read this, but if you would follow along with

[4]me on the records -- the notations correspond

[5]to the medical records. Have you had a chance

[6]to review this time **[*95]** line?

[7]A Yes, I have.

[8]Q Okay. And based on your review of the

[9]medical records in this case, do the notations

[10]correspond with the records that you read?

[11]A Yes, they do.

[12]Q Okay. Now as we can see, these are

[13]the nurses -- excerpts from the nurses' notes

[14]in red down below this line, is that right?

[15]A Yes.

[16]Q And up above they are excerpts from

[17]the doctors' notes?

[18]A Yes.

[19]Q And down at the bottom in blue are the

[20]medications that were prescribed and the times

[21]of those?

[22]A Yes.

[23]Q Okay. Now -- and you have also

Page 120

[1]reviewed the depositions in the case including

[2]those of the defendant doctors, Dr. Eskander,

[3]Scot, Park, Frim and Llinas, correct?

[4]A Yes, I have.

[5]Q And in reviewing those depositions and

[6]in looking at the records in the case, did you

[7]come to an understanding as to what Dr.

[8]Eskander prescribed for drugs, which are the

[9]ones he prescribed?

[10]A You would really have to help me pick

[11]out. My recollection is that the Demerol was

[12]something prescribed by Dr. Eskander.

[13]Q At 4:15 and at 9:00? [*96]

[14]A That's correct.

[15]Q Okay. And as part of the neurosurgery

[16]team and given Dr. Eskander's second year of

[17]residency that he was in at the time, do you

[18]have an opinion as to whether he should have

[19]know about the effects of morphine and Demerol

[20]on a patient like this?

[21]A I do have an opinion.

[22]Q And what is your opinion?

[23]MR. DAILEY: Objection.

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[1]THE COURT: Would you rephrase the

[2]question in terms of the standard of care.

[3]MS. RISTUBEN: Certainly.

[4]Q Do you have an opinion to a reasonable

[5]degree of medical certainty as to whether Dr.

[6]Eskander given his level of education and

[7]experience at that time should have known what

[8]the effects of morphine and Demerol were on a

[9]patient like Michael Cardarelli?

[10]A Yes, I do have an opinion.

[11]Q And what is your opinion?

[12]MR. DAILEY: Objection.

[13]A That at his level --

[14]THE COURT: Overruled.

[15]A I'm sorry. That at his level he

[16]should have been aware of the potential effects

[17]of narcotic analgesics in a patient, such as

[18]Michael Cardarelli.

[19]Q Okay. And again, the [***97**] morphine was

[20]first given at 12:30 p.m. on the 3rd, correct?

[21]A That's that the record shows.

[22]Q And did you come to an understanding

[23]in your work on the case that Dr. Eskander was

Page 122

[1]there for the entire day?

[2]A Yes.

[3]Q And throughout the night as well?

[4]A Yes.

[5]Q Okay. And so in your -- have you

[6]formed an opinion to a reasonable degree of

[7]medical certainty as to whether Dr. Eskander

[8]departed from standards of care expected of him

[9]at the time?

[10]A Yes, I did formulate an opinion.

[11]Q And what is your opinion?

[12]MR. DAILEY: Objection.

[13]THE COURT: Overruled.

[14]A That he did depart from standards of

[15]care.

[16]Q And what is the basis for that

[17]opinion?

[18]A The administration of narcotic

[19]analgesics, as I have gone over. I feel it was

[20]contraindicated in this patient based on the

[21]presence of an intracranial mass, the presence

[22]of signs and symptoms of intracranial pressure,

[23]and the potential for the narcotic analgesic,

Page 123

[1]in this case Demerol, to obscure the signs and

[2]to worsen the condition.

[3]Q Now [*98] Dr. Frim was the senior fellow who

[4]was at the hospital for this --

[5]THE COURT: I'm sorry to interrupt,

[6]but why don't we stop here. It's one o'clock.

[7]We will stop here for lunch.

[8]

[9](Whereupon, court was in recess.)

[10]

[11]THE COURT: All set?

[12]MS. RISTUBEN: Yes, thank you.

[13]Q Now in your work on this case, Doctor,

[14]did you come to an understanding as to what

[15]role Dr. Frim played in caring for Michael

[16]Cardarelli?

[17]A Yes.

[18]Q And what is that?

[19]A Dr. Frim, by my understanding, had

[20]completed a neurosurgery residency and had

[21]started as a fellow in neurosurgery. He was

[22]the head of the in-house team, if you will, the

[23]one who was running the show so to speak, the

Page 124

[1]senior person, the one with the most training,

[2]and was, if you will, from second to second the

[3]one involved with monitoring the care and

[4]directing the care of the patient.

[5]Q So he was second in command to Dr.

[6]Scott?

[7]A Yes. In terms of order of things, Dr.

[8]Scott as the attending would be the person in

[9]charge of -- ultimately in charge. And Dr.

[10]Frim is a sense [*99] would be the second in command

[11]and probably the first in command in terms of

[12]directing the resident staff and overseeing the

[13]minute-to-minute care of the patient.

[14]Q And did you come to an understanding

[15]as to when Dr. Frim was in the hospital on the

[16]3rd of July?

[17]A It's my understanding he was in early

[18]on the morning of the 3rd and became involved

[19]with the patient. I'm hard pressed to give you

[20]an hour, 6:00, 7:00, 8:00 or 9:00. But early

[21]on he with the team became directly involved

[22]with the patient.

[23]Q And did you come to an understanding

Page 125

[1]as whether he had some contact with Dr. Scott

[2]through the course of the day?

[3]A It's my understanding that at some

[4]point, and apparently it's not truly, precisely

[5]documented, he did have contact with Dr. Scott.

[6]He apparently discussed the patient with Dr.

[7]Scott. I believe his deposition testimony

[8]stated that he reviewed both the CAT scan and

[9]the MRI scan with Dr. Scott, which defines it

[10]as least as being after the MRI scan being

[11]done.

[12]Q The MRI scan was done at about 9:00

[13]a.m.?

[14]A I thought 10:30 but [*100] I could be wrong

[15]about that.

[16]Q It was in the morning in any event?

[17]A Yes.

[18]Q And do you recall in your review of

[19]the papers in the case learning about what time

[20]of day Dr. Scott was present?

[21]A It appears, and again it's sketchy,

[22]there is no that I recall written note in the

[23]chart by Dr. Scott. I believe the mother's

Page 126

[1]testimony indicates that Dr. Scott was there

[2]some time around noon. The neurologist has

[3]indicated that Dr. Scott was in the room around

[4]the time that she was there, and that puts it

[5]some time around noon, I believe.

[6]Q Okay. And again, Dr. Frim, do you

[7]recall discussing the case with Dr. Scott some

[8]time after the MRI was taken?

[9]A My recollection is that his deposition

[10]testimony was that he discussed the MRI with

[11]Dr. Scott along with the CAT; and therefore, it

[12]had to be after the MRI was done.

[13]Q And did you review Dr. Scott testimony

[14]as well?

[15]A Yes, I did.

[16]Q And do you recall from that that he

[17]had no recollection of being in there that day?

[18]A He had no specific recollection of

[19]knowing about Mr. [*101] Cardarelli. I don't think he

[20]said he wasn't in the hospital, but I don't

[21]believe that he had any specific recollection

[22]at all of seeing or being aware of Mr.

[23]Cardarelli.

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[1]Q Now looking again at the time frame of

[2]mid-day on July 3rd, Michael Cardarelli had

[3]gotten the doses of Decadron in the early

[4]morning hours, around 3:00 a.m., is that right?

[5]A I believe it was to be started at that

[6]time, yes.

[7]Q Okay. And would you expect to see

[8]some effect of that within a certain period of

[9]time?

[10]A Within a certain period of time, yes.

[11]Q And what kind of effect would you

[12]expect to see from the Decadron?

[13]A The effect that you would see would

[14]hopefully be that the patient was less

[15]symptomatic. And in this case the patient was

[16]more comfortable, complaining of less

[17]headaches. If there were focal neurological

[18]signs, you would hope they would resolve.

[19]But again, I answered that question in

[20]an indefinite time frame, and it's difficult to

[21]predict how quickly Decadron would start to

[22]have these effects. It would be surprising if

[23]it would show up **[*102]** within six to twelve hours,

Page 128

[1]and I think I would expect it more after twelve

[2]hours and probably twenty-four to forty-eight

[3]hours.

[4]Q But in any event, by the noon time

[5]time frame, Michael was still requiring pain

[6]medication, so is it fair to infer that the

[7]Decadron wasn't touching that by that time

[8]frame?

[9]MR. DAILEY: Objection.

[10]THE COURT: Sustained.

[11]Q Would you expect the Decadron to have

[12]an effect on Michael's headache?

[13]A That would be one of the anticipated

[14]positive effects, yes.

[15]Q Okay. Over some period of time?

[16]A Yes.

[17]Q Now when we looked at the CAT scan,

[18]was there a significant amount of edema or

[19]swelling on that that you could tell?

[20]A There was some. It was not

[21]overwhelming in my recollection and my review

[22]of the study.

[23]Q Now I'm going to go back to a couple

Page 129

[1]of the films, the MRI's that were done on the

[2]3rd. There are a couple more views in addition

[3]to what we marked earlier as Exhibit 2. And

[4]I'm just going to ask you, if you would, to

[5]point out what these views of the MRI show, and

[6] **[*103]** what significance it would have to you.

[7]A Let me turn it for just one second and

[8]look straight at it.

[9]Q Okay.

[10]A These are two more coronal views,

[11]slices, with you looking right at the patient

[12]and having the head just sliced off. So you

[13]are looking straight at it. And this is the

[14]left, and this is the right.

[15]It pretty much corresponds -- as it

[16]should, it corresponds with what we saw on the

[17]earlier studies. This large right area is the

[18]majority of the cyst. You are again seeing

[19]that tough mid-line structure called the falx

[20]pushed out of the way, and some of the

[21]structure pushing across from the left to the

[22]right.

[23]This shows more of the what we call

Page 130

[1]heterogeneous enhancement of the solid tumor.

[2]It again gives you a good idea of the location

[3]of the tumor right near the surface of the

[4]brain. It doesn't -- I mean, it again is part

[5]of the same study and just shows more of the

[6]same.

[7]Q And in these views?

[8]A Again, one of the things I will

[9]mention so you are not confused, you see this

[10]same fluid fluid level. Remember that the

[11] **[*104]** patient's head is basically rotated ninety

[12]degrees. He is not -- he is still lying down

[13]on his back.

[14]But again, we see the cyst. We see

[15]solid tumor and irregular areas of some

[16]enhancement and not enhancement. This is a

[17]nice view in showing us that the tumor presents

[18]again right at the surface of the brain, very

[19]far forward.

[20]This is the brow. The nose is here.

[21]So this portion of the tumor/cyst combination

[22]is pushing right up against the surface of the

[23]skull. And really there's no functioning brain

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[1]on the surface from here to here really. So

[2]getting into the tumor, this is a nice

[3]demonstration why getting into the tumor won't

[4]take you through any functioning brain.

[5]And the same can be said for the

[6]second view. Really, it's basically another

[7]view of the same thing.

[8]MS. RISTUBEN: I will offer those,

[9]Your Honor.

[10]THE COURT: No objection?

[11]MR. DAILEY: No objection, Your Honor.

[12]THE COURT: All right.

[13]

[14](Exhibit No. 3, marked; July 3, 1995

[15]MRI scan of Michael Cardarelli.)

[16](Exhibit No. 4, marked; July 3, 1995

[17]MRI scan **[*105]** of Michael Cardarelli.)

[18]

[19]MS. RISTUBEN: Your Honor, may I have

[20]the witness step down and address the time line

[21]a little closer to the jury?

[22]THE COURT: Yes.

[23]MS. RISTUBEN: Is this okay?

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[1]THE COURT: I don't have to see it.

[2]As long as I can hear.

[3]Q Now in reference again to this time

[4]line, if we look again at the mid-day time

[5]frame, there were significant events happening

[6]around the mid-day time frame, were there not?

[7]A We are looking I presume at the area

[8]above the line.

[9]Q Both above and below.

[10]A Okay.

[11]Q Of what significance were the

[12]notations of the events that were happening in

[13]that time frame?

[14]THE COURT REPORTER: You are going to

[15]have to speak up, and I can't even see the

[16]witness, Your Honor.

[17]THE COURT: All right. Ms. Ristuben,

[18]how about moving it to the other end near where

[19]the podium is and then the reporter can hear

[20]you better and see the witness.

[21]THE WITNESS: Is this better?

[22]THE COURT: Well, it's just that the

[23]reporter has to hear you.

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[1]THE WITNESS: Now I'm looking [*106] at her.

[2]THE COURT: Is that okay?

[3]THE COURT REPORTER: We'll try it.

[4]THE COURT: All right.

[5]A The events that we will talk about

[6]will run from around twelve o'clock to two to

[7]four o'clock. And I think we have touched upon

[8]a lot of these at this time.

[9]Dr. Sutton's evaluations showing --

[10]question of blurring and questioned early

[11]papilledema and a focal finding of sixth nerve

[12]paresis, bilateral hyperreflexia, clonus, the

[13]beating of the ankle.

[14]Dr. Dershewitz's question and the

[15]observation of transiently or temporarily of

[16]one pupil being larger. The need for morphine

[17]2 mg., morphine 2-4 mgs, and by four o'clock

[18]Demerol. So 12:30, 2:30, 4:15, three doses of

[19]narcotic analgesics. The continuing complaint

[20]of three o'clock severe headache, 2:30 bad

[21]headache, 12:30 headache. All of these things

[22]are very significant in terms of judging the

[23]fact that the patient is still very

Page 134

[1]symptomatic, which are the signs and symptoms

[2]of increased intracranial pressure.

[3]Q And with the signs and symptoms that

[4]were apparent in that time frame, was this a

[5] **[*107]** stable patient?

[6]A He was stable in a bad state. He was

[7]consistently complaining of the same thing. So

[8]I suppose the term stability applies to someone

[9]having --

[10]THE COURT REPORTER: Excuse me. You

[11]have to speak up.

[12]A I'm sorry. I forgot. I suppose that

[13]the term stable would apply to someone who was

[14]stable on the parameter perhaps of herniating

[15]with a severe headache, with probably

[16]fluctuating neurological signs would certainly

[17]imply instability. I think he was -- if the

[18]word stable is used, it a very tenuous

[19]stability. If you invoke the fact that he did

[20]have observers seeing perhaps changing

[21]neurological signs, that would certainly imply

[22]instability.

[23]Q Now in your experience and expertise

Page 135

[1]and your work on this case did you form

[2]opinions as to whether Dr. Frim as the

[3]neurological fellow departed from the standards

[4]of care expected of him under the

[5]circumstances?

[6]A Yes, I did.

[7]Q And what are those opinions?

[8]MR. DAILEY: Objection.

[9]THE COURT: Overruled.

[10]A I felt that he did depart from

[11]standards of care.

[12] **[*108]** Q And what is that based upon?

[13]A Dr. Frim was the senior member of the

[14]neurosurgery team and responsible for the in-

[15]house ongoing treatment of the patient. He is

[16]responsible, therefore, to be aware of all of

[17]these things that are going on. He is

[18]responsible to be aware of the use of

[19]medications in this patient. And in my opinion

[20]he was responsible to know that the use of

[21]morphine and Demerol in a patient that you are

[22]worried about impending herniation is

[23]contraindicated, and that's really the basis

Page 136

[1]for my opinion.

[2]Q And --

[3]THE COURT: Could I just interrupt.

[4]Should he -- do you want him still at the --

[5]MS. RISTUBEN: One more time line

[6]question.

[7]THE COURT: All right.

[8]Q And in your work on the case and your

[9]experience and expertise did you form opinions

[10]as to whether Dr. Michael Scott departed from

[11]standards of care expected of him under the

[12]circumstances?

[13]A I did formulate opinions.

[14]Q Okay. And if we assume that Dr. Scott

[15]knew of the findings as evidenced by the

[16]records in the noon time time frame, do you

[17]have an opinion **[*109]** as to whether he departed from

[18]standards of care?

[19]A Yes, I do.

[20]Q And what is that opinion?

[21]A If we assume that this block of

[22]information that we have just gone over was

[23]communicated to or Dr. Scott was aware of all
Page 137

[1]of these things, in my opinion given that he

[2]knew all these things would be a departure in

[3]standards of care to allow that.

[4]Q Thank you. You can take the stand.

[5]And as to your opinion about Dr.

[6]Scott, what is that based upon, Doctor?

[7]A My opinion in reference to the care of

[8]Dr. Scott is based, number one, on what I think

[9]standards of care are in terms of the use of

[10]narcotic analgesics and a patient with

[11]increased intracranial pressure, mass, and

[12]mass effect, and potential for herniation.

[13]It's also based on what I think has to

[14]be a hypothetical as to what he did or didn't

[15]know because of the lack of documentation. And

[16]I presume the honest lack of Dr. Scott's memory

[17]as to what he knew. Again, you have

[18]given me very specific parameters; and

[19]depending on which of those parameters do or

[20]don't apply, he did or didn't depart **[*110]** from

[21]standards of care.

[22]Q And in following up with your opinions

[23]that you have given us so far, and within the

Page 138

[1]parameters that we have given them to you, that

[2]Dr. Llinas, Dr. Park, Dr. Eskander, Dr. Scott

[3]and Dr. Frim departed from the standard of care

[4]expected of them, do you also have an opinion

[5]as to whether those departures caused Michael's

[6]brain herniation?

[7]A I do have an opinion.

[8]Q What is your opinion?

[9]MR. DAILEY: Objection.

[10]THE COURT: Overruled.

[11]A That they did lead to Michael's brain

[12]herniation.

[13]Q What is that opinion based upon?

[14]A The patient presented with a

[15]relatively stable or slightly fluctuating

[16]neuro. exam, but largely intact neurological

[17]function.

[18]He rather precipitously sometime in

[19]the early morning of the 4th of July lost

[20]almost all neurological function. The failure

[21]to heed the obvious signs of severe increased

[22]intracranial pressure; the failure to treat

[23]that pressure by decompressing the process; the

Page 139

[1]failure to be aware of the contraindication for

[2]the use of narcotic analgesics [*111] to mask the

[3]symptoms, i.e. the headache, and fail to

[4]recognize that that medication alone can cause

[5]increased intracranial pressure, allowed the

[6]patient's clinical condition to go from

[7]teetering near herniation to actually falling

[8]over the cliff and precipitously going from

[9]maybe even a normal neuro exam down the tubes

[10]very suddenly.

[11]And again, the failure to treat this

[12]process before that happened, I feel, was a

[13]direct cause of the progression to herniation.

[14]Q And do you have an opinion as to

[15]whether at the noon time time frame it was

[16]foreseeable that his herniation could occur?

[17]A I do have an opinion.

[18]Q What is that opinion?

[19]A That it was --

[20]MR. DAILEY: Objection.

[21]THE COURT: The objection is

[22]overruled.

[23]A That it was foreseeable at the noon

Page 140

[1]time time frame.

[2]Q And what is that based on?

[3]A The patient had been placed on

[4]Decadron, which we would not have expected to

[5]work. The patient was requiring no longer oral

[6]but now intravenous pain medication, was

[7]continuing to vomit, was showing all the signs

[8] [*112] of increased intracranial pressure, and was

[9]failing to be adequately treated for it, or to

[10]respond to the treatment.

[11]Other than the effect of the pain

[12]medication to make him not complain about

[13]headache as much, he was showing no signs of

[14]reversing; and indeed depending on the

[15]observer, he may have actually been showing

[16]signs of progression of this process.

[17]Q And when his brain did herniate, what

[18]damage did it cause, and how did it cause that

[19]damage?

[20]A The herniation which occurred was a

[21]so-called transtentorial herniation, that can

[22]cause pressure on a number of structures,

[23]including the third nerves, the brain stem, the

Page 141

[1]blood vessels passing through this tight

[2]opening, the so-called tentorium.

[3]The result of that was damage to the

[4]brain stem, damage to the third nerves, damage

[5]to the blood flow to the posterior part of the

[6]brain leading to scattered areas of infarction

[7]in the brain.

[8]Q What does infarction mean?

[9]A Lack of blood supply causing death of

[10]tissue.

[11]Q And do you have an opinion as to

[12]whether the damages from which [*113] Michael

[13]Cardarelli now suffers are attributable to the

[14]brain herniation?

[15]A I do have an opinion.

[16]Q What's your opinion?

[17]A That they are attributable to the

[18]brain herniation.

[19]Q And what is that based upon?

[20]A The presence of the mass, which we saw

[21]on scan, existed while the patient had a

[22]relatively stable neurological examination. If

[23]that mass had been removed, it would not have
Page 142

[1]required the sacrifice of any functioning

[2]neural tissue.

[3]And with a reasonable degree of

[4]medical probability, the patient would have

[5]been left neurologically intact. We still have

[6]the tumor to deal with, but he would not have

[7]had any neurological deficit that he didn't

[8]have prior to his devastating herniation.

[9]Once he herniated, he showed coma.

[10]And as I mentioned, CAT evidence of infarction,

[11]development of a major neurological deficit,

[12]which wasn't there prior to the herniation.

[13]The cause of the herniation was the tumor mass

[14]and specifically the failure to remove that

[15]mass prior to its going on to causing damage to

[16]the brain.

[17]THE COURT: For [*114] the record, Ms.

[18]Ristuben, you have put up again exhibits?

[19]MS. RISTUBEN: Exhibit 1 and -- oh,

[20]yes. We haven't marked this yet.

[21]THE COURT: All right.

[22]Q What you have in front of you are the

[23]CAT scans from the 3rd and the 4th; do you see
Page 143

[1]those?

[2]A Yes, I do.

[3]Q You have reviewed those before today?

[4]A Yes, I have.

[5]Q Would you tell the Court and jury what

[6]you see on the CAT scan of the 4th?

[7]A This is the CAT scan of the 4th. I

[8]don't believe it is with contrast. And I

[9]should mention this one I believe does have the

[10]infusion of contrast which accounts for some of

[11]the difference in appearance.

[12]THE COURT: Doctor, we are losing your

[13]voice.

[14]THE WITNESS: I apologize.

[15]A I'll start again. July 3rd, we have

[16]looked at the scan. July 4th, we haven't seen

[17]it. The July 3rd study has been done after the

[18]injection or administration of contrast

[19]material which causes tumor tissue to turn

[20]white on the scan. The July 4th study was done

[21]without that.

[22]What we are seeing in two slightly

[23]different cusps, but basically from **[*115]** the same

Page 144

[1]area, is that there is still this small amount

[2]of what I have called the fluid fluid level

[3]with the layering of the blood without any

[4]substantial change. There is still the very

[5]significant shift across the midline of

[6]structures.

[7]It's very hard to quantify. I had the

[8]impression in reviewing the scan that there was

[9]perhaps a bit more shift on this film. A

[10]little more moving from left to right on this

[11]film versus this study.

[12]This looks different from this study

[13]because this area of probable calcification in

[14]the earlier study is surrounded by advanced

[15]tumor, so it doesn't stand out. But basically

[16]that appears. The appearance of the cyst. The

[17]appearance of this blood layer. All is the

[18]same. So the only major change that I see, and

[19]I'm able to see in comparing these two, is that

[20]the shift may be a little bit greater. But in

[21]essence it's largely the same picture.

[22]Q Okay. Now this CAT scan over the 4th

[23]was taken before surgery?

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[1]A Yes.

[2]Q And with respect to the level of

[3]hemorrhage that you had described in the one on

[4] **[*116]** the 3rd in the bottom of the cystic

[5]component --

[6]A Yes.

[7]Q -- is there any difference from one

[8]series to the other?

[9]MR. DAILEY: Objection.

[10]THE COURT: Would you lay more of a

[11]foundation for that question.

[12]MS. RISTUBEN: Sure.

[13]Q I believe you had said that in the

[14]image of the -- the CAT scan image of the 3rd,

[15]there is a fluid fluid level, and the fluid on

[16]the bottom is what?

[17]A Most likely red blood cells.

[18]Q Okay. And that holds true too for the

[19]fluid on the bottom of the cyst as it appears

[20]on the 4th, correct?

[21]A Yes.

[22]Q Is there any substantial change from

[23]one -- from the series of the 3rd to the

Page 146

[1]series of the 4th in that fluid level?

[2]MR. DAILEY: Objection.

[3]THE COURT: Overruled.

[4]A No.

[5]Q Thank you.

[6]MS. RISTUBEN: I will offer the CAT

[7]scan for the 4th.

[8]THE COURT: No objection, Mr. Dailey?

[9]MR. DAILEY: No, none, Your Honor.

[10]THE COURT: All right. The CAT scan

[11]of the 4th may be marked.

[12]

[13](Exhibit No. 5, marked; July 4th, 1995

[14]CAT scan of Michael Cardarelli. [*117])

[15]

[16]Q Now in the record on -- let me get a

[17]page reference for you. Page 17, that's a memo

[18]-- at the lowest note on that page, are you

[19]familiar with that?

[20]A We are looking at the 7/4/95 and

[21]the --

[22]Q In the HCHP?

[23]A I have read that, yes.

Page 147

[1]Q Okay. What is your understanding as

[2]to who wrote that note?

[3]A I believe it was by a doctor from the

[4]Harvard health care group that was taking care

[5]of the patient.

[6]Q Was that doctor part of the

[7]neurosurgery team?

[8]A I do not believe so.

[9]Q And if he was covering as primary

[10]care, would he have been involved in the

[11]decision making as to when to do surgery?

[12]A No, he would not.

[13]Q And of what significance is it, if

[14]any, that he noted when he did -- I'm sorry. I

[15]was looking at the wrong note.

[16]Page 15. I apologize.

[17]A Page 15?

[18]Q Yes. The bottom note on that page,

[19]that's from the HCHP primary care coverage

[20]doctor; is that the one?

[21]A Now I'm looking at page 15.

[22]Q Yes.

[23]A There's a note dated 7/3/95. I

Page 148

[1]believe it's by the same **[*118]** doctor. The signature

[2]looks the same.

[3]Q Okay. And in that note he says

[4]patient, "Doing better this afternoon -- with

[5]pain management."

[6]A It says, "Doing better this

[7]afternoon." Then there are -- I guess that's

[8]"with." I'm not really sure, something "pain

[9]management."

[10]Q Okay. Of what significance is it to

[11]you that that primary care doctor wrote the

[12]note as he did?

[13]A I don't think I can assign any great

[14]significance to it. It's an isolated and

[15]really not very specific note. It's a very

[16]vague note. It could -- again, the major thing

[17]that the patient was complaining about was

[18]headache. "Doing better this afternoon," could

[19]mean not having --

[20]MR. DAILEY: Objection.

[21]A -- as much headache.

[22]THE COURT: Sustained. It's

[23]speculative, so that's sustained.

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[1]A I apologize.

[2]THE COURT: No. You don't have to

[3]apologize, just wait until I rule on the

[4]objection, please .

[5]Q How large a person was Michael

[6]Cardarelli as these events were happening?

[7]A I believe he was sixty kilos or about

[8]one hundred and thirty **[*119]** pounds. I think that

[9]sticks in my mind.

[10]Q And given the amount of pain

[11]medications that were given to him beginning

[12]with the Percocet, what effect would those

[13]narcotics have on him?

[14]A My review of the record indicates that

[15]the patient was not a narcotics pain medicine

[16]user; therefore, he was quote/unquote "not used

[17]to these medicines." Percocet in a patient who

[18]has never taken it could be --

[19]MR. DAILEY: Objection.

[20]A -- could really knock him down

[21]significantly.

[22]THE COURT: The last part of the

[23]answer is stricken unless there is a foundation

Page 150

[1]laid.

[2]Q Do you have an opinion based on your

[3]work on this case and your expertise as to

[4]whether the cumulative effect of the narcotics

[5]that were given to Michael Cardarelli had a

[6]certain effect on him given his size?

[7]A Yes, I do.

[8]Q And what is that opinion?

[9]A My opinion is that given his size and

[10]given the amount of medication he had, the

[11]cumulative effect would be to expose him to a

[12]substantial dose of narcotic analgesic with the

[13]potential to depress his responsiveness perhaps

[14] **[*120]** to mask his headache --

[15]MR. DAILEY: Well, objection.

[16]THE COURT: Overruled.

[17]A To mask his headache and to increase

[18]intracranial pressure.

[19]MS. RISTUBEN: That's all I have.

[20]THE COURT: Cross-examination, Mr.

[21]Dailey.

[22]

[23]CROSS-EXAMINATION BY MR. DAILEY:

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[1]Q Doctor, if we take a look at those

[2]films that you just looked at.

[3]A Would you like me to come down, sir?

[4]Q If you would please, Doctor.

[5]Are these the two that you were

[6]looking at as you -- and I'll stand over here.

[7]Did you indicate that on the film of

[8]the 4th.

[9]THE COURT: Could I interrupt for the

[10]record, you put up exhibit what?

[11]MR. DAILEY: Exhibit 5 and exhibit 1

[12]I think it is.

[13]Q You mentioned, if we look at the left-

[14]hand film on the right-hand board, the board of

[15]the 4th, that that shows that the fluid extends

[16]over a little more to the left you said, isn't

[17]that right?

[18]A I think that there's a little bit more

[19]shift of the falx and the mass effect, yes.

[20]Q That would indicate there was more

[21]fluid there, wouldn't it?

[22]A Not **[*121]** necessarily, no.

[23]Q So if you agree that there is more

Page 152

[1]fluid showing up over in this area here, isn't

[2]that right?

[3]A I don't believe I stated that, sir.

[4]Q Didn't you indicate that it appeared

[5]that this had moved, this area of the falx had

[6]moved over more from left to right?

[7]A Yes.

[8]Q And when we're affect about bleeding,

[9]we would be affect about bleeding that occurred

[10]presumably somewhere on the walls of this cyst,

[11]is that right?

[12]A I didn't know we were affect about

[13]bleeding.

[14]Q Well if we were affect about bleeding,

[15]it would presumably come from the walls of the

[16]cyst, is that right?

[17]A It could come from the walls of the

[18]cyst, yes.

[19]Q And if there were bleeding that

[20]occurred between twelve midnight and two

[21]o'clock in the morning and this film was taken

[22]at 3:16 in the morning, how long would it take

[23]for the blood to filter through and settle down

Page 153

[1]here?

[2]A An acute bleed in that time frame

[3]would be a blood clot and more than likely you

[4]would see a fresh blood clot and the blood

[5]would not settle **[*122]** out as it does in this so-

[6]called hematocrit effect in that time frame.

[7]MR. DAILEY: Good. Thanks, Doctor.

[8]You can go back if you would please.

[9]Q Now we can agree, can we not, that in

[10]all likelihood this particular tumor started

[11]many years before July of 1995, isn't that

[12]right?

[13]A I'm not sure about the many years, but

[14]a long time before I would certainly be

[15]comfortable with.

[16]Q Several years probably?

[17]A It would certainly be possible, yes.

[18]Q And that tumor developed over a period

[19]of time and it developed without any apparent

[20]symptoms to the young man, isn't that right?

[21]A From my understanding of the record,

[22]yes.

[23]Q And the tumor grew to a size that as

Page 154

[1]of July of 1995, the tumor was something on the

[2]order of three inches by two inches?

[3]A That's about right. I think somebody

[4]measured it close at five by seven. That's

[5]about two by three, yes.

[6]Q In other words, we take two and a half

[7]centimeters to an inch roughly, isn't that

[8]right?

[9]A Yes.

[10]Q And when we talk about this tumor

[11]we're affect about **[*123]** a three dimensional tumor;

[12]in other words, it would have some width, it

[13]would have some length and it would have some

[14]depth, wouldn't it?

[15]A Yes.

[16]Q So in other words, that tumor, if we

[17]were to think about it, was something on the

[18]order of two to three inches in penetration?

[19]A I don't understand what you mean by

[20]penetration.

[21]Q That particular tumor began to show

[22]some symptoms when, according to your review of

[23]the records?

Page 155

[1]A I think that the patient complained

[2]something about two, two and a half or three

[3]weeks of headaches. That would be the first

[4]obvious symptom relative to the tumor.

[5]Q Did you look back on any of the prior

[6]records to see whether there was any indication

[7]of headaches? Put aside now the three weeks

[8]that you've just talked about.

[9]Was there any indication to you that

[10]perhaps these headaches had been going on

[11]longer than that?

[12]A I don't recall if I did or didn't,

[13]sir. I may or may not have seen such records.

[14]Q Let me just see if I can help you

[15]here. Take a look at this note from the

[16]records, Doctor, [*124] and I'll ask you first, after

[17]you've had a chance to look at it.

[18]Take a look at that note if you will

[19]that goes back to November 29 of 1994 and just

[20]read it to yourself if you will. I think it

[21]goes over onto the other page.

[22]A Yes, sir, I've read it.

[23]Q And does it indicate anything there

Page 156

[1]about headaches?

[2]A Yes, it does.

[3]Q And how long does it say the headaches

[4]had existed as of November, 1994?

[5]A I'm sorry, let me find that.

[6]Q Maybe at the top of that page.

[7]A There is a sentence, Entire household

[8]lingering URI INT. I'm not sure if that stands

[9]for intermittent nasal congestion. Mild s t,

[10]which I believe means sore throat, headache

[11]times six weeks.

[12]Q Stop there if you will.

[13]A I'm sorry, I wasn't finished, sir.

[14]Q Go ahead.

[15]A I can't tell from that sentence

[16]whether that's referring to the patient or the

[17]entire household though.

[18]Q Well now this note refers to the

[19]patient, doesn't it?

[20]A I'm only reading, the sentence starts

[21]with entire household. That's why I'm not

[22]sure.

[23]Q It said **[*125]** that the entire household had

Page 157

[1]had an upper respiratory infection; isn't that

[2]what it said?

[3]A The entire sentence reads: Entire

[4]household lingering URI", which I believe is

[5]upper respiratory infection, INT, which I think

[6]is intermittent nasal congestion, cough, mild

[7]sore throat, headache times six week period.

[8]Again, I can't interpret for you

[9]whether that refers to the patient or the

[10]entire family.

[11]Q Well now the note itself refers to the

[12]patient, isn't that right? It's the patient's

[13]note and as part of the history it indicates

[14]that the family had had an upper respiratory

[15]infection that apparently had gone through the

[16]family.

[17]But it indicates that this young man

[18]had had a headache for six weeks, or someone

[19]had a headache for six weeks, isn't that right?

[20]A It looks like someone had a headache

[21]for six weeks, or over a six-week period some

[22]of the family had a headache. I'm sorry, I

[23]can't interpret it more accurately.

Page 158

[1]Q When you saw that, didn't you want to

[2]do a little bit of digging and say to someone

[3]who was it that had the **[*126]** headache with an upper

[4]respiratory infection for six weeks?

[5]Did you ever make an inquiry about

[6]that before you came here today?

[7]A No, sir.

[8]Q Well now it would be extraordinary if

[9]someone had an upper respiratory infection and

[10]had a headache with it for six weeks, isn't

[11]that right?

[12]A I think it could happen. I don't

[13]treat enough upper respiratory infections to

[14]know.

[15]Q You don't know as a medical doctor

[16]that it would be extraordinary to have an upper

[17]respiratory infection and have a headache that

[18]went on for six weeks?

[19]A I would agree that that would be

[20]pretty unusual without saying that I'm

[21]qualified to really make that statement.

[22]Q And then we know that after that the

[23]patient reported in June of 1995, as of June

Page 159

[1]23, that he had had a headache at that point

[2]for about ten days, right?

[3]A Yes.

[4]Q And were there any interim headaches

[5]between November of '94 and June of '95?

[6]A I'm sorry, I'm not aware of any

[7]records that would give me that information.

[8]I'd be glad to look at them if you have them.

[9] **[*127]** Q Now when the young man came to the

[10]hospital, we know that during this three-week

[11]period there was one visit to a doctor, isn't

[12]that right?

[13]A Yes.

[14]Q And the doctor thought that it might

[15]be a virus?

[16]A Correct.

[17]Q And he started some erythromycin?

[18]A Yes.

[19]Q And the history was that the vomiting

[20]started within three days of getting the

[21]erythromycin, isn't that right?

[22]A I recall it was after he started the

[23]erythromycin, yes, sir.

Page 160

[1]Q All right, so we know that there had

[2]been headaches for three weeks. We know that

[3]the vomiting had been going on for at least a

[4]week, by the time the young man comes to the

[5]hospital, isn't that right?

[6]A I think that's correct, yes.

[7]Q And when he comes to the hospital,

[8]this tumor that you have talked about was of

[9]such size that it had pushed the falx from left

[10]to right, isn't that right?

[11]A Yes.

[12]Q And you said that that's sort of an

[13]unmovable membrane, isn't that right?

[14]A If I used the term semi-rigid, I think

[15]that would characterize what I was trying to

[16]express. **[*128]**

[17]Q Now you know that in the brain there

[18]is some pressure, isn't that right?

[19]A There's a normal pressure, yes.

[20]Q And would the normal pressure in the

[21]brain be something like the normal venous

[22]pressure that we would have in our body?

[23]A It would be around that order of
Page 161

[1]magnitude, yes.

[2]Q And that would be somewhere on the

[3]order of fifteen, twenty pounds, something like

[4]that?

[5]A I think it's measured in millimeters

[6]of water, not pounds.

[7]Q They're not pounds?

[8]A I've never heard pounds used to

[9]describe that.

[10]Q But it's about the same as the venous

[11]pressure, is that right?

[12]A At times, yes.

[13]Q And we know that by the time this

[14]young man came to the hospital he had this

[15]tumor, it had pushed the semi-rigid falx from

[16]left to right, is that right?

[17]A Yes.

[18]Q The ventricle was impinged upon, isn't

[19]that right?

[20]A Yes.

[21]Q And you could see all of that on the

[22]CAT film that was taken?

[23]A That's correct.

Page 162

[1]Q And you have read the deposition

[2]testimony in this case, haven't **[*129]** you?

[3]A I've read depositions, yes.

[4]Q And you saw that a question was put to

[5]the very first doctor that saw the patient on

[6]whether or not the young man would die and the

[7]doctor said that she could not tell, isn't that

[8]right?

[9]A I'm sorry, I would be glad to have you

[10]read that to me, I don't recall that specific.

[11]Q Do you remember the Doctor Brown

[12]Donovan that saw the patient in the Emergency

[13]Room?

[14]A Yes, I do.

[15]Q And do you remember that the question

[16]was put to her?

[17]A I'm sorry, I honestly don't remember

[18]that. I'd be glad to have you read it to me.

[19]I apologize for not remembering that point.

[20]Q But you could tell from Mrs.

[21]Cardarelli's deposition, and you read that?

[22]A Yes.

[23]Q That Mrs. Cardarelli indicated that

Page 163

[1]she saw Dr. Scott fairly early in the morning,

[2]didn't she?

[3]A She remembers seeing him. Again, I

[4]don't know how accurate she was. She said in

[5]the morning.

[6]Q And do you remember that there was

[7]concern at that point in time about the

[8]condition, that is the condition of the

[9]swelling? [*130]

[10]A Yes.

[11]Q And that was a legitimate concern,

[12]wasn't it?

[13]A Yes.

[14]Q Now if we were to think of brain

[15]tumors, just think of brain tumors. Brain

[16]tumors would represent about 2 percent of all

[17]of the cancerous tumors that afflict people,

[18]isn't that right?

[19]A I think that's a ball park number,

[20]yes.

[21]Q And if you were to think of that 2

[22]percent, an ependymoma represents about 5

[23]percent of brain tumors, other types

Page 164

[1]representing the remaining 95 percent, isn't

[2]that right?

[3]A It's a low fraction. I accept that

[4]number again as ball park. I couldn't tell you

[5]if it was absolutely accurate.

[6]Q And we know that people -- are you

[7]familiar with the central brain tumor registry?

[8]A Yes, I am.

[9]Q Have you ever contributed to that?

[10]A Yes.

[11]Q You have sent in reports about cases?

[12]A Yes.

[13]Q And would it be fair to say that the

[14]life expectancy in general, in general, of

[15]people who have brain tumors is somewhere

[16]around five years?

[17]MS. RISTUBEN: Objection, Your Honor.

[18]THE COURT: Overruled.

[19] [*131] A I'm not aware of that as a number in

[20]as broad a spectrum as you've painted that

[21]picture.

[22]Q Would it be fair to say that within

[23]the group of patients from age zero to age 19,

Page 165

[1]less than 50 percent, about 48 percent survive

[2]five years?

[3]A I'm sorry, sir, your initial question

[4]said brain tumors, you did not say ependymoma.

[5]That's why I have a problem. Was it a wrong

[6]question or did I misunderstand you?

[7]Q No. Was my original question of the

[8]five years about right?

[9]A You said all brain tumors, about five

[10]years?

[11]Q Right.

[12]A I don't know that number. I'm not

[13]going to dispute it, but I don't know that

[14]number.

[15]Q If we were to take ependymoma that

[16]young people experience?

[17]A Yes.

[18]Q Would it be fair to say that about 48

[19]percent of young people who experience

[20]ependymomas live for five years?

[21]A I think that's a reasonable number,

[22]yes.

[23]Q So in other words, if we were to take
Page 166

[1]ependymomas treated the best they could be

[2]treated around the country, less than 50

[3]percent would live for five years; that's **[*132]** true,

[4]isn't it?

[5]A I believe I can accept that number

[6]with the caveat that I do not claim an

[7]expertise in the neuro-oncological field, and

[8]that number could be corrected by someone who

[9]does have that expertise. I believe that's a

[10]ball park figure that's accepted.

[11]Q Let's say that in New York State

[12]during the period from 1991 to 1997 there were

[13]about twelve thousand brain tumors and among

[14]those twelve thousand brain tumors in the age

[15]group of zero to 19 there were about three

[16]thousand youngsters that had those tumors, did

[17]you report on any of those three thousand?

[18]A No.

[19]Q As a matter of fact, you don't operate

[20]on children, do you?

[21]A I stopped operating on children below

[22]16 approximately three years ago or five years

[23]ago, thereabouts.

Page 167

[1]Q Well there's a little difference

[2]between three and five years, isn't there?

[3]A I can't remember.

[4]Q And if we were to think about the fact

[5]that only 48 percent of children who have these

[6]tumors survive for five years, this tumor here

[7]was of a very significant size, wasn't it?

[8] **[*133]** A The tumor plus cyst was, yes.

[9]Q And of course the presentation as far

[10]as the tumor goes, that is the size of the

[11]tumor, the amount of tissue that's involved in

[12]the surrounding structures, and ependymoma I'm

[13]affect about now, the amount of mass effect

[14]that's present, the amount of swelling that's

[15]present, all of those would be factors that

[16]would have to be taken into consideration when

[17]you're deciding what's going to happen with

[18]this tumor, isn't that right?

[19]A I'm sorry, what's going to happen

[20]within the next twenty-four hours or what's

[21]going to happen in the next ten years?

[22]Q Well all right, let me ask you. The

[23]way the patient presents is certainly going to

Page 168

[1]be important when we think of these statistics,

[2]we look at statistics first.

[3]In other words, the worse the tumor

[4]is, the less the chances for a good result

[5]statistically, isn't that right?

[6]A I really cannot agree with that

[7]statement.

[8]Q I want you, if you will, to think now

[9]about this particular presentation. We know

[10]that there was a team and we've talked about

[11]the team of neurosurgeons. [*134] There were also

[12]neurologists who were involved, and I'm not

[13]affect about Dr. Llinas at this point, I'm

[14]affect about Dr. Mary Sutton and Dr. Scott

[15]Pomeroy who had come over from the Dana Farber

[16]as neurologists to see the patient and evaluate

[17]the patient so that they would be familiar with

[18]the patient, isn't that right?

[19]A Yes.

[20]Q And you can expect that people coming

[21]over -- put aside the team for a minute -- you

[22]could expect that people coming over in that

[23]capacity would be people who are experienced in

Page 169

[1]dealing with tumors, isn't that right?

[2]A Yes.

[3]Q And you could expect that they would

[4]be people who had had experience as

[5]neurologists in observing how tumors are

[6]treated, isn't that true?

[7]A Yes.

[8]Q And if we were to think of the note

[9]that Dr. Mary Sutton wrote, I want you to

[10]assume that Dr. Scott Pomeroy was there. After

[11]Dr. Mary Sutton had gone through her entire

[12]neurological check she wrote a line at the end

[13]where she said, I agree with the treatment

[14]plan, isn't that right?

[15]A Yes, it is.

[16]Q Now they obviously had nothing [*135] to do

[17]with the neurosurgery team. They are entirely

[18]independent, isn't that true?

[19]A I believe so, yes.

[20]Q And if we were to consider when this

[21]CAT scan was done that morning, early in the

[22]morning of the 3rd, you could see that a call

[23]very quickly was made by Dr. Llinas to Dr.

Page 170

[1]Frim, isn't that right?

[2]A That's my understanding, yes.

[3]Q And Dr. Llinas' job at that point was

[4]to convey the information he had to Dr. Frim,

[5]isn't that right?

[6]A Yes.

[7]Q And there is no indication that Dr.

[8]Llinas didn't convey every bit of the

[9]information that was available to him, is

[10]there?

[11]A No indication at all.

[12]Q Now Dr. Frim was a fully trained

[13]neurosurgeon at that point, isn't that right?

[14]A That is my understanding.

[15]Q Presumably could have gone anywhere in

[16]the country from the Mass. General where there

[17]was an opening and assumed the role of an

[18]attending neurosurgeon doing everything that a

[19]neurosurgeon would normally do?

[20]A Yes.

[21]Q But he had made an election to take

[22]some additional training in pediatric

[23]neurosurgery, [*136] isn't that right?

Page 171

[1]A Yes.

[2]Q You have not taken that type of

[3]training, have you?

[4]A No, I have not.

[5]Q And I want to ask you now, you

[6]mentioned that you're an instructor in

[7]medicine.

[8]In the academic field as far as

[9]medicine is concerned there is a hierarchy in

[10]the sense that there are instructors, there are

[11]assistant professors, there's associate

[12]professors, then full professor, is that right?

[13]A Yes.

[14]Q If we were to think of that hierarchy,

[15]you indicated you're an instructor?

[16]A That's correct.

[17]Q And you've been an instructor since

[18]1978?

[19]A That's correct.

[20]Q And you have never moved up from the

[21]level of instructor?

[22]A Correct.

[23]Q And you mentioned that you teach in

Page 172

[1]neurosurgery.

[2]At the hospital where you are is

[3]there a neurosurgery training program?

[4]A No, there is not.

[5]Q You're not in any neurosurgery

[6]training program teaching, are you?

[7]A No, sir.

[8]Q Now when we look at what Dr. Llinas

[9]conveyed to Dr. Frim, you mentioned that as far

[10]as [*137] you could see he conveyed all of the

[11]information, there is an indication --

[12]MS. RISTUBEN: Objection, Your Honor.

[13]THE COURT: Without the preface.

[14]MR. DAILEY: All right.

[15]Q Dr. Llinas conveyed information to Dr.

[16]Frim, right?

[17]A Yes.

[18]Q And based upon your review of the

[19]deposition testimony, Dr. Frim spoke with Dr.

[20]Scott fairly early in the morning on the 3rd,

[21]didn't he?

[22]A I don't know how specific I can be and

[23]be sure when that occurred. I just don't know

Page 173

[1]that we have a time or that Dr. Frim was able

[2]to give an accurate time.

[3]Q But we know that decadron was

[4]prescribed and that dilantin was prescribed and

[5]that a percocet was prescribed shortly after

[6]midnight?

[7]A Yes.

[8]Q One or two o'clock in the morning,

[9]isn't that right?

[10]A Yes.

[11]Q And we know that there were rounds

[12]sometime around seven o'clock in the morning

[13]where Dr. Frim and Dr. Park and Dr. Llinas and

[14]Dr. Eskander were all present?

[15]A That is my understanding, yes.

[16]Q And you know that Dr. Frim had to run

[17]things by Dr. Scott as far **[*138]** as putting the final

[18]plan in place, that's the way it works, isn't

[19]that right?

[20]A I can't say I know that, but the

[21]answer is yes, that is the way it works.

[22]Q All right. And you know that from

[23]reading Dr. Scott's deposition that he

Page 174

[1]indicates what was done was consistent with

[2]what he would have directed to be done?

[3]A Yes.

[4]Q Now I want you to assume that a

[5]problem is presented, brain tumor problem is

[6]presented to two different neurosurgeons and

[7]that these two different neurosurgeons consider

[8]the problem and go ahead and address the

[9]problem. All right?

[10]A Yes.

[11]Q They may get the same result or they

[12]may get different results after they have

[13]completed their course of therapy, isn't that

[14]right?

[15]A You mean outcome?

[16]Q Outcome?

[17]A Yes.

[18]Q And if you were to take a doctor who

[19]did five hundred brain surgeries and compared

[20]the five hundred brain surgeries with five

[21]hundred that another neurosurgeon did, the

[22]outcomes on the part of one doctor might be

[23]considerably better than the outcomes on the

Page 175

[1]part of [*139] the other, isn't that right?

[2]A I'm sure that could be true, yes.

[3]Q And one of the reasons that you get

[4]better outcomes is because of the judgments

[5]that certain doctors have to make, isn't that

[6]true?

[7]A That would certainly be a factor, yes.

[8]Q And some doctors develop reputations

[9]as being very good doctors because of the

[10]outcomes they get, isn't that right?

[11]A Yes.

[12]Q Now let's think after seven o'clock in

[13]the morning, based upon what you saw that

[14]happened at seven o'clock in the morning, the

[15]rounds were held, Dr. Llinas conveyed the

[16]information that he had according to the

[17]deposition to the group, Dr. Frim examined the

[18]patient, right?

[19]A Yes.

[20]Q And at that point in time this

[21]treatment plan was in place that called for an

[22]MRI to be done during the early morning, right?

[23]A Yes.

Page 176

[1]Q And the MRI was done sometime around

[2]9:30, isn't that right?

[3]A Yes.

[4]Q Now one of the things that you just

[5]told the jury that should have been considered

[6]was to put a so-called bolt into this young

[7]man, isn't that right? **[*140]**

[8]A I think I said it was one of the

[9]possible modalities of treatment.

[10]Q You put that out as one of the things

[11]that should be considered, isn't that right?

[12]A I think the question was worded "could

[13]be done", but should be considered with

[14]qualifying to me.

[15]Q Don't quibble. Should the bolt have

[16]put into this young man or not?

[17]A My opinion is no.

[18]Q So anything that was said here about

[19]putting a bolt into this young man would never

[20]have been in keeping with good practice,

[21]because you wouldn't do that on a young person

[22]who was awake and alert, would you?

[23]A I won't agree with that statement.

Page 177

[1]You may.

[2]Q And we know that the MRI film comes

[3]back and based upon the deposition testimony

[4]Dr. Frim and Dr. Scott got together and looked

[5]over the films, isn't that right?

[6]A Yes.

[7]Q And that plan was in place at that

[8]point in time?

[9]A Yes.

[10]Q Now would you agree with this

[11]statement here, I want to read you something.

[12]Decadron is a steroid, is that right?

[13]A Yes.

[14]Q Do you agree or disagree with [*141] this

[15]statement?

[16]Steroids improve the patient's

[17]symptoms and reduce the morbidity of surgery by

[18]reducing cerebral edema and intracranial

[19]pressure?

[20]A Yes, I agree.

[21]Q Now having in mind that this decadron

[22]was given, one of the concerns, Doctor, was

[23]that there was swelling and that that was a

Page 178

[1]concern if you were going to do surgery, isn't

[2]that right?

[3]A It was part of the consideration, yes.

[4]MR. DAILEY: If I could, Your Honor,

[5]I'd like the Doctor to step down. I just want

[6]to use a model of the head. Doctor, could you

[7]come over for a minute here.

[8]Doctor, if you would think of that as

[9]a head. What percentage of the size would that

[10]represent? In other words, would that be

[11]three-quarters, would that be a half, would

[12]that be about full size, having in mind a young

[13]man, about the size?

[14]COURT REPORTER: I didn't hear that

[15]answer.

[16]A It would be a pretty good

[17]representation for full size.

[18]Q Now if we were to just for a second

[19]here take this apart and we think of this as

[20]the brain inside the head. Where does this

[21]tumor **[*142]** lie?

[22]A I'm putting my finger on the left

[23]frontal lobe.

Page 179

[1]Q Would that represent about the size of

[2]the brain?

[3]A It's a little shrunk down, but it's a

[4]rough approximation.

[5]Q So if the jurors were to think of this

[6]being the area and this being shrunk down a

[7]little bit, we would have to put on here a

[8]tumor that would be about three inches by two

[9]inches, to give the jurors some idea of the

[10]size and the amount of this surface that was

[11]affected, isn't that right?

[12]A Yes.

[13]Q Now we know from the films that this

[14]tumor is there. We know that it has grown to

[15]the size it has. We know it has pushed the

[16]falx to one side. We know that the ventricle

[17]is impacted, right?

[18]A Yes.

[19]Q The only way that this semi-rigid falx

[20]could be moved is because of the pressure that

[21]the tumor is exerting on the falx, isn't that

[22]right?

[23]A Yes.

Page 180

[1]Q Now if we were to do the surgery, if

[2]we put this back on --

[3]If you were to do the surgery, you

[4]would have to drill four holes, something like

[5]this here, so that you would have **[*143]** the holes on

[6]the far side of the tumor, isn't that right?

[7]In other words, so that when we join the holes

[8]with the saw, the entire tumor would be

[9]exposed.

[10]A Firstly, the area you were showing was

[11]incorrect. It should be much more forward.

[12]And secondly, drilling four holes and joining

[13]four holes is one way to do it, yes.

[14]Q As soon as you make a hole in that

[15]skull and you go through the dura, then you

[16]have another area where the pressure can be

[17]relieved, don't you?

[18]A Yes.

[19]Q And one of the worries is that that

[20]brain can come out through that opening that

[21]you've made. That's one of the disasters that

[22]doctors, neurosurgeons are afraid will happen,

[23]isn't that right?

Page 181

[1]A Are you referring to this particular

[2]case?

[3]Q I'm affect about in general. The

[4]experience that neurosurgeons have, that if you

[5]have something there under pressure and you

[6]suddenly give that brain an opportunity to

[7]move, in other words remove the covering, that

[8]you're then concerned that when you open up

[9]that area the brain can swell, the swelling can

[10]come right out, **[*144]** isn't that right?

[11]A That as a general statement, yes.

[12]MR. DAILEY: Thank you, Doctor. You

[13]can go back.

[14]THE COURT: Why don't we take about a

[15]five minute recess.

[16]

[17](Whereupon, court was in recess.)

[18]

[19]Q Doctor, we were affect about

[20]headaches, we went back to November of 1994,

[21]and there was that note that you took a look at

[22]there from the records.

[23]A Yes.

Page 182

[1]Q And I asked you whether or not there

[2]was anything between November of 1994 and June

[3]of 1995. Will you take a look in those same

[4]pages and see whether there's an entry for

[5]January 9, 1995.

[6]A There is an entry January 4, 1995.

[7]Q January 4, 1995. Does it say anything

[8]about headaches or nausea or vomiting in

[9]January of 1995?

[10]A It does, yes.

[11]Q And what does it say in January of

[12]1995 about headaches or nausea or vomiting?

[13]A There's this line which reads:

[14]Positive history sinusitis, c o complains of

[15]frontal h a, which is headache, nausea, frontal

[16]and maxillary tenderness.

[17]Q And if we were to think about the

[18]location of this particular tumor, **[*145]** was that in

[19]the frontal part of the skull?

[20]A Yes.

[21]Q So if we look at the November, 1994

[22]record there, it mentions a headache for what,

[23]six weeks was it?

Page 183

[1]A We discussed the six weeks number. It

[2]does use that number, yes.

[3]Q And then if we look at January 4,

[4]1995, there is reference to the entries that

[5]you just mentioned. And if we look on June 23,

[6]1995 there is also the notes that we've talked

[7]about, isn't that right?

[8]A Yes.

[9]Q Now by the way, you mentioned

[10]decadron, in order for decadron to do what it

[11]has to do, you would expect that it would take

[12]twenty-four to forty-eight hours for it to show

[13]significant relief?

[14]A I think I said it could respond more

[15]quickly, but normally I'd anticipate twenty-

[16]four or forty-eight hours.

[17]Q Dealing with the normal interval, you

[18]would expect twenty-four to forty-eight hours

[19]before you would see the effect of the

[20]decadron, isn't that right?

[21]A Most probably, yes.

[22]Q And as a matter of fact, if you would

[23]take a look at Dr. Mary Sutton's note, she

Page 184

[1]makes reference [*146] to the decadron, doesn't she?

[2]A Yes.

[3]Q And in the last entry on Dr. Sutton's

[4]note, on page 14 just above her signature, it

[5]indicates -- just above her signature, you have

[6]it there?

[7]A I see it, yes.

[8]Q Agree with plan to continue decadron,

[9]cimetidine, dilantin. Patient is still

[10]vomiting and unable to keep down po meds, but

[11]it may improve with decadron, isn't that right?

[12]A That's what is written, yes.

[13]Q And as a matter of fact, you read Dr.

[14]Sutton's deposition transcript, didn't you?

[15]A Yes, I did.

[16]Q And she indicated that with regard to

[17]patients just like this, having in mind Dana

[18]Farber, Children's and the hospitals there, it

[19]was routine to treat with decadron to try to

[20]get the swelling down, isn't that right?

[21]MS. RISTUBEN: Objection, Your Honor,

[22]without the benefit of the transcript.

[23]THE COURT: If the witness can answer

Page 185

[1]the question, he may. Objection overruled.

[2]A I do recall that statement. It

[3]probably paraphrases the exact words which I

[4]can't remember.

[5]Q Doctor, do you remember this, Mary

[6] [*147] Sutton affect about doing neurological

[7]assessments.

[8]The question: And in making a

[9]neurological assessment of someone with a brain

[10]tumor are you looking for signs of increasing

[11]intracranial pressure?

[12]Answer: (I'm looking at page 15)

[13]You look for signs of whether they've had

[14]increased pressure.

[15]This is 15 in the transcript, I

[16]should explain, Your Honor, that the jury

[17]doesn't have.

[18]THE COURT: All right, thank you.

[19]MR. DAILEY: Answer: You look for

[20]signs of whether they've had increased

[21]pressure? In somebody with a tumor of his size

[22]it's something that you usually do find, which

[23]is some swelling there.

Page 186

[1]Q You would agree with that, wouldn't

[2]you?

[3]A Yes.

[4]Q Now having in mind the fact that

[5]swelling was found, mass effect was found, you

[6]would know that that would affect the

[7]surrounding tissues to the tumor, wouldn't you?

[8]A Yes.

[9]Q So not only are we dealing with the

[10]area seven centimeters by five centimeters, we

[11]have an affected area outside that, don't we?

[12]A Yes.

[13]Q And that area outside that that **[*148]** is

[14]affected is the very area that you have to go

[15]into when you're trying to get out this tumor,

[16]isn't that right?

[17]A You have to go right next to it. I'm

[18]not sure what you mean by go into, because the

[19]tumor was right on the surface of the brain.

[20]Q Well you have to try to get the entire

[21]tumor, don't you?

[22]A Yes.

[23]Q The entire tumor is right up against

Page 187

[1]the area where the swelling is, isn't that

[2]right?

[3]A That is correct.

[4]Q You know that that tissue, that brain

[5]tissue that is swollen, is going to be extra

[6]fragile, don't you?

[7]A Yes.

[8]Q And if you can get this thing under

[9]control so that some of the swelling is out of
[10]there and you're trying to get the tumor out,
[11]putting aside the fact that the tumor may come
[12]out through the opening and the other problems,
[13]if you can get the swelling down a little bit,
[14]you're going to improve the condition of that
[15]surrounding tissue, aren't you?
[16]A I think that's really speculative and
[17]if you are, in my opinion, you would improve it
[18]very little. It's a layer of non-functioning
[19]what **[*149]** we call encephalomalacia brain which
[20]probably does not or which, in my opinion,
[21]would not have the capacity to regain function,
[22]nor was it serving any important function.

[23]Q Well if we were to think about the
Page 188

[1]neurology team that came in to look at the
[2]patient, you have plucked out -- you have
[3]plucked out three things out of two pages here,
[4]haven't you?

[5]A Yes, I have, sir.
[6]Q If we were to look at the rest of the

[7]note of Dr. Sutton, and I'm looking now at page
[8]13 where it talks about the neuro, about three-

[9]quarters of the way down on the left on page
[10]13, do you have that page there, Doctor?

[11]A Yes, I do.
[12]Q Dr. Sutton is saying: m s, which
[13]would be mental status, alert, oriented, speech
[14]fluent, normal naming, repetition, reading,

[15]writing. Now that next word that you couldn't

[16]read is normal praxis, isn't that right?

[17]A I think that's a good translation,

[18]yes.

[19]Q Right?

[20]A Yes.

[21]Q Normal praxis, constructions,

[22]calculation, right?

[23]A yes, sir.

Page 189

[1]Q Then it says slightly inattentive, on

[2]percocet, right? **[*150]**

[3]A Yes.

[4]Q The memory testing that Dr. Sutton

[5]did, when you read her deposition, was

[6]basically normal, wasn't it?

[7]A Yes.

[8]Q And then you go along, is c n central

[9]nervous system?

[10]A Cranial nerves.

[11]Q Cranial nerves, visual fields full to

[12]bff?

[13]A Yes.

[14]Q The pupils are reactive --

[15]A Yes.

[16]Q -- when she checks them. Goes from 5

[17]millimeters to 3 millimeters?

[18]A Yes.

[19]Q The disc, slight blurring of superior

[20]margins, isn't that right?

[21]A That's what it says.

[22]Q And what did Dr. Sutton say with a

[23]tumor of this size that you would expect when
Page 190

[1]you would check a patient?

[2]MS. RISTUBEN: Objection, Your Honor,

[3]hearsay.

[4]THE COURT: Sustained.

[5]Q You said that you read Dr. Sutton's

[6]deposition, did you?

[7]A Yes, I did.

[8]Q And that was one of the things that

[9]you took into consideration?

[10]A Yes.

[11]Q And would you agree with a tumor of

[12]this size that you could well expect some

[13]slight blurring?

[14]A Yes.

[15]Q And then it goes on, extra ocular

[16] **[*151]** movements, EOM they were basically -- mentions

[17]mild right sixth nerve, doesn't bury right

[18]sclera, right?

[19]A Yes.

[20]Q Of all of those symptoms that you

[21]mentioned, if we were to think of the hierarchy

[22]of involvement of the sixth nerve, these nerves

[23]are close together, aren't they, when you're

Page 191

[1]affect about cranial nerves?

[2]A Well that's a relative statement. To

[3]neurosurgeons operating near them, they're

[4]miles apart, but in terms of inches, they're

[5]close together.

[6]Q If we were to think about an inability

[7]to bury -- the sclera would be the shaded part

[8]of your eye?

[9]A Yes.

[10]Q So what Dr. Sutton is saying is, the

[11]young man could not move that part of the eye

[12]completely over and bury it behind the corner

[13]of the eye, isn't that right?

[14]A What she's saying is that the right

[15]eye doesn't fully AB duct or go to the side as

[16]manifest by the fact that he couldn't bury the

[17]sclera. That's a better translation of what

[18]she's saying.

[19]Q And as you were affect here earlier

[20]about the symptoms that you would be looking

[21]for, one of them would be [*152] diplopia, things like

[22]that.

[23]There was never any indication of any

Page 192

[1]diplopia or anything similar to that, was

[2]there?

[3]A There is not an indication that the

[4]patient complained of diplopia, but inability

[5]to bury the sclera on the right side certainly

[6]qualifies to similar to that.

[7]Q You're saying that inability to bury

[8]the sclera is the equivalent of diplopia?

[9]A No. You grouped things, diplopia or

[10]things similar to that, meaning some problems

[11]with extraocular movement, that inability to

[12]bury the sclera is indicative of a finding

[13]consistent with incomplete extraocular

[14]movements.

[15]Q And then Dr. Sutton went along, facial

[16]sensation and movement were normal, normal

[17]hearing, palate and tongue were at the midline.

[18]Motor, normal tone and bulk, power five over

[19]five, no pronator drift. In tact -- what is

[20]FFM, Doctor?

[21]A It's probably fine finger movements.

[22]Q Sensory, in tact to light touch and

[23]graphesthesia?

Page 193

[1]A Yes.

[2]Q That meant that Dr. Sutton took her

[3]finger and with the young man looking away

[4]drew, for example, **[*153]** and E and asked whether he

[5]could recognize that?

[6]A Yes.

[7]Q And then there is an entry there, no?

[8]A No extinction to double simultaneous

[9]stimulation.

[10]Q Meaning that if the Doctor were to

[11]take and put her fingers on either side of the

[12]face, for example, the young man could tell

[13]that the fingers were on each side of the face?

[14]A Yes.

[15]Q And then, normal -- what is F to N?

[16]A finger to nose.

[17]Q So normal finger to nose, normal heel

[18]to shin, right?

[19]A Yes.

[20]Q Then you mentioned something about

[21]deep reflex findings that you mentioned, right?

[22]A Yes.

[23]Q Had this young man ever had an injury

Page 194

[1]to his spine?

[2]A There was history of prior injury to

[3]the patient. Whether it resulted in a fracture

[4]or injury to his spinal cord, I don't know.

[5]Q Was there any indication that for a

[6]period of time, did you read any hospital

[7]records relating to that?

[8]A I saw reference to the fact that he

[9]had, I think it was mentioned in the initial

[10]history, one of the initial histories. If you

[11]would like, I'd be glad **[*154]** to find it in a second.

[12]Q Maybe it would help, was there an

[13]indication that at some point while playing

[14]sports he had been injured and had had

[15]paralysis for a period of several hours in the

[16]Emergency Room at a hospital?

[17]A Yes, I found it. There is an

[18]indication: Kneel in back of head during ball

[19]game, numbness of whole body, couldn't move for

[20]four hours, then fine. No cervical fracture

[21]per mom.

[22]Q Now when Dr. Sutton had taken this

[23]whole history, the whole examination, and Dr.
Page 195

[1]Pomeroy, the two people from the Dana Farber,

[2]she writes that last paragraph that we've

[3]talked about before, didn't she?

[4]A Yes.

[5]Q Then if we move along and we take a

[6]look at Dr. Dershowitz, right there at the

[7]bottom of page 14, you read his deposition

[8]transcript, didn't you?

[9]A Yes, I did.

[10]Q And when you read his deposition

[11]transcript you saw that what Dr. Dershowitz

[12]indicated was that he had thought he had seen

[13]from across the room a transient change in the

[14]size of one pupil?

[15]A I don't remember the across of the

[16]room part, but I remember he thought [*155] he saw

[17]without the benefit of a flashlight an

[18]asymmetry in the pupils on the left side.

[19]Q And he immediately went and got a

[20]flashlight and checked and everything was fine?

[21]A That's correct.

[22]Q And then we know that Dr. Eskander

[23]came in, on the top of page 15, and did an
Page 196

[1]examination at 2 p.m., right?

[2]A Yes.

[3]Q And it says called to see patient

[4]because of question of pupillary asymmetry,

[5]right?

[6]A Yes.

[7]Q Now if you had pupillary asymmetry

[8]that was coming from a brain tumor, you

[9]wouldn't expect that it would come and go in a

[10]few minutes, would you?

[11]A That's not true; it can.

[12]Q Is that what would likely happen? Is

[13]that what you're saying, that if you had a

[14]brain tumor that was causing a difference, a

[15]change in the size of a pupil, that it would

[16]come and go quickly?

[17]A It can come and go.

[18]Q No, no, no, not can. Would you expect

[19]it?

[20]A I would expect a low percentage

[21]probability, but it can definitely in my

[22]experience happen, yes.

[23]Q With a low percentage of probability

Page 197

[1]it might [*156] happen, that's the answer, isn't it?

[2]A Yes.

[3]Q And Dr. Eskander comes in: patient

[4]currently awake, alert, but complains of

[5]moderate headache, right?

[6]A Yes.

[7]Q And then it mentions: Afebrile,

[8]meaning no temperature. Vital signs stable,

[9]vitals stable, right?

[10]A Yes.

[11]Q And then he goes in and he indicates

[12]that he did -- the next line is what? Chest?

[13]A I'm sorry. Chest, B, I think breast

[14]clear to auscultation, would be a translation.

[15]Heart rrr, which means regular rhythm.

[16]Q Now let's stop there for a minute.

[17]You talked about this young man getting a lot

[18]of medication, didn't you?

[19]A Yes.

[20]Q And what happened when he got the

[21]first percocet? Did it indicate that he

[22]vomited?

[23]A I know that he was vomiting on oral

Page 198

[1]medications. I can't remember if it was the

[2]first or the second it mentioned that. I'm

[3]sorry.

[4]Q And one of the concerns that the

[5]doctors had was that the young man couldn't

[6]keep down the medications, isn't that right?

[7]A Yes.

[8]Q And as a matter of fact, they were

[9]limited **[*157]** in the medications they could give

[10]because they didn't want to give anything that

[11]might interfere with the ability to do surgery,

[12]if surgery had to be done; isn't that true?

[13]A They wouldn't want to give him

[14]medication that would interfere, that's

[15]correct. I'm not sure what you're referring

[16]to.

[17]Q Now one of the things that you said

[18]that this medication could do was to change the

[19]respiratory rate, it could cause CO₂ to build

[20]up, right?

[21]A Yes.

[22]Q That's what you said earlier, isn't

[23]that right?

Page 199

[1]A Yes.

[2]Q Show us anywhere in the record where

[3]the respiratory rate was affected by the

[4]medication?

[5]A I don't believe there was a specific

[6]notation of major change in respiratory rate.

[7]Q As a matter of fact, they were

[8]following the respiratory rate all along. It's,

[9]recorded in the chart and it's within normal

[10]limits all the way along, isn't that right?

[11]A Yes.

[12]Q And then the Doctor goes along and he

[13]says: neurological, neuro: awake, crisply

[14]alert, oriented times 3, glass glaucoma scale,

[15]the GCS 15. That's entirely normal, [*158] isn't it?

[16]A Yes.

[17]Q Then cranial nerves: pupils 6 to 3,

[18]meaning that he used the light and the pupils

[19]reacted, right?

[20]A Yes.

[21]Q And they reacted, equally reactive, is

[22]that what it is, bilateral?

[23]A It says pupils 6 to 3, b meaning
Page 200

[1]bilaterally briskly reactive.

[2]Q Briskly reactive, right?

[3]A Yes.

[4]Q Just what you would want, isn't it?

[5]A Yes.

[6]Q Extraocular movement in tact. The

[7]fact was equal in the sense that there was

[8]symmetry, right?

[9]A Yes.

[10]Q Then the next word, what do you make

[11]that out to be?

[12]A I thought it was tongue.

[13]Q Tongue, okay, meaning at midline?

[14]A I think that notation -- well it

[15]curves to the right. I don't know if it's a

[16]crooked line or if it's -- I can't interpret

[17]that, sir.

[18]Q Did you read Dr. Eskander's deposition

[19]and what he meant by that?

[20]A Yes, I think it meant midline.

[21]Q Strength: 5 5 bilaterally, upper

[22]extremities and lower extremities, right?

[23]A Yes.

Page 201

[1]Q Then assessment and plan. Patient

[2]neurologically stable. **[*159]** No evidence of

[3]herniation, right?

[4]A Yes.

[5]Q Will follow closely tonight?

[6]A Yes.

[7]Q Now after Dr. Eskander gets finished,

[8]some doctor not at all included with the team

[9]comes in and does a check on the young man,

[10]isn't that right?

[11]A Yes.

[12]Q This is a medical doctor?

[13]A I'm not aware of what the doctor is,

[14]but I trust that is the proper representation.

[15]Q And his words are: Doing better this

[16]afternoon with pain management, isn't that

[17]right?

[18]A That's what it says, yes.

[19]Q That's the assessment of a doctor

[20]whose job it was to come in and look at the

[21]patient and assess the patient, isn't that

[22]true?

[23]A I don't know what his job was, sir.

Page 202

[1]Q But we know that things didn't stop

[2]then because there were evening rounds, isn't

[3]that right, according to the deposition

[4]testimony?

[5]A Yes.

[6]Q And you have had a chance to read that

[7]testimony?

[8]A Correct.

[9]Q And we know that nurses were looking

[10]in on this young man during the entire day,

[11]isn't that right?

[12]A Yes.

[13]Q And [*160] you know that in this particular

[14]setting, on the neurology and neurosurgery

[15]floor, where the patients are limited to those

[16]types of problems, that nurses develop a

[17]special ability to recognize neurology

[18]problems, don't they?

[19]A Yes.

[20]Q And when we look at the flow sheets

[21]that were prepared by the nurses, if you look

[22]at page 34, you can see that the patient was

[23]being checked during the day on four-hour

Page 203

[1]intervals. That would be 8 a.m. on July 3,

[2]then noontime, right?

[3]A Yes.

[4]Q Then two hours later at 1400, that

[5]would be two o'clock, four o'clock, six

[6]o'clock, eight o'clock, right? Am I right

[7]there?

[8]A Two o'clock, four o'clock, eight

[9]o'clock.

[10]Q I'm sorry, eight o'clock, ten o'clock

[11]and midnight, right?

[12]A Yes.

[13]Q And the nurses were checking to see

[14]how the eyes reacted, whether they opened

[15]spontaneously, right?

[16]A Yes.

[17]Q And you can see that they opened

[18]spontaneously, isn't that right?

[19]A Yes.

[20]Q And then when they spoke to the

[21]patient, he was orientated?

[22]A Yes.

[23]Q And when they **[*161]** asked him to do certain

Page 204

[1]things, under best motor response, it was obeys

[2]commands, right?

[3]A That's correct.

[4]Q In other words, in those three

[5]categories the patient was responding to the

[6]highest level on those particular flow sheets,

[7]isn't that right?

[8]A Yes.

[9]Q And then when we look at the motor

[10]strength, all throughout their checks there was

[11]normal strength in all of the extremities,

[12]isn't that right?

[13]A Yes.

[14]Q And the pupil size right up until

[15]midnight were being checked, isn't that right?

[16]A That's correct.

[17]Q And when we look at that, everything

[18]was being reported as entirely normal, isn't

[19]that right?

[20]A Yes, it is.

[21]Q Now I want you to think here for a

[22]minute. You mentioned that you do consulting

[23]work, is that right?

Page 205

[1]A Yes, I do.

[2]Q You mentioned that earlier. And in

[3]this consulting work that you do, do you review

[4]somewhere in the order of twenty to thirty of

[5]these matters a year?

[6]A I think on that magnitude, yes. About

[7]that.

[8]Q And you told us that today, for

[9] [*162] example, thirty patients got canceled, is that

[10]right?

[11]A That's approximately what was in my

[12]office today, yes.

[13]Q Were you going to see them all?

[14]A Yes.

[15]Q Or do your colleagues see some of

[16]them, too?

[17]A Some of them may be started by a

[18]physician's assistant, but I see every patient

[19]on my own.

[20]Q Now you've been doing this work since

[21]1987 or 1988, is that what you said?

[22]A Yes.

[23]Q So that over a period of time you've

Page 206

[1]reviewed something on the order of a couple of

[2]hundred of these cases?

[3]A I would think that was about right.

[4]Q And in addition to reviewing these

[5]cases down there in New York, do you also do

[6]some testifying on these disability matters,

[7]worker's compensation disability matters, do

[8]you get involved in that?

[9]A Well I would have patients that I

[10]would testify for occasionally. I would act as

[11]an expert witness in that type of field too,

[12]yes.

[13]Q And if we were to think about the work

[14]that you do, are there professional groups that

[15]find doctors who are willing to review cases

[16]and are there **[*163]** three or four that send cases to

[17]you?

[18]A There are professional groups. I

[19]don't honestly know if I do get patients from

[20]any of those groups. I think occasionally I

[21]get a case sent from osh-kosh, Wisconsin. I

[22]don't know how it gets to me, but I don't

[23]solicit cases from professional groups, if

Page 207

[1]that's what you're inquiring about.

[2]Q Well now you mentioned that there were

[3]some articles that you've published.

[4]During the last ten years how many

[5]articles have you published that relate to the

[6]brain?

[7]A Probably none.

[8]Q But some people from osh-kosh or down

[9]in Florida and out in Kansas, Maryland,

[10]Virginia, somehow they find you and they send

[11]you cases, is that right?

[12]A Yes.

[13]Q And when these cases come in, you

[14]review the cases, is that what you do?

[15]A I may or I may not. I may say no, I

[16]can't, or I may review them.

[17]Q Well, for example, you went down to

[18]Florida and testified in a case and gave an

[19]opinion against a chiropractor, didn't you?

[20]A I did not go down to Florida, but I

[21]did testify and give an opinion on behalf [*164] of a

[22]chiropractor.

[23]Q So you testified in a case dealing

Page 208

[1]with chiropractic medicine, right?

[2]A The neurosurgical or neurological

[3]aspects of that treatment, yes.

[4]Q And then you were involved in a case

[5]up in Vermont where you gave an opinion as to

[6]an anesthesiologist up there, didn't you?

[7]A Yes.

[8]Q A Doctor by the name of Paganelli?

[9]A I do remember that case, yes.

[10]Q And you told people up there through

[11]your deposition that you were an expert and

[12]knew all about anaesthesia, right?

[13]A No. I testified strictly about

[14]neurosurgical issues in that case.

[15]Q Well didn't you give an opinion that

[16]Dr. Paganelli, an Anesthesiologist, deviated

[17]from good practice?

[18]A Yes.

[19]Q And as far as the chiropractor, you

[20]said that you knew about chiropractor work and

[21]you testified that he did all right?

[22]A No, sir. I testified, as I said,

[23]about the neurosurgical aspects of that case.

Page 209

[1]I gave no testimony about the chiropractic

[2]treatment rendered by the chiropractor.

[3]Q Well you were there on behalf of the

[4]chiropractor, [*165] right?

[5]A That is correct.

[6]Q And these groups that find doctors, is

[7]one of the ones that you work with called Med

[8]One or Novation?

[9]A Noveon, yes.

[10]Q Noveon?

[11]A They send, I believe, I think it's

[12]mostly comp. cases for evaluation.

[13]Q And then there's an integral medical

[14]group?

[15]A Yes. Again, that's the same type of

[16]thing. They need a patient evaluated for work

[17]status, et cetera.

[18]Q And the Medical Management Group of

[19]New York?

[20]A Same thing.

[21]Q Another similar group?

[22]A Yes.

[23]Q And all of these groups from time to

Page 210

[1]time may send cases over to you so that you can

[2]look them over and comment, is that it?

[3]A No. In the particular ones that you

[4]just mentioned, they all send patients to me to

[5]be examined to determine appropriateness of

[6]medical treatment, whether they should, for

[7]example, authorize surgery, whether a patient

[8]is able to return to work. All that you named

[9]send patients to actually be examined.

[10]Q Now they would be on top of the twenty

[11]or thirty, right, a year?

[12]A Yes.

[13] **[*166]** Q So in other words, there would be

[14]twenty or thirty of these kind of cases that

[15]you review, and then if we were to think about

[16]these other cases, these cases where these

[17]groups send people over, roughly how many of

[18]those would there be?

[19]A A year or two ago I would have said

[20]maybe fifty or sixty a year. Now I probably do

[21]-- I've cut way back because I don't have time,

[22]I do maybe a dozen a year, something like that.

[23]Q So at one time you would have fifty or

Page 211

[1]sixty of these come over, plus the twenty or

[2]thirty, is that it?

[3]A Yes.

[4]Q And when you do this work, in addition

[5]you mentioned the five thousand dollars, how

[6]many hours did you put in reviewing records in

[7]this case?

[8]A I have it written down piecemeal, I

[9]would have to add it up. I would guess eight

[10]or ten, something like that.

[11]Q And you charge for that time?

[12]A Yes.

[13]Q And what is the rate for that time?

[14]A Four hundred dollars an hour.

[15]Q When some person comes in off the

[16]street, like the person that was coming in, one

[17]of the thirty today, would you charge them [*167] the

[18]equivalent of four hundred dollars an hour to

[19]check them over?

[20]A If they were coming in for a medical

[21]examination, that would be fairly close to what

[22]the charge would be. In fact, it might be more

[23]per hour.

Page 212

[1]Q Now you're familiar with the way --

[2]generally familiar with the way a team of

[3]neurosurgeons work, is that right?

[4]A Yes.

[5]Q And it would be fair to say that

[6]someone like Dr. Llinas, someone like Dr.

[7]Eskander, someone like Dr. Park, they're there

[8]basically to observe what's going on, to learn,

[9]to be very, very vigilant about how things are

[10]done, and if they do an evaluation, to do the

[11]evaluation right, isn't that true?

[12]A Yes.

[13]Q That's basically their responsibility,

[14]right?

[15]A That covers some of their

[16]responsibilities, yes.

[17]Q And there would be someone in charge

[18]of the group who would be actually setting out

[19]the plan, isn't that right?

[20]A It may be one person or it may be

[21]arrived at en masse by the whole group.

[22]Q And as far as the ultimate decision on

[23]whether or not certain medications should be

Page **[*168]** 213

[1]given, there would be one person who would have

[2]the final say, isn't that right?

[3]A I don't know that I could say that

[4]with certainty.

[5]Q Now we know that there were three

[6]doses of percocet that were prescribed.

[7]After how many of those doses did the

[8]patient vomit that medication?

[9]A I seem to recall the patient receiving

[10]two doses, but I could be wrong about that, and

[11]I believe he vomited after the percocet was

[12]given.

[13]Q And then we know that arrangements

[14]were made to give morphine, isn't that right?

[15]A Yes.

[16]Q And one of the ways that you determine

[17]how much morphine to give is to determine the

[18]weight of the patient, isn't that right?

[19]A Yes.

[20]Q And here, what was the dose of the

[21]morphine that was given?

[22]A I believe it was written, an order for

[23]2 to 4 every two to three hours. I believe the

Page 214

[1]first dose was 2 milligrams.

[2]Q And if we were to think of someone,

[3]and you say the eight was something like 60

[4]kilograms, whether it was 60 or 70, 2

[5]milligrams would be a small dose, wouldn't it?

[6]A It [***169**] depends very much on how the

[7]patient would react to it and how used they are

[8]to the medication. It may be for an individual

[9]a very big dose or it may not touch them at

[10]all, depending on how quickly they metabolize

[11]the medicine, whether they're used to the

[12]medicine, but really based on how they react to

[13]it.

[14]Q How many doses of morphine in total

[15]did the patient receive?

[16]A I believe he received two doses of

[17]morphine, but you are testing my memory.

[18]Q And then the patient was switched to

[19]demerol, is that right?

[20]A Yes.

[21]Q And how many doses of demerol in all

[22]did the patient get?

[23]A I think he received two doses.

Page 215

[1]Q And was the last one at nine o'clock

[2]or thereabouts?

[3]A That is my recollection.

[4]Q And the records indicate the patient

[5]did not receive any medication whatsoever

[6]between nine and the time that the problem

[7]developed around two o'clock, isn't that right?

[8]A It's correct that I see no indication

[9]that medication was given between those times.

[10]Q And if we were to think of the maximum

[11]potential of a medication [*170] like demerol, would

[12]it be fair to say that the maximum potential of

[13]a medication such as that would occur within

[14]thirty to sixty minutes?

[15]A It would probably peak in that time

[16]given intramuscularly, yes.

[17]Q And then it would start going the

[18]other way, wouldn't it?

[19]A Yes.

[20]Q Tell us, if you will, Doctor, where we

[21]should look in the record, you've talked about

[22]the respiratory rate, tell us where it is in

[23]the record that there is any indication that

Page 216

[1]the blood pressure was being affected by these

[2]medications?

[3]A The blood pressure was recorded

[4]multiple times with a fairly wide spread from

[5]systolic to diastolic, with some of the

[6]systolics in the 140s or 150s. There was no

[7]indication in the record that the blood

[8]pressure was affected specifically by the

[9]medication.

[10]Q And if we were to think then of, you

[11]used the word obtunded, where would we look in

[12]the record and see that this young man was

[13]obtunded because of the medication?

[14]A It's not listed in the record.

[15]Q As a matter of fact, if we look at the

[16]record and we look at the **[*171]** notes of the doctors

[17]and the nurses, to the contrary every record

[18]would indicate that the medication was having

[19]no effect whatsoever, other than Dr. Mary

[20]Sutton's note, slightly inattentive, on

[21]percocet, isn't that right?

[22]A I don't think I could reach that

[23]conclusion from review of the hospital record.

Page 217

[1]Q Tell us where in the hospital record

[2]that there is an indication That these

[3]medications were causing the man to be

[4]obtunded?

[5]A There's not.

[6]Q As a matter of fact, right up until

[7]the time the young man went to sleep there is

[8]every indication that he was awake, he was

[9]alert, on occasion he was watching television,

[10]isn't that right?

[11]A Went to sleep, what time are you

[12]affect about?

[13]A Nine or ten o'clock?

[14]A I don't remember the watching

[15]television, but the indications in the chart

[16]are that he was responsive, yes.

[17]Q When you're thinking about

[18]intracranial pressure, there is a so-called

[19]triad of information that you look at, called a

[20]Cushing Triad, isn't that right?

[21]A That is one of the signs of

[22]intracranial pressure, **[*172]** yes.

[23]Q And you look at the respiration rate,

Page 218

[1]the blood pressure, right?

[2]A Yes.

[3]Q And you look at the heart rate?

[4]A Correct.

[5]Q If we were to take a look at those

[6]three, we've discussed the first two, as far as

[7]the heart rate, Doctor, where would we look and

[8]see that the heart rate was being affected?

[9]A It did not appear that it was being

[10]affected.

[11]Mr. DAILEY: Just one moment please.

[12]I'm almost done, Your Honor. Thank you. May I

[13]approach the witness, Your Honor.

[14]Q You have read Mrs. Cardarelli's

[15]deposition transcript, do you remember that?

[16]A Yes. Yes, I have.

[17]Q I'm just going to ask you here on page

[18]67 -- I'm going to point here to save some

[19]time. If you would just read that to yourself.

[20]A Just line 13 to 16, sir?

[21]Q Right. You can read anything you

[22]want, but I'm going to ask you a question.

[23]Do you remember that Mrs. Cardarelli

Page 219

[1]indicated that a question was put to the doctor

[2]that first saw Michael?

[3]MS. RISTUBEN: Objection, Your Honor,

[4]it's hearsay.

[5]THE COURT: Well the [*173] question is

[6]whether he remembers a question, so that's not

[7]hearsay. That's overruled. Yes or no.

[8]A Reading this page refreshes my memory

[9]that it was asked, yes.

[10]Q Whether or not the doctor could say if

[11]Michael would pass away?

[12]A Yes.

[13]MS. RISTUBEN: Objection.

[14]THE COURT: Overruled.

[15]Q And the answer was, the doctor could

[16]not say, isn't that right?

[17]MS. RISTUBEN: Objection.

[18]THE COURT: Sustained.

[19]Q And then finally, if you will just

[20]turn two pages, on pages 68, 69, Doctor, does

[21]that help refresh your memory that Mrs.

[22]Cardarelli indicated she saw Dr. Scott

[23]somewhere between seven and nine o'clock on the

Page 220

[1]morning of the 3rd?

[2]A It indicates I am going to have to say

[3]somewhere between seven and nine. That's as

[4]accurate as she was. But it also says, "I just

[5]don't really remember."

[6]MR. DAILEY: That's all I have.

[7]Thank you.

[8]THE COURT: I'll see you for a

[9]minute.

[10](Side bar not transcribed)

[11]

[12]REDIRECT EXAMINATION BY MS. RISTUBEN:

[13]Q Would Michael Cardarelli's vital signs

[14]necessarily have [*174] changed over the course of

[15]time?

[16]A No.

[17]Q Why?

[18]A He had a mass in the left frontal

[19]lobe, very far away from structures that have

[20]affects on vital signs. With that mass

[21]contained and causing the local pressure, it

[22]may very well cause no change whatsoever in his

[23]vital signs until he developed this herniation

Page 221

[1]syndrome.

[2]Q And if you refer to page 14 of the

[3]materials, Dr. Sutton's note where she says

[4]agree with plan to continue decadron,

[5]cimetidine and dilantin?

[6]A Yes.

[7]Q There's no reference in there

[8]whatsoever to morphine and demerol, is there?

[9]A No, there is not.

[10]Q And again, Dr. Sutton is a

[11]neurologist, not part of the neurosurgery team?

[12]A That's correct.

[13]Q And she wasn't qualified to determine

[14]when or under what circumstances surgery would

[15]be done in this case?

[16]MR. DAILEY: Objection.

[17]THE COURT: Sustained.

[18]Q You were asked about your instructor

[19]status as a teacher?

[20]A Yes.

[21]Q Would you explain that please?

[22]A I am primarily a clinical neurosurgeon

[23]and don't have responsibilities [*175] in instructing.

Page 222

[1]In my role as senior attending at St. Luke's

[2]Roosevelt Hospital, Columbia Presbyterian

[3]Hospital is responsible for issuing a change in

[4]my status. That application has not been made

[5]or really responded to for any of the

[6]attendings at Roosevelt Hospital.

[7]Q You're a more clinical hands on

[8]surgeon?

[9]A I would say almost exclusively, yes.

[10]Q Now the questions about the concern

[11]about the brain from oozing out through a hole

[12]if you drill a hole, was that a concern, would

[13]it have been a concern in this case had surgery

[14]been done earlier?

[15]A No.

[16]Q And why do you say that?

[17]A The tumor as we demonstrated on the

[18]scans came right to the surface. The approach

[19]to the tumor would be through either what we

[20]call encephalomalacia brain, which is dead

[21]brain which has lost all function or no brain.

[22]Moreover, once the incision in the

[23]dura was made, if there was evidence that

Page 223

[1]through this tiny opening in non-functioning

[2]brain there was pressure causing it to squirt

[3]out, one would appropriately either stick a

[4]catheter in **[*176]** or a needle in to drain the fluid,

[5]and that would have the effect of immediately

[6]draining the pressure and eliminating that

[7]bulging out of the brain. That indeed is what

[8]was done.

[9]Q And in fact surgery was undertaken in

[10]the early morning hours of July 4, correct?

[11]A Yes.

[12]Q That was by Dr. Alexander?

[13]A Yes.

[14]Q And when he made an incision into

[15]Michael Cardarelli's brain through his skull,

[16]was there any such event that happened?

[17]A He noted when he elevated the bone

[18]flap and was looking at the dura that the dura

[19]was tense, with some pulsation I think he said.

[20]He then made a small opening and noted some

[21]bulging. he then stuck something into the cyst

[22]and aspirated the fluid to relieve the

[23]pressure.

Page 224

[1]Q And there was a note about that?

[2]A He noted that it relieved the pressure

[3]and that the fluid was brownish in character.

[4]Q And what does brownish mean?

[5]A That's what you would expect with

[6]proteinaceous fluid with old blood mixed in it.

[7]Q With old blood mixed in?

[8]A Yes.

[9]Q And again, most of the consulting [*177] work

[10]that you do is for physicians and hospitals and

[11]their attorneys?

[12]A I guess so, yes.

[13]Q You had said 75 percent earlier.

[14]A Oh, I'm sorry. Yes, more for defense

[15]work versus plaintiff work, yes.

[16]Q Now the questions about vomiting, he

[17]was vomiting on oral medication, what was done

[18]about that?

[19]A I don't believe he was given any

[20]medication to stop vomiting. He was switched

[21]from oral medication to intravenous and then

[22]intramuscular medication so that he wouldn't

[23]vomit it up.

Page 225

[1]Q And the vomiting itself, you said

[2]earlier that was a sign of increasing

[3]intracranial pressure?

[4]A Yes.

[5]Q The questions that were put to you

[6]about Dr. Sutton's normal findings on

[7]examination, normal findings that she notes?

[8]A Yes.

[9]Q Just because he had normal findings,

[10]does that change your opinions in any way?

[11]A No, it does not.

[12]Q And does that justify waiting to

[13]relieve the pressure that was there?

[14]MR. DAILEY: Objection.

[15]THE COURT: Sustained in that form.

[16]Q The normal findings that she noted,

[17]does [*178] that indicate that he was still

[18]functioning and could talk and read?

[19]A Yes.

[20]Q And the abnormal findings that are

[21]noted, just because she was noting normal

[22]findings, does that justify ignoring the

[23]abnormal findings?

Page 226

[1]MR. DAILEY: Objection.

[2]THE COURT: Sustained.

[3]Q Were the abnormal findings that she

[4]noted again signs of increasing intracranial

[5]pressure?

[6]MR. DAILEY: Objection.

[7]MS. RISTUBEN: Let me ask it a

[8]different way.

[9]Q The abnormal findings of Dr. Sutton,

[10]were they consistent with increasing

[11]intracranial pressure?

[12]A Yes, they were.

[13]Q In terms of Dr. Eskander's note in the

[14]chart on page 15, where he said that there was

[15]no evidence of herniation, is that consistent

[16]with what the CAT scan had shown?

[17]A The CAT scan showed evidence of

[18]subfalkian herniation, so in that sense it's

[19]not consistent. It he was referring to

[20]clinical herniation, I wouldn't interpret the

[21]note to say that's what he was affect about.

[22]Q That there was evidence of herniation

[23]on the CAT scan?

Page 227

[1]A I think I pointed **[*179]** out --

[2]MR. DAILEY: Objection.

[3]THE COURT: Sustained.

[4]Q If you refer to the nurse's

[5]neurological checks on page 34 in the flow

[6]sheet, they noted the pupillary size was 3, is

[7]that right?

[8]A Yes.

[9]Q And Dr. Eskander had noted the

[10]pupillary size was 6, right?

[11]Q Is that a difference?

[12]A It's a different number, yes.

[13]Q And also, the nurse's notes indicate

[14]that the last check before he was found to be

[15]unresponsive happened at midnight, correct?

[16]A Yes.

[17]Q So that was the last time he was

[18]checked before he was found to be unresponsive?

[19]A That's the last time it's charted.

[20]Q And we can't tell anything from the

[21]record as to when he actually lost

[22]consciousness, can we?

[23]A No.

Page 228

[1]Q And you were asked whether Dr. Park,

[2]Eskander and Llinas had the duty to observe and

[3]do an evaluation correctly, correct?

[4]A Yes.

[5]Q And you were about to say I think, you

[6]weren't given the opportunity to say what other

[7]responsibilities they had?

[8]A The residents may independently make

[9]decisions about **[*180]** treatment of the patient, so to

[10]say they only observed would short circuit some

[11]of their responsibility and function.

[12]Q Would you describe very briefly the

[13]Vermont case that was referred to and your role

[14]in it please?

[15]A The Vermont case involved a gentleman

[16]who went in for a spinal fusion. He was placed

[17]on a prone or face down position and operated

[18]on by an orthopedic surgeon and given

[19]anaesthesia by an anesthesiologist. When he

[20]woke up, he was blind because of pressure on

[21]both eyes during the case.

[22]Q What is the Medical Management Group

[23]of New York that was referred to?

Page 229

[1]A All of those groups are groups that

[2]send patients to doctors for evaluations, most

[3]often after a motor vehicle accident, after a

[4]work related injury, to see if further

[5]treatment is indicated, to see if they're ready

[6]to go back to work.

[7]Q And that's the capacity in which you

[8]do the work?

[9]A Yes.

[10]Q Did anything that was asked of you or

[11]brought out during cross-examination change any

[12]of your fundamental opinions in any way?

[13]MR. DAILEY: Objection.

[14] **[*181]** THE COURT: Sustained.

[15]Q Did any of the facts pointed out on

[16]cross-examination cause you to change your

[17]opinions in any way?

[18]MR. DAILEY: Objection.

[19]THE COURT: Overruled.

[20]A No.

[21]MS. RISTUBEN: Thank you. That's all

[22]I have.

[23]

Page 230

[1]RECORD-CROSS-EXAMINATION BY MR. DAILEY:

[2]Q Doctor, you just said the vital signs

[3]would not change over a period of time until

[4]herniation, is that what you said?

[5]A I either said will or may not; I'm not

[6]sure.

[7]Q Well you've been affect about

[8]medications here.

[9]Are you saying that if someone got

[10]too much medication none of the vital signs

[11]would change?

[12]A Depends on how you define too much

[13]medication. If someone got enough --

[14]Q Didn't you indicate here earlier that

[15]you disagreed with the amount of medication and

[16]the type of medication that was given?

[17]A Yes.

[18]Q And didn't you indicate that that

[19]medication could cause a person to become

[20]obtunded?

[21]A Among other things, yes.

[22]Q If a patient became obtunded or was

[23]approaching becoming obtunded, are you saying

Page 231

[1] **[*182]** none of the vital signs would have changed?

[2]A They may or may not.

[3]Q And with regard to this work that you

[4]do, you mentioned 75 percent of it is for

[5]physicians, down in New York have you testified

[6]or looked at malpractice cases?

[7]A Yes.

[8]Q Have you looked at cases for doctors

[9]in New York?

[10]A For doctors, yes.

[11]Q And have you looked at any cases for

[12]patients in New York?

[13]A Yes.

[14]Q Most of the work that you do in New

[15]York is for doctors, isn't that right?

[16]A Yes.

[17]Q In other words, it's when you come out

[18]to Vermont or Pennsylvania, or New Jersey, or

[19]Kansas, or Florida, or here in Massachusetts,

[20]or Maryland, or Virginia, that you normally

[21]testify for patients, isn't that right?

[22]MS. RISTUBEN: Objection.

[23]THE COURT: Sustained.

Page 232

[1]Q And with regard to these checks that

[2]you were just asked about, you were asked

[3]whether or not there's a difference between 6

[4]millimeters and 3 millimeters that the nurse

[5]were reporting as to the pupil size?

[6]A Yes.

[7]Q What did Dr. Eskander find and what

[8]did [*183] Dr. Mary Sutton find the size of the pupil

[9]was with a flashlight?

[10]A I seem to remember various indications

[11]of 6 going down to 3 with the light in the eye.

[12]Q Didn't they each indicate 3?

[13]A 3 was one of the numbers, yes.

[14]Q And wouldn't the nurses have been

[15]checking with a flashlight?

[16]A In observing pupillary signs, you may

[17]or may not.

[18]Q And if they were and they came up with

[19]the 3s, everyone was finding the same size,

[20]weren't they?

[21]A Yes.

[22]Q And you're not saying that these

[23]nurses were going in every two hours and

Page 233

[1]checking this young man, are you?

[2]A I don't know, sir.

[3]Q As a matter of fact, you know the

[4]practice would be that they would be in much

[5]more frequently than that, but that the

[6]reporting practice is that you would report

[7]every two hours, isn't that right?

[8]MS. RISTUBEN: Objection, Your Honor.

[9]THE COURT: I think if the witness

[10]can answer that question.

[11]A I would answer it by saying I have no

[12]idea what the routine would be.

[13]Q You have no idea what the routine

[14]would be on a neurology [*184] floor where they're

[15]watching neurology and neurosurgery patients?

[16]MS. RISTUBEN: Objection, it's beyond

[17]the scope.

[18]A That's correct.

[19]THE COURT: I'm going to sustain that

[20]objection and strike the answer.

[21]MR. DAILEY: That's all I have, Your

[22]Honor.

[23]THE COURT: Thank you. You may step

Page 234

[1]down.

C E R T I F I C A T E

I, June Gibbs, an official court reporter, do hereby certify that the foregoing transcript, Pages 1 through 233, is a complete, true and accurate transcription of my audiographic recording taken in the aforementioned matter to the best of my knowledge, skill and ability.

June Gibbs, Official Court Reporter

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