TESTIMONY OF DR. GEORGE DIGIACINTO; 1995 Trial Trans. LEXIS 1117

SUPREME COURT OF NEW YORK, SUFFOLK COUNTY, I.A.S. PART VI

Index No. 13490/88

October 17, 1995

Reporter
1995 Trial Trans. LEXIS 1117 *

DEANNE ISAACSON, as Administratrix of the Estate of ELI ISSACSON, and DEANNE ISAACSON, Individually, Plaintiff, -against- DAVID LEIVY, Defendant.

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

Disclaimer

Certain information may have been removed or redacted. LexisNexis, its subsidiaries, affiliates and related entities bear no responsibility whatsoever for such content or any removal or redaction thereof.

Counsel

[*1] SIMONSON, HESS & LEIBOWITZ, P.C., Attorneys for Plaintiff, New York, NY, BY: STEVEN L. HESS, ESQ.

VARDARO & HELWIG, ESQS., Attorneys for Defendant, Smithtown, NY, BY: ANTHONY P. VARDARO, ESQ.

Judges

Before HON. LESTER E. GERARD, Justice, and a Jury

Proceedings

1 2

[2]Dr. George Vincent DiGiacinto,

[3]425 West 59th Street, New York, New York

[4]10019, called as a witness in behalf of the

[5]defendant, having been duly sworn,

[6]testified as follows:

[7]DIRECT EXAMINATION

[8]BY MR. VARDARO:

[9]Q. Good **[*2]** morning, doctor.

[10]A. Good morning.

[11]Q. Doctor, are you a physician duly licensed

[12]to practice medicine in the State of New York?

[13]A. Yes, I am.

[14]Q. What year were you licensed, doctor?

[15]A. 1974.

[16]Q. And doctor, could you tell us a little bit

[17]about your background starting with the medical school

[18]you attended and the year you graduated?

[19]A. I attended the Harvard Medical School and

[20]graduated in 1970. From 1970 to 1972 I was a general

[21]surgery house officer at the Roosevelt Hospital in New

[22]York City. From 1972 to '74 I was a medical officer in

[23]the United States Navy. And starting in July of 1974

[24]and ending in June of 1978 I completed a neurosurgical

[25]residency at Columbia Presbyterian Medical Center in

[1]3

[2]New York City.

[3]Q. And doctor, after completion of your

[4]residency did you enter into private practice?

[5]A. Yes. As soon as I completed my residency I

[6]started in private practice.

[7]Q. Doctor, are you board certified?

[8]A. Yes, I am.

[9]Q. And in what specialty?

[10]A. In neurosurgery.

[11]Q. Doctor, tell us a little bit about **[*3]** the

[12]practice of neurosurgery.

[13]A. Neurosurgery involves the evaluation of and

[14]treatment of processes involving the brain, the spinal

[15]cord and the nerves. We're asked to diagnose an

[16]alteration in function and diagnose the presence of

[17]abnormalities which may or may not but which very often

[18]will be treated by an operation to correct the

[19]abnormality.

[20]Q. And doctor, do you have hospital

[21]affiliations?

[22]A. Yes, I do.

[23]Q. Could you tell us about them, sir?

[24]A. I'm affiliated with the St. Luke's

[25]Roosevelt Hospital Center in New York City where I am

[1]4

[2]the director of neurosurgery. I am an attending

[3]neurosurgeon at Harlem Hospital Center and at Beth

[4]Israel North Medical Center and I am an instructor in

[5]neurosurgery at Columbia Presbyterian Medical Center.

[6]Q. Doctor, with respect to your duties as

[7]director of neurosurgery, could you tell us a little

[8]bit about that at St. Luke's Hospital?

[9]A. Yes. I am obligated to basically run the

[10]division of neurosurgery, which means scheduling, being

[11]aware of and overseeing all neurosurgical cases that

[12]are done either **[*4]** by myself or any of the other attending

[13]neurosurgeons. I am involved in training the general

[14]surgery residents which -- excuse me, who rotate on the

[15]neurosurgery service.

[16]Q. Doctor, have you authored any articles or

[17]texts?

[18]A. Yes, I have.

[19]Q. Could you tell us about them, sir?

[20]A. Excuse me?

[21]Q. Could you tell us about them?

[22]A. I have authored approximately 15 or 20

[23]articles dealing primarily with the treatment of spine

[24]tumors and spine stabilization.

[25]Q. Doctor, did there come a time when you were

[1]5

[2]asked by my office to review certain materials

[3]pertaining to this case?

[4]A. Yes, sir.

[5]Q. Okay. And doctor, what materials were you

[6]asked to review?

[7]A. I was asked to review the Huntington

[8]Hospital medical record, the depositions or examination

[9]before trial I guess they're called of the plaintiff

[10]and of the defendant.

[11]Q. And included in the hospital chart, doctor,

[12]was the autopsy report there?

[13]A. That's correct.

[14]Q. Okay. And doctor, have you testified

[15]before?

[16]A. Yes, I have.

[17]Q. Approximately **[*5]** how many times?

[18]A. Approximately a dozen times.

[19]Q. Okay. Over what period of time, doctor?

[20]A. 10 years, mostly over the last five years.

[21]Q. Okay. And doctor, is this the first time

[22]that you were contacted by my office and you have

[23]testified for either my office or me in particular?

[24]A. That is correct.

[25]Q. Okay.

[1]6

[2]A. It is.

[3]Q. Doctor, before today did you and I meet and

[4]discuss this case?

[5]A. Yes, we did.

[6]Q. On how many occasions?

[7]A. Two occasions before today.

[8]Q. Okay. And doctor, are you being

[9]compensated for your review of the materials that we

[10]sent you and for the time spent today in court away

[11]from your practice?

[12]A. Yes, sir.

[13]Q. Doctor, in the course of your practice have

[14]you had occasions to treat patients with back problems?

[15]A. Yes, sir.

[16]Q. And have you also had occasions to treat

[17]patients with herniated disks?

[18]A. Yes, sir.

[19]MR. VARDARO: Your honor, we've

[20]premarked an exhibit. Could I have the

[21]doctor come down here and discuss the

[22]exhibit with the jury?

[23] **[*6]** THE COURT: Go ahead, doctor.

[24]Q. Doctor, could you step down?

[25]THE COURT: How did you mark that one?

[1]7

[2]MR. VARDARO: Defendant's A.

[3]Q. Doctor, looking at Defendant's A, could you

[4]describe the anatomy of the lumbosacral spine?

[5]A. We are given one, two, three, four, five

views of various parts of the so-called lumbar spine and sacrum. The lumbar spine consists of normally five bones called lumbar vertebrae, L1, two, three, four and five. The last movement segment is between the L5 vertebra and the lowest normally solid bone called the sacrum. So this is the lumbar spine, this is the sacrum.

Each individual lumbar vertebra has a so-called vertebral body and then so-called posterior elements, spinous process. And inside each vertebra is a hole where the nerve roots run. Between each set of vertebrae lies a so-called lumbar disk. And exiting between each set of vertebrae is a nerve root that goes out and then forms a nerve that goes down to the leg. I'm not sure how much more. I could keep going. We could go on for a long time.

Q. Doctor, as long as you **[*7]** are describing the disk in this particular case, diagnosed by Dr. Leivy was L3-4. Could you describe that, please?

A. I numbered the lumbar vertebrae and they

8

are labeled here for us, so that the disk lying between the third lumbar vertebra and the fourth lumbar vertebra is the one involved. The somewhat more blown up picture on your right exhibits specifically the L3-4 disk as labeled, and that helps us because it labels the L4 nerve root, which is passing by the disk at L3-4 and the L3 nerve root that's exiting just at the level of the disk at L3-4.

Q. Doctor, when you have a herniated disk can

[11]you have compression upon one or several of the nerve

[12]roots?

[13]A. Yes, you can, sir.

[14]Q. In this particular case, doctor, in your

[15]review of the records, did we have a herniated disk?

[16]A. Yes, sir.

[17]Q. Okay. And was there compression of the

[18]nerve roots?

[19]A. Yes, sir.

[20]Q. Would you describe which nerve roots were

[21]involved, doctor?

[22]A. The area involved was between the third and

[23]the fourth lumbar vertebrae. As I mentioned, the L4

[24]nerve root **[*8]** is passing by the disk before it exits out

[25]to the leg one level lower. A disk herniation

[1]9

[2]anteriorly into the spinal canal will compress the L4

[3]root. It will also compress the L3 root which is lying

[4]a little bit more lateral and passing out again to form

[5]one of the legs that goes down to the -- one of the

[6]nerves that goes down to the legs. Therefore, an

[7]anterior and lateral herniation into the anterior

[8]portion of the spinal canal will compress the L4 and

[9]the L3 nerve roots. And that's specifically what we're

[10]talking about today.

[11]Q. Now doctor, with compression of the nerve

[12]root, L3-L4, can you have severe pain?

[13]A. Yes, sir.

[14]Q. Doctor, with compression of L3 and L4 as

[15]you have shown us on that diagram, can that pain

[16]radiate?

[17]A. Yes, sir.

[18]Q. And when we talk about radiation, what is

[19]radiation?

[20]A. The term we use in this setting is a lumbar

[21]radiculopathy. The radiculopathy means that a nerve

[22]root has pressure on it and that pressure causes pain

[23]to radiate, radiculate, I'm not sure exactly how they

[24]translate the word, so that it causes discomfort in **[*9]** the

[25]leg and it causes discomfort in the leg in a pattern

[1]10

[2]more or less related to which nerve roots are

[3]compressed. So therefore lumbar radiculopathy is an

[4]indicator, a very strong indicator of a nerve or nerve

[5]roots that are being irritated by a herniated disk.

[6]Q. Doctor, beside pain, on the question of

[7]pain, in your opinion, doctor, is that pain constant or

[8]does it vary?

[9]A. The pain in lumbar disk disease

[10]characteristically varies up and down from minute to

[11]minute, hour to hour, day to day, depending on how much

[12]irritation there is of the nerve root, with it being

[13]constantly pressed on, whether it's just been touched,

[14]whether a change in position allows a little relief of

[15]that nerve root compression. So the simple answer is

[16]it does vary very frequently.

[17]Q. Doctor, with a herniated disk, nerve root

[18]compression, does it radiate down to certain portions

[19]of the leg which are indicated in the chart which we

[20]call dermatomes?

[21]A. As I mentioned, each nerve root has a

[22]pattern of radiation of changes in a senseation, pain,

[23]numbness. It's never a hundred percent reliable, **[*10]** that

[24]you can't always say exactly one point is always going

[25]to reflect one nerve root, but there are so-called

[1]11

[2]dermatomal areas, patterns of numbness that you would

[3]most commonly expect with a given nerve root, yes.

[4]Q. Doctor, have you completed with this?

[5]A. I think so, yes.

[6]Q. Doctor, I would like to show you what has

[7]been marked --

[8]MR. VARDARO: Premarked, your honor,

[9]Defendant's B.

[10]MR. HESS: Your honor, can I stand

[11]over there? Because I can't see.

[12]THE COURT: Go ahead.

[13]MR. HESS: Thank you.

[14]Q. This is a little smaller, doctor. Maybe

[15]you can move up. What is this diagram, doctor?

[16]A. This is a diagram that's meant to

[17]demonstrate -- I'm talking about this portion up here,

[18]the so-called dermatomal patterns. It's a guide to

[19]tell us where a specific nerve root most commonly will

[20]show changes in a senseation or in radiation of pain or

[21]in numbness. It's a guide rather than a very strict,

[22]strict indicator, though.

[23]Q. Okay. When you say, "a guide," doctor, on

[24]that chart could you show us where a herniated disk

[25]with nerve root **[*11]** compression of L3 and L4, nerve root

[1]12

[2]L3-L4, would generally be?

[3]A. The two grayed areas which we see here are

[4]labeled L3 and L4. They fairly well correspond to the

[5]area that usually is involved. And if I described it

[6]anatomically it would be the anterior thigh running

[7]around to the medial thigh and running down the leg

[8]usually just to about the level of the knee. Again,

[9]dermatomal patterns vary a great deal. The pain may be

[10]somewhat higher, the pain may actually be somewhat

[11]lower. But this does act as a general guide of the

[12]area where most of the sensory changes, either pain

[13]and/or numbness, might be noticed in a patient.

[14]Q. So I understand, doctor, when you say,

[15]"generally," can there be an overlapping of the

[16]dermatomes from one lumbar area to another?

[17]A. There essentially always is an overlapping,

[18]so that what this diagram tries to do is show you the

[19]area that's most commonly, most exclusively served by

[20]in this case the L3 nerve root. But we know from

[21]stimulation of nerve studies and we know from cutting

[22]of nerve studies that the area of change in sensation

[23]is much **[*12]** broader, so that the L3 change is, if we could

[24]make L3 red and L4 blue, there would be a lot of

[25]overlap between L3 and L4 so that L4 would extend up to

[1]13

[2]the area labeled L3 and vice versa.

[3]By the same token, the L3 area very much

[4]overlaps into the next level up, the L2 area, which is

[5]labeled on the other side, so that whenever you're'

[6]talking about one nerve root and trying to draw a

[7]dermatome you're underestimating the overall area

[8]that's covered by the particular nerve root.

[9]Q. Doctor, in the hospital chart is a

[10]consultation by a Dr. Brown, and are you familiar with

[11]his consultation report?

[12]A. Yes, I am, sir.

[13]Q. Doctor, let me read you right out of the

[14]report, and it's page 11, for the record, your honor,

[15]and paragraph number four, the very last sentence in

[16]paragraph number four. Doctor, quote, he says he has

[17]so much pain on the inside of his right thigh that just

[18]touching it bothered him. Doctor, is that consistent

[19]with a herniated disk and nerve root compression of L3

[20]and four?

[21]A. Yes, it is, sir.

[22]Q. Could you explain that, please?

[23]A. **[*13]** I think we have pretty much explained that

[24]already. If I make the same circle I was making around

[25]L3 and L4, I'm covering the area of the anterior and

[1]14

[2]inner thigh. So I think that's the best way to answer

[3]your question.

[4]Q. Okay. Now doctor, also within the hospital

[5]chart Dr. Leivy noted that there was slight atrophy of

[6]the right quadriceps. Now first off, doctor, using

[7]that chart, could you tell us first off what are the

[8]quadriceps?

[9]A. It's a group of muscles that run from about

[10]here down to the knee. It's the muscles in front of

[11]the thigh. It's the muscle that straightens the leg.

[12]It's the muscle that serves this so-called patella or

[13]knee jerk reflex, and it's the muscle that's innervated

[14]primarily by the L4 nerve root, to a lesser extent the

[15]L3 nerve root.

[16]Q. And I don't know if we explained atrophy.

[17]What is that?

[18]A. Atrophy means that the muscle that is

[19]shrunken down, it's gotten smaller than it normally

[20]should be.

[21]Q. Okay. Is atrophy consistent with a

[22]herniated disk at L3-4?

[23]A. Again, it's consistent with the nerve going

[24]to the muscle **[*14]** not working properly and the muscle

[25]losing some of its bulk.

[1]15

[2]Q. Is atrophy or the loss of bulk, is that

[3]consistent with a diagnosis of a deep venous

[4]thrombosis?

[5]A. It would be unrelated and it would look the

[6]opposite. If there were clinical evidence it would not

[7]show atrophy of the muscle or atrophy or thinning out

[8]of the leg at all.

[9]Q. Thank you, doctor. I'll take that out of

[10]the way. Will you take the stand.

[11]Doctor, when a patient presents with

[12]symptoms of a herniated disk, a nerve root compression,

[13]what forms of treatment were available back in 19 --

[14]and all my questions by the way refer back to 1986,

[15]July of 1986. What forms of treatment were available

[16]for the symptoms of a herniated disk with nerve root

[17]compression?

[18]A. The treatments that were most commonly

[19]utilized at that time were bedrest, pelvic traction,

[20]pain medications, anti-inflammation medications and

[21]surgery.

[22]Q. Now doctor, pelvic traction, that was

[23]utilized in this case, true?

[24]A. Yes, sir.

[25]Q. Okay. Could you describe pelvic traction

[1]16

[2]for us, sir?

[3] **[*15]** A. The patient is lying in the bed in a

[4]comfortable position, either flat or with pillows,

[5]depending on how he feels best. A canvas band that's

[6]attached either with straps, with Velcro is put around

[7]the pelvis bone and it's attached to a rope on either

[8]side running down along the legs. The rope's hung over

[9]the end of the bed and by a pulley system weights are

[10]put on it to pull on that whole construct to try to put

[11]traction on the pelvis and therefore pull the bones

[12]back apart a little bit.

[13]Q. Doctor, would with pelvic traction are the

[14]legs immobilized?

[15]A. No, sir.

[16]Q. And is the patient free to move his legs?

[17]A. Yes, sir.

[18]Q. What if anything is the significance of a

[19]patient at bedrest with the ability to move his legs?

[20]A. I'm not exactly sure what you mean. The

[21]patient in pelvic traction for a herniated disk is
[22]attempting to relieve some of his pain. He will be
[23]immobilized in the sense that he's kept in bed. He
[24]won't be immobilized in the sense of being able to move
[25]around in bed. Very characteristically the patient
[1]17
[2]who's in bed with an irritated nerve **[*16]** root will find a
[3]comfortable position and find a few minutes or a half
[4]an hour later that he's not comfortable in that
[5]position anymore and he'll change position. The
[6]advantage of the pelvic traction is that he's free to
[7]move around as much as he needs to and yet the pull on
[8]the spine, which is designed to help relieve the pain,
[9]is consistent even if he is turning from side to side,
[10]wiggling on his back and just constantly changing
[11]position.
[12]Q. Doctor, are you familiar with the -- let's
[13]say from the standpoint of the mechanism with respect
[14]to the legs and utilizing muscles to move the blood,
[15]could you describe that for us?
[16]A. Well, every time a muscle contracts, every
[17]time you wiggle or turn, you're causing the muscles to
[18]contract down and that allows the muscle to go through
[19]a normal range of motion and it also allows the blood
[20]in the legs to be assisted in returning to the heart.
[21]Q. And doctor, a patient at bedrest, pelvic
[22]traction, legs are not immobilized, is he at high risk
[23]for a thrombus?
[24]A. Not at high risk, no.
[25]Q. Doctor, a patient, and all my questions

[1] **[*17]**

[2]again, I know I referred to 1986, a patient at bedrest

[3]with traction, do you automatically, based on the

[4]traction and bedrest, consider coagulation therapy for

[5]such a patient?

[6]A. No, sir.

[7]Q. Doctor, in looking at the hospital chart --

[8]MR. VARDARO: Your honor, can the

[9]doctor have Plaintiff's Exhibit I believe

[10]it's one?

[11]A. Okay.

[12]Q. Doctor, we have had testimony concerning

[13]some of the injuries within the hospital chart. But

[14]I'll ask you to assume that on admission the patient

[15]had severe back pain. I ask you to further assume that

[16]Dr. Leivy saw the patient later on on the day of

[17]admission, July the 18th, sometime in the morning, and

[18]his note indicates bad night, now a little better.

[19]Further assume, doctor, that you have nurses' notes

[20]with respect to pain, at 6:30 A.M., complains of pain.

[21]Refused pain medication. Wants traction. No relief of

[22]pain thus far. At 12 P.M., the same day, July 18,

[23]complains of pain right hip and leg when moved. And

[24]the last entry we have, doctor, at 7:30 P.M., Dr. Brown

[25]visited. Appetite fair. Voiding. No complaints of

[1]19

[2] **[*18]** pain at present.

[3]My question is, doctor, in your opinion,

[4]those entries, is that consistent with a diagnosis of a

[5]herniated disk with nerve root compression?

[6]A. Yes, it is, sir.

[7]Q. Would you tell us why?

[8]A. Well, I think what you've outlined is a

[9]patient with pain that seems to be fluctuating, it's

[10]bad at times, sometimes he's not requiring pain

[11]medicine. He's reported by at least one observer to be

[12]pain free. And again very characteristically the

[13]irritation of the nerve root can be intermittent in the

[14]sense that the pain may sometimes be very severe and

[15]then with change in position, adjusting himself, the

[16]pain will be very minimal and then come back again.

[17]And I think that's the sequence that we have outlined

[18]here.

[19]Q. After the 18th, doctor, on July 19 and July

[20]20 the patient continued to complain of pain, is that

[21]correct?

[22]A. Yes, sir.

[23]Q. Okay. And doctor, in any of the notes by

[24]Dr. Leivy or the nurses was there any complaint of

[25]thigh pain?

[1]20

[2]A. I did not see any entry indicating that,

[3]sir.

[4]Q. Now doctor, on July the 21st **[*19]** Dr. Leivy has

[5]an entry in his progress note for July 21, and I'll

[6]read. Pain may be subsiding. Will add PT. Is that

[7]physical therapy, doctor?

[8]A. Yes, sir.

[9]Q. Okay. Doctor, what if anything is the

[10]purpose of physical therapy?

[11]A. One of the forms of treatment, which I
[12]actually think I failed to mentioned in answer to an
[13]earlier question, is therapy to try to alleviate some
[14]of the results of nerve root irritation. Therapy is
[15]designed to stretch muscles, to exercise them, to offer
[16]massage, to offer deep heat, all modalities which will
[17]allow a patient who's getting more comfortable to begin
[18]to progress toward moving, toward getting up, toward
[19]moving around. So it's part of the therapy for
[20]so-called nonsurgical treatment of herniated lumbar
[21]disk disease.
[22]Q. And doctor, we have had testimony here that
[23]the patient later on on the 21st of July was taken to
[24]physical therapy, and, for the purpose, we have read it
[25]several times. Allow me to read it, doctor. Reading
[1]21
[2]from page 18, for the record, the entry of July 21,
[3]1986, physical therapy treatment record. Patient in
[4] **[*20]** extreme pain, especially upon movement. Inner groin
[5]very sore, lumbosacral area as well. Moist heat,
[6]massages. Patient unable to tolerate prone or
[7]side-lying for more than a few minutes at a time.
[8]Patient in excruciating pain. Now doctor, what if
[9]anything in your opinion is the significance of that
[10]note?
[11]A. I think the findings and the description
[12]there goes along very well with what I mentioned
[13]earlier. The patient with irritated nerve root from a
[14]herniated disk will try to find a position that's
[15]comfortable. Here he's been taken down to

[16]physiotherapy, he's been turned on his side, he's been

[17]turned I think they say prone or on his stomach, and

[18]those changes in position are causing further

[19]irritation of the nerve root and causing him a marked

[20]worsening or exacerbation of his pain because the nerve

[21]root is being banged on as he's being moved around.

[22]Q. Now doctor, looking at physical therapy,

[23]the last notation on July the 21st I believe, we have

[24]the nurse's note on the three to 11 shift?

[25]A. Do you have a page, sir?

[1]25

[2]Q. Doctor, are patients who are postsurgical,

[3] **[*21]** are they at high risk?

[4]A. Certain types of surgery do make patients

[5]more prone to emboli and thrombus formation. Brain

[6]surgery is associated with thrombus formation. Casting

[7]of an extremity is associated with thrombus formation,

[8]among other things.

[9]Q. Doctor, any other types of surgery, for

[10]example, hip and knee surgery?

[11]MR. HESS: Objection to the leading.

[12]A. I'm sorry, any --

[13]THE COURT: Sustained as to form.

[14]A. I'm sorry.

[15]Q. Any others, doctor?

[16]A. Any surgery that will involve an extremity,

[17]bone surgery, pinning of the hip, casting of a

[18]fracture, that general area. I'm sorry if I didn't

[19]include everything.

[20]Q. Doctor, what are the signs and symptoms of

[21]a thrombus?

[22]A. Swelling, redness, heat and complaints of

[23]pain are the most commonly noted signs and symptoms.

[24]Q. Doctor, if you'd refer to page nine of the

[25]hospital chart, the physical examination, admitting

[1]26

[2]physical examination of Dr. Leivy. Doctor, does it

[3]indicate there that Dr. Leivy did a straight leg test?

[4]A. Yes, sir, it does.

[5]Q. And did he also **[*22]** check for some of the

[6]reflexes?

[7]A. He mentions the right knee jerk decreased

[8]compared to the left, so -- right hamstring is absent,

[9]so he did check for at least those two reflexes, yes.

[10]Q. Doctor, as a neurosurgeon you are familiar

[11]with those tests?

[12]A. Yes, sir.

[13]Q. You have performed them yourself?

[14]A. Yes, sir.

[15]Q. Doctor, when you perform those tests do you

[16]have to touch the patient, palpate the patient?

[17]A. Yes, sir.

[18]Q. Okay. And while you are palpating the

[19]patient are you observing the patient?

[20]A. Yes, sir.

[21]Q. And doctor, in any of the examinations that

[22]Dr. Leivy performed did he note any swelling or redness

[23]or heat?

[24]A. No, there's none mentioned, sir.

[25]Q. Doctor, when Dr. Leivy examined, one of the

[1]27

[2]areas that he noted in his examination was extremities?

[3]A. Yes.

[4]Q. What did he write there, sir?

[5]A. He noted no edema, which means no swelling.

[6]Q. Okay. Doctor, by the way, from the

[7]hospital chart, did Dr. Leivy see the patient every

[8]day?

[9]A. My recollection is that he did. **[*23]** I believe

[10]so.

[11]Q. We had testimony that Dr. Leivy examined

[12]Mr. Isaacson each and every visit that he made while he

[13]was in the hospital. Doctor, in your review of the

[14]hospital chart is there any notation by Dr. Leivy of

[15]any swelling of the extremities?

[16]A. Not to my recollection.

[17]Q. Doctor, you reviewed the consultation of

[18]Dr. Brown?

[19]A. Yes, sir.

[20]Q. And did Dr. Brown also perform a straight

[21]leg raising test as well as testing for the ankle and

[22]knee reflexes?

[23]A. Yes, sir.

[24]Q. Okay. And doctor, would that be something

[25]that an orthopedic doctor would do in the same manner

[1]28

[2]that a neurosurgeon would perform?

[3]A. Very much in the same manner, yes.

[4]Q. Did Dr. Brown record any swelling of any of

[5]the extremities?

[6]A. Not that I noticed.

[7]Q. And doctor, you reviewed all of the nurses'

[8]notes for the entire admission. Was there any notation

[9]by any of the nurses, any of the shifts, that recorded

[10]any swelling of any of the extremities?

[11]A. Not that I noticed, sir.

[12]Q. By the way, doctor, none of the nurses

[13]also, would **[*24]** I be correct, reported any redness or heat?

[14]A. No, sir.

[15]Q. Okay. Now doctor, with respect to pain,

[16]when you have a thrombus and before it breaks free,

[17]becomes an embolus, does it grow larger?

[18]A. That's the natural history of such an

[19]event, yes.

[20]Q. And doctor, would it be true that a

[21]thrombus, once it begins, whether it be in the

[22]superficial or the deep veins of the leg, would that be

[23]true, that once it begins, before it breaks free it

[24]would grow larger?

[25]A. Again, that would be the natural history of

[1]29

[2]such an event, yes.

[3]Q. If a patient reported pain related to a

[4]thrombus within the leg would you expect that pain to

[5]continue?

[6]A. The impetus for the pain is very constant

[7]there and it would be a continuous pain, yes.

[8]Q. And doctor, a thrombus within any of the

[9]veins within the leg, as it grows larger and a patient

[10]were to complain of pain related to the thrombus, would

[11]you expect that pain not only to continue but perhaps

[12]to progress and get worse?

[13]A. I would suspect it would, yes.

[14]Q. Doctor, in your opinion if a patient

[15] **[*25]** experiences pain from a deep venous thrombus, would

[16]that pain also exist at bedrest?

[17]A. Characteristically it does exist at

[18]bedrest, yes.

[19]Q. Would you explain why?

[20]A. I think I mentioned a moment ago the cause

[21]of the pain is constant, the thrombus doesn't come and

[22]go. It's sitting in the vein and causing its symptoms

[23]rather consistently, as in contradistinction to what we

[24]have talked about with the nerve root being irritatesd

[25]and then being less irritatesd. In this case it's

[1]30

[2]always there and it's always going to be the same

[3]stimulation for pain.

[4]Q. Doctor, I wonder if you could turn to, I

[5]believe it's page 34, the autopsy report. Do you have

[6]that, sir?

[7]A. Yes, I do, sir.

[8]Q. Now doctor, did the pathologist, based on

[9]his examination, did he confirm a herniated disk at

[10]L3-4?

[11]A. Yes, he did.

[12]Q. And doctor, I believe the pathologist also

[13]wrote that there was lumbar disk degeneration with the

[14]herniation?

[15]A. Yes, sir.

[16]Q. Could you explain, what is lumbar disk

[17]degeneration?

[18]A. As a disk undergoes stresses and wear **[*26]** and

[19]tear it changes its chemistry and specifically it loses

[20]water and it becomes what we call dried out, desiccated

[21]or degenerated. Those are more or less interchangeable

[22]terms. So that when he describes disk degeneration it

[23]means that it's a disk that isn't firm and solid, it's

[24]rather fibrous. Some people describe it as crab meat.

[25]When you pull it out, it shreds very much. A normal

[1]31

[2]disk is a very tough structure, you can't pull it out,

[3]it holds very well to itself. So he's describing a

[4]disk that's chemically changed its water content and

[5]physically it's just easier to pull apart or more

[6]friable is the term we use.

[7]Q. Doctor, based on the autopsy report

[8]indicating a herniated lumbar disk with lumbar disk

[9]degeneration, is that consistent with the pain and

[10]radiation of pain that was experienced by the patient

[11]in this case?

[12]A. Yes, it is, sir.

[13]Q. Okay. Now doctor, would you look at page

[14]36 of the autopsy report. And there's writing on the

[15]entire page, doctor. I wonder if I could -- I'll refer

[16]you to the fourth paragraph, and it's the third line

[17]down. I'll read that **[*27]** portion. The cut surfaces of the

[18]lung showed large proximal pulmonary emboli which

[19]measured up to 10 centimeters by 1.5 centimeters when

[20]uncoiled and six centimeters by one centimeter. Now

[21]doctor, before this embolus lodged in the lungs was

[22]this one thrombus?

[23]A. Most probably, yes.

[24]Q. And how would you characterize the size

[25]reported by the pathologist?

[1]32

[2]A. I think I'd call it very large. I can't do

[3]better than that.

[4]Q. Doctor, back in 1986 was pulmonary embolism

[5]one of the leading causes of death in the United

[6]States?

[7]A. Yes, it was, sir.

[8]Q. And doctor, are you familiar with the term

[9]silent pulmonary embolism?

[10]A. Yes, sir.

[11]Q. Could you explain that to us, please?

[12]A. A silent pulmonary embolus, the terminology

[13]means that there is no indication in the patient that

[14]he has a thrombus and it only presents once the

[15]thrombus has released and become a pulmonary embolus

[16]and gone up to the lung. So it's silent until it

[17]causes the problem in the lung itself.

[18]Q. When you say, "silent," doctor, am I clear

[19]that a thrombus forms, **[*28]** breaks away, becomes an embolus,

[20]lodges in either the heart or the lungs and this occurs

[21]without any sign or symptom?

[22]A. It occurs with -- if you look at the

[23]patient until he becomes symptomatic from the embolus,

[24]there's no way of knowing that it was there.

[25]Q. Okay. When you say, "symptomatic from the

[1]33

[2]embolus," could you describe what symptoms would be

[3]present when the thrombus breaks free and becomes an

[4]embolism?

[5]A. Depending on how large it is and where it

[6]goes and referring to this situation, it would

[7]anatomically cause a decrease in the flow of blood back

[8]to the heart, the patient would become faint,

[9]diaphoretic, trouble breathing and pass out very

[10]quickly with a large embolus.

[11]Q. Is that similar to the events that occurred

[12]in this particular case, doctor?

[13]A. Yes, sir, those are exactly.

[14]Q. Doctor, to your knowledge what percentage

[15]of pulmonary embolisms develop without signs or

[16]symptoms?

[17]A. Around 50 or 60 percent of those.

[18]Q. And doctor, in the absence of signs or

[19]symptoms of a deep venous thrombus is that a difficult

[20]diagnosis? **[*29]**

[21]A. Incredibly difficult.

[22]Q. Doctor, on the autopsy that you reviewed is

[23]the pathologist able to determine the site where the

[24]thrombus originated?

[25]MR. HESS: Objection. He's calling

[1]34

[2]for his opinion, what the opinion of the --

[3]or the state of mind of the pathologist. I

[4]don't mind if the question is rephrased as

[5]to whether there is anything in the autopsy

[6]report that indicates where it came from.

[7]THE COURT: Yes, sustained as to form.

[8]MR. VARDARO: I'll withdraw that, your

[9]honor. In fact, I'll adopt Mr. Hess's

[10]question.

[11]Q. Doctor, in the pathology report is there

[12]any indication by the pathologist as to where, at what

[13]site the thrombus, which eventually traveled, lodged in

[14]the pulmonary lungs, anything in there that indicates

[15]where the thrombus originated?

[16]A. No, there is not, sir.

[17]Q. Doctor, one of the things that -- did you

[18]also review the death certificate in this case?

[19]A. Yes, I did, sir.

[20]MR. VARDARO: Your honor, that's

[21]Plaintiff's Exhibit No. 12. Could the

[22]doctor have that? And I think there's 12A,

[23]which is the blowup. **[*30]**

[24]THE COURT: Show the doctor the death

[25]certificate.

[1]35

[2]MR. VARDARO: Can I have the blowup?

[3]THE COURT: You want the enlargement?

[4]MR. VARDARO: Yes. Just a few

[5]questions, if I may.

[6]Q. Now doctor, you are familiar with death

[7]certificates?

[8]A. Yes, sir.

[9]Q. And by the way, this was completed by Dr.

[10]Leivy, isn't that true?

[11]A. I believe it was, yes.

[12]Q. Okay. And I can't make out the date,

[13]doctor, off of the copy, but it looks like July 28 of

[14]1986. But in any event, doctor, this was completed by

[15]Dr. Leivy after the autopsy was known, would that be

[16]fair to say?

[17]A. I believe that is true, yes.

[18]Q. Okay. Now doctor, prior to the autopsy

[19]were any of the preexisting conditions which you have

[20]discussed with us, as far as that placing a patient at

[21]a high risk for a thrombus, any of those preexisting

[22]conditions present in this case?

[23]A. No, sir.

[24]Q. Okay. And doctor, any of the surgical

[25]conditions that you mentioned and with respect to

[1]36

[2]immobilization of the extremities, any of those

[3]surgical conditions for the **[*31]** hip, abdominal, knee, were

[4]they present in this case?

[5]A. No, sir.

[6]Q. Okay. Doctor, in your opinion was it

[7]reasonable, based on the autopsy report, in the absence

[8]of any of those preexisting or high risk conditions,

[9]was it reasonable for Dr. Leivy to place not only the

[10]cause of death, pulmonary embolism, but that bedrest

[11]for a herniated disk contributed?

[12]MR. HESS: Objection to that question.

[13]Was it reasonable for Dr. Leivy to put it

[14]down? Dr. Leivy put it down. He's calling

[15]for the state -- his opinion --

[16]THE COURT: The state of someone

[17]else's mind. Sustained.

[18]Q. Let me ask this, doctor: None of the

[19]preexisting or the usual high risk conditions were

[20]present in this patient, correct?

[21]A. No, they were not.

[22]Q. Doctor, do you agree with Dr. Leivy that

[23]bedrest might have contributed to the pulmonary

[24]embolism?

[25]MR. HESS: Objection.

[1]37

[2]THE COURT: What's the objection? So

[3]far as agreeing with his opinion?

[4]MR. HESS: Firstly, he's misquoting.

[5]It doesn't say might have contributed. The

[6]statement, it's a certified record, it **[*32]** says

[7]that the pulmonary embolism is due to or as

[8]a consequence of bedrest for herniated

[9]disk. So might have contributed is not

[10]what's in that document.

[11]MR. VARDARO: I think we had testimony

[12]from Dr. Leivy, and his testimony was may

[13]have contributed.

[14]THE COURT: Well, without concern for

[15]Dr. Leivy's opinion, you want to ask this

[16]doctor his opinion?

[17]Q. One other thing, doctor. You have had

[18]experience in not only reviewing death certificates but

[19]also completing them?

[20]A. Yes, sir.

[21]Q. Okay. Doctor, in a general way, just a

[22]general proposition, if you had a patient operated on

[23]for a subdural hematoma and his demise was brought

[24]about by an unrelated cardiopulmonary arrest, would the

[25]cause of death be cardiopulmonary arrest?

[1]38

[2]MR. HESS: Objection.

[3]THE COURT: Sustained.

[4]Q. Doctor, is it customary for the physician

[5]who completes the death certificate to not only place

[6]the cause of death but what preceded the cause of

[7]death?

[8]MR. HESS: Objection.

[9]THE COURT: As to custom and practice

[10]with regard to filling out death

[11] **[*33]** certificates?

[12]MR. HESS: I don't see what that has

[13]to do with this case. We're talking about

[14]this death certificate where Dr. Leivy

[15]admitted that's what he filled out as a

[16]consequence of this man's death. So I just

[17]don't see what other doctors do with other

[18]things. The question is what Dr. Leivy did

[19]in this case.

[20]THE COURT: Well, custom and practice

[21]might enter into it. Overruled.

[22]Q. You may answer, doctor.

[23]A. Could I have the question again? I'm

[24]sorry.

[25]Q. Yes.

[1]39

[2]THE COURT: Read it back.

[3](Whereupon, the reporter read back as

[4]requested.)

[5]A. Yes, sir.

[6]Q. Doctor, do you have an opinion with a

[7]reasonable degree of medical certainty whether or not

[8]there were any signs or symptoms of a thrombus in this

[9]patient during the hospitalization from July 17 of 1986

[10]through July 22 of 1986?

[11]A. I do have an opinion.

[12]Q. And what is that opinion?

[13]A. That there was no clinical evidence of

[14]thrombus in this patient during that period which was

[15]just mentioned.

[16]Q. Could you discuss with us the basis for

[17]that opinion? **[*34]**

[18]A. The hospital record talks of a patient with

[19]a herniated lumbar disk causing nerve root compression.

[20]His entire course and all of his complaints and

[21]clinical findings are very well explained by that disk

[22]which was subsequently well demonstrated on the

[23]postmortem examination. No other mechanism needs to be

[24]invoked to explain any of those symptoms which he was

[25]suffering from.

[1]43

[2]A. Yes, sir.

[3]Q. And have you testified for a fellow doctor

[4]like you're doing in this case prior to today?

[5]A. Yes, sir.

[6]Q. And of the times that you have testified

[7]how many times have you come into court on behalf of a

[8]fellow doctor?

[9]A. Probably 80 percent of the time. Most of

[10]the time.

[11]Q. And have you ever testified in a medical

[12]malpractice case like this one on behalf of a patient

[13]who was suing a doctor?

[14]A. Yes, sir.

[15]Q. How many times?

[16]A. Two.

[17]Q. Excuse me?

[18]A. Two.

[19]Q. Okay. Now Dr. Leivy, David Leivy is the

[20]defendant in this case. Do you know him?

[21]A. No, sir.

[22]Q. Never met him?

[23]A. We go to meetings. **[*35]** I might have seen him

[24]but I don't think I have ever been introduced to him,

[25]no.

[1]44

[2]Q. Do you know Dr. Hugh Wisoff?

[3]A. I know his name. I don't know him.

[4]Q. Do you know his name because he was the

[5]chairman of neurosurgery at Albert Einstein?

[6]A. I know about him, yes.

[7]Q. When was the first time you were contacted

[8]by anyone from Mr. Vardaro's office concerning this

[9]case?

[10]A. I believe in March of 1994.

[11]Q. And you told us you reviewed the hospital

[12]record, is that correct?

[13]A. Yes, sir.

[14]Q. And you reviewed as part of the hospital

[15]record the autopsy report?

[16]A. Yes, sir.

[17]Q. You read the deposition of Dr. Leivy, is

[18]that correct?

[19]A. Yes, sir.

[20]Q. Now the charts that were presented this

[21]morning, you saw them before you testified, I'd assume,

[22]is that correct?

[23]A. I saw a copy of this, if that's what you

[24]mean, sir. Oh, those.

[25]Q. Let me rephrase the question.

[1]45

[2]A. Yes, sir.

[3]Q. The charts that were the sensory and motor

[4]innervation of lower limbs, you have seen these charts

[5]before? **[*36]**

[6]A. Yes, sir.

[7]Q. Did you bring this with you to court or did

[8]Mr. Vardaro have possession of them?

[9]A. I didn't bring it.

[10]Q. Now you testified with respect to your

[11]review of this hospital record and the autopsy report

[12]that there's no question that Mr. Isaacson, the person

[13]who died, had a herniated disk, is that correct?

[14]A. That is correct.

[15]Q. He had clinical signs of a herniated disk?

[16]A. Yes, sir.

[17]Q. And Dr. Leivy, when he first saw him in the

[18]hospital, Huntington Hospital, made a presumptive

[19]diagnosis that he had a herniated disk at an L3-L4

[20]level, is that correct?

[21]A. Yes, sir.

[22]Q. And that we know was confirmed because the

[23]autopsy also confirmed that there was in fact a

[24]herniation at L3-L4, is that correct?

[25]A. That is correct.

[1]46

[2]Q. So clearly Dr. Leivy in his diagnosis of

[3]the herniated disk was absolutely correct because the

[4]autopsy confirmed it?

[5]A. Yes, sir.

[6]Q. And we also know by the autopsy that Mr.

[7]Isaacson died from a pulmonary embolism that was

[8]described as massive, is that correct?

[9] **[*37]** A. Yes, sir.

[10]Q. And we know that because it's described by

[11]the pathologist as the cause of death?

[12]A. Yes, sir.

[13]Q. Okay. Now in medicine in order to deal

[14]with a pulmonary embolism back in 1986 doctors were

[15]concerned with prevention of pulmonary embolism, is

[16]that correct?

[17]A. Yes, sir.

[18]Q. Because back in 1986 doctors knew that a

[19]pulmonary embolism could result in death as it did in

[20]this case, is that correct?

[21]A. Yes, sir.

[22]Q. And that was nothing that was that exotic.

[23]As a matter of fact, you testified that that was one of

[24]the leading causes of death in 1986?

[25]A. Yes, sir.

[1]47

[2]Q. Now in order to prevent pulmonary embolism

[3]back in 1986 doctors were concerned with the prevention

[4]of deep venous thrombosis, is that correct?

[5]A. Correct.

[6]Q. Because if you prevent a deep venous

[7]thrombosis or the blood clot, then you don't take it

[8]the step further where the blood clot develops into an

[9]embolus, is that correct?

[10]A. That's correct.

[11]Q. So that that was clearly recognized back in

[12]1986, in order to prevent the pulmonary **[*38]** embolism you

[13]have to try to prevent the deep venous thrombosis?

[14]A. Yes, sir.

[15]Q. And if you can't prevent a deep venous

[16]thrombosis, you have to try to diagnose the condition

[17]of deep venous thrombosis so that you can use a

[18]medication in the form of Heparin to help prevent the

[19]blood clot from becoming an embolus, is that correct?

[20]A. Yes, sir.

[21]Q. Okay. And Heparin was available in 1986?

[22]A. Yes, sir.

[23]Q. And Heparin was a medicine that was an

[24]effective medicine to combat deep venous thrombosis?

[25]A. Yes, sir.

[1]48

[2]Q. As a result of the recognition that

[3]pulmonary embolism was a leading cause of death,

[4]doctors would be on the lookout for any signs or

[5]symptoms of deep venous thrombosis?

[6]A. Yes, sir.

[7]Q. That was something that was important to

[8]look out for obviously?

[9]A. I agree.

[10]Q. And not only did doctors look out for signs

[11]and symptoms, they also recognized back in 1986 that at

[12]least 50 percent of the cases where people developed a

[13]pulmonary embolism, that those people didn't have any

[14]signs or symptoms of deep venous thrombosis **[*39]** before they

[15]developed the embolism, is that correct?

[16]A. Yes, sir.

[17]Q. So that doctors knew that more often than

[18]not somebody could throw a pulmonary embolism without

[19]any signs or any symptoms whatsoever?

[20]A. That's correct.

[21]Q. And as a result of that doctors back in

[22]1986 would utilize a high degree of suspicion in

[23]looking for signs and symptoms of what I'll call DVT or

[24]deep venous thrombosis?

[25]A. I'm not sure if I understand the question.

[1]49

[2]I don't know what a high degree of suspicion to look

[3]for means. I think we -- I'm sorry.

[4]Q. I think your comment is fair, so let me

[5]withdraw the question. Back in 1986 doctors would be

[6]on a very careful lookout to see if there were any

[7]signs or symptoms of deep venous thrombosis because

[8]they recognized that if you have a DVT, that could

[9]develop into a pulmonary embolism and you could die?

[10]A. Yes, sir.

[11]Q. Let's just talk about for a moment the

[12]herniated disk. Dr. Leivy diagnosed a herniated disk

[13]and he put Mr. Isaacson in the hospital for additional

[14]bedrest, is that correct?

[15]A. Yes, sir.

[16] **[*40]** Q. When I say, "additional bedrest," Dr. Leivy

[17]was aware that Mr. Isaacson came into the hospital with

[18]a history of two weeks of bedrest?

[19]A. Whatever period of time, yes.

[20]Approximately that.

[21]Q. Well, the hospital --

[22]A. I thought it was 11 days.

[23]Q. Well, from the factual testimony we know

[24]July 7 was the time that Mr. Isaacson hurt his back and

[25]from July 7 basically through July 17 or 18 he was on

[1]50

[2]bedrest, so it's about 11 days?

[3]A. Yes, sir.

[4]Q. All right. But the hospital record in fact

[5]documents a two-week history of bedrest?

[6]A. I don't recall it specifically but I have

[7]no reason to question that, sir.

[8]Q. All right. Assume for the moment that Dr.

[9]Leivy was advised that there was a two-week history of

[10]bedrest. He put Mr. Isaacson in the hospital for

[11]additional bedrest, is that correct?

[12]A. And traction, yes.

[13]Q. All right. But with respect to bedrest it

[14]was additional bedrest, is that correct?

[15]A. Yes, sir.

[16]Q. And you spoke before about immobilization,

[17]and to a certain degree someone at bedrest is

[18]immobilized, **[*41]** is that correct?

[19]A. To a certain degree, yes.

[20]Q. All right. Clearly you can move your feet,

[21]you can move your knees, you can move your arms, you

[22]can move any part of your body unless you're restrained

[23]or paralyzed, is that correct?

[24]A. Yes, sir.

[25]Q. But back in 1986 someone at bedrest,

[1]51

[2]specifically with a history of two weeks at bedrest,

[3]was at a higher risk for developing deep venous

[4]thrombosis than someone who was not at bedrest, is that

[5]correct?

[6]A. I would agree with that, yes.

[7]Q. You would agree with that?

[8]A. Yes.

[9]Q. All right. Now Mr. Vardaro asked you

[10]questions about high risk patients. And I think I

[11]clearly understood you. You said that people who had a

[12]cancer condition would be a high risk person to develop

[13]a deep venous thrombosis?

[14]A. Yes, sir.

[15]Q. And people who had some sort of vascular

[16]problem in their leg, they would be at a high risk?

[17]A. Yes, sir.

[18]Q. People with congestive heart failure?

[19]A. Yes, sir.

[20]Q. And I think maybe you mentioned somebody

[21]with brain damage --

[22]A. Yes. **[*42]**

[23]Q. -- or disease, they would be at high risk?

[24]A. Yes.

[25]Q. And I suspect people who are paralyzed,

[1]52

[2]they would be at high risk, that can't move an

[3]extremity at all?

[4]A. Yes.

[5]Q. And one of the factors that -- one of the

[6]factors that make someone a high risk is the concept in

[7]medicine of stasis of the blood, is that correct?

[8]A. Yes, sir.

[9]Q. Because although there's a lot of pressure

[10]in the distribution of blood through the arterial

[11]system, that is, from the heart to the rest of the

[12]body, there isn't significant pressure of the return of

[13]that blood to the heart, is that correct?

[14]A. If you say there isn't as much pressure, I

[15]mean, it's significant because it works.

[16]Q. All right. There isn't as much pressure,

[17]it's a much lower pressure system?

[18]A. Yes, sir.

[19]Q. As a matter of fact, the way the system

[20]works, especially with the blood return from the lower

[21]extremities, is that the movement of the muscles kind

[22]of like pumps the blood up through the valves of the

[23]veins back to the heart, is that correct?

[24]A. It assists it, **[*43]** yes.

[25]Q. So that someone with a history of bedrest

[1]53

[2]is at a higher risk for developing stasis of blood than

[3]someone who is active?

[4]A. That's too general a statement. It

[5]really --

[6]Q. You can't answer that like that? I'll

[7]withdraw the question. I'll ask you another one.

[8]A. I think the answer probably would be no,

[9]because the patient at bedrest is moving around, is

[10]pumping these muscles that you are talking about and so

[11]that any difference would be very small.

[12]Q. Does it matter if a person is at bedrest

[13]for three days or a week or two weeks with respect to

[14]your last answer?

[15]A. That's one of the factors, yes.

[16]Q. If someone is at bedrest for more than a

[17]week, is that person considered a risk, not a high

[18]risk, but a risk factor for developing DVT?

[19]A. I don't know that I am aware that a week is

[20]the cutoff point. I am not aware of any study that

[21]says over a week it's more of a risk than less than a

[22]week. I am not so much disagreeing as not being able

[23]to agree with that statement.

[24]Q. But there is certainly medical literature

[25]on the development **[*44]** of deep venous thrombosis and the

[1]54

[2]relationship of bedrest and deep venous thrombosis, is

[3]there not?

[4]A. Yes, sir.

[5]Q. Would you agree that factors in the

[6]development of venous stasis, that's the pooling of

[7]blood, are bedrest, long trips, inactivity, would you

[8]agree with that?

[9]A. Those are all contributing factors, yes.

[10]Q. Obesity?

[11]A. I believe that would be. I don't know that

[12]I could answer it with absolute certainty.

[13]Q. And then of course paralysis, congestive

[14]heart failure, cancer?

[15]A. Yes, sir.

[16]Q. Would you agree that there's an association

[17]between bedrest and venous thrombosis for those

[18]patients at bedrest in excess of one week?

[19]A. Again, I can't disagree with that

[20]statement. I'm not familiar with a specific study that

[21]says that.

[22]Q. Are you familiar with studies involving

[23]examination of patients at autopsies concerning the

[24]development of blood clots in the venous system and

[25]bedrest?

[1]55

[2]A. I cannot say that I am, sir, no.

[3]Q. Are you familiar with a textbook called

[4]"Hemostasis and Thrombosis"? **[*45]** What's hemostasis, by the

[5]way?

[6]A. Stopping bleeding, controlling bleeding.

[7]Q. And thrombosis?

[8]A. Clotting.

[9]Q. Are you familiar with that textbook, the

[10]second edition, specifically, by a Dr. Coleman, Dr.

[11]Hirsch, Dr. Marter and Dr. Saltzman?

[12]A. No, I am not, sir.

[13]Q. Are you aware that there are autopsy

[14]studies where doctors actually look at dead patients

[15]and see the relationship of certain factors, including

[16]bedrest, with the development of deep venous

[17]thrombosis?

[18]MR. VARDARO: I have no objection to

[19]the question, just that if he would put a

[20]date on it so at least we know what we are

[21]talking about, '86, subsequent, prior.

[22]Q. All I'm asking you is everything that was

[23]aware by doctors back in 1986.

[24]MR. VARDARO: No objection, your

[25]honor.

[1]56

[2]Q. That's when Mr. Isaacson died. That's what

[3]we're talking about. So my question is are you aware

[4]of autopsy studies that were performed to determine the

[5]relationship between bedrest and the development of

[6]venous thrombosis?

[7]A. Am I specifically aware of specific

[8]studies? **[*46]** No, I am not, sir. Do I doubt that they

[9]exist? I don't doubt that they exist.

[10]Q. Doctor, in terms of an increased incidence

[11]of the development of deep venous thrombosis, would you.

[12]agree that long periods of cramped sitting in travel,

[13]such as in an airplane or watching television or in

[14]fact any state involving partial or complete

[15]immobilization-, increases the risk of deep venous

[16]thrombosis?

[17]A. I am aware of that type of information,

[18]yes.

[19]Q. And that type of information was available

[20]back in 1986, is that correct?

[21]A. I'm sure it was.

[22]Q. Doctor, when a patient is put in the

[23]hospital with a particular diagnosis, like Mr. Isaacson

[24]was put into this hospital with a diagnosis of a

[25]herniated disk at L3-L4, the doctor who's in charge of

[1]57

[2]his care doesn't close his eyes to any other things

[3]that are going on with the patient other than that

[4]particular diagnosis, is that correct?

[5]MR. VARDARO: Objection.

[6]THE COURT: Sustained as to form.

[7]Q. Back in 1986 you were a neurosurgeon, is

[8]that correct?

[9]A. Yes, sir.

[10]Q. Did you put patients **[*47]** in the hospital for

[11]bedrest back in 1986 for a herniated disk?

[12]A. Yes, sir.

[13]Q. And when you put them in the hospital did

[14]you consider the history that they had when they came

[15]into the hospital, that is, whether they were on

[16]bedrest or not on bedrest?

[17]A. Yes, sir.

[18]Q. Why would you consider that history of

[19]being on bedrest or not being on bedrest?

[20]A. It would impact to some degree on how much

[21]longer I would keep the patient on bedrest before going

[22]to the next step in terms of treatment or diagnosis.

[23]Q. Would it impact to you back in 1986 if a

[24]person was on bedrest for approximately two weeks,

[25]would you have any concern about the development of

[1]58

[2]deep venous thrombosis?

[3]A. I would always have a concern about that,

[4]so I would answer yes.

[5]Q. As a result of having that concern for a

[6]deep venous thrombosis back in 1986 would you put

[7]Jobst, J-O-B-S-T, stockings on that patient?

[8]A. I found -- my answer is no.

[9]Q. Back in 1986 did you put stockings on those

[10]patients?

[11]A. No.

[12]Q. Did other neurosurgeons in your hospitals

[13] **[*48]** that you were associated with put Jobst stockings on?

[14]MR. VARDARO: Objection.

[15]THE COURT: Sustained.

[16]Q. Were Jobst stockings used in 1986?

[17]A. Yes, sir.

[18]Q. Were they used in conjunction with the

[19]prevention of blood stasis?

[20]A. That was their stated purpose, yes.

[21]Q. And was there a belief back in 1986 that

[22]just these Jobst stockings had some effect on limiting

[23]the amount of pooling of the blood for people who were

[24]on bedrest?

[25]A. There was an argument throughout the use of

[1]59

[2]Jobst stockings as to whether they were effective or

[3]the opposite and caused more problems than they were

[4]designed to treat.

[5]Q. But they were utilized because of the

[6]concern about the development of blood clots?

[7]A. Yes, sir.

[8]Q. Back in 1986 there were certain noninvasive

[9]tests that were available to be used to determine

[10]whether or not somebody had a blood clot in their leg?

[11]A. Yes, sir.

[12]Q. Among those tests was a Doppler study?

[13]A. Yes, sir.

[14]Q. That would be primarily used for a

[15]suspicion of a blood clot in the calf, is that correct? **[*49]**

[16]A. I don't have enough expertise to say if

[17]that was the only area it worked in but it would be

[18]used in that area, yes.

[19]Q. Talking about expertise, in talking about

[20]deep venous thrombosis and pulmonary embolism, a

[21]pulmonologist would be a specialist in that area?

[22]A. He would be one of the areas that would

[23]cover that, yes.

[24]Q. And back in 1986, besides the Doppler study

[25]and whether or not you have enough expertise to

[1]60

[2]determine whether it was just used for the calf area,

[3]there was also something called an impedance

[4]plethysmography?

[5]A. Yes, I believe that was available then.

[6]Q. Okay. And that's also a test that's called

[7]a noninvasive test where there's no entry into the

[8]patient's body by a needle or any sort of procedure, is

[9]that correct?

[10]A. That's correct.

[11]Q. And back in 1986 impedance

[12]plethysmographies were specifically designed to

[13]diagnose any blood clots in the area of the leg between

[14]the knee and the hip?

[15]A. That's beyond my expertise to answer that,

[16]sir.

[17]Q. Let's just get for a moment back to the

[18]area of expertise **[*50]** with respect to the herniated disk.

[19]You told us I believe that there were two nerve roots

[20]compressing or being compressed on Mr. Isaacson, is

[21]that correct?

[22]A. That was my impression, yes.

[23]Q. And your impression was that both the L3

[24]and the L4 nerve root were being pinched or compressed

[25]by the herniated disk, is that correct?

[1]61

[2]A. Yes, sir.

[3]Q. And I think you said, I wrote it down, I

[4]may have been wrong, you said there was both an

[5]anterior and a lateral herniation?

[6]A. It was an anterolateral herniation.

[7]Q. An anterolateral herniation?

[8]A. Yes.

[9]Q. Where did you get that information?

[10]A. From the postmortem examination.

[11]Q. And specifically could you just refer to

[12]the postmortem examination and show me where you got

[13]that information from?

[14]A. If you will give me a page, anybody?

[15]Q. Well, I could tell you. It starts on --

[16]THE COURT: Page 35, doctor. The

[17]actual postmortem starts on page 35.

[18]MR. VARDARO: It begins on 33.

[19]Q. Doctor, just so we don't have to waste

[20]time, on page 33, you see it says, number **[*51]** two, skeletal

[21]system?

[22]THE COURT: Page 33.

[23]A. Yes, sir.

[24]Q. And it says L3-4 intervertebral disk

[25]herniation, anterio-right-lateral?

[1]62

[2]A. Yes, sir.

[3]Q. And is that the information that you took

[4]to say that there were two nerve roots being

[5]compressed?

[6]A. That plus the clinical information relevant

[7]to the patient.

[8]Q. And is there -- with respect to page 37 of

[9]the same postmortem examination, do you see that, page

[10]37?

[11]A. Yes, I do, sir.

[12]Q. Okay, And specifically the part which

[13]talks about skeletal system, do you see that?

[14]A. Yes.

[15]Q. About the middle of the page. This is a

[16]part of the autopsy report where the pathologist

[17]actually cut open the area of the disk?

[18]A. I have no idea how these are done, sir.

[19]Q. What does sectioning mean?

[20]A. Cutting.

[21]Q. Excuse me?

[22]A. Sectioning is cutting.

[23]Q. So let me just read to you from the autopsy

[24]report. It says the lumbosacral spine showed some

[25]degeneration of the intervertebral disk on sectioning.

[1]63

[2]That means that the pathologist actually **[*52]** cut into it,

[3]is that correct?

[4]A. Yes, sir.

[5]Q. And then it continues. It says L3-L4 right

[6]anterior protrusion of disk material, is that correct?

[7]A. That's what it says, yes.

[8]Q. So when he did the cutting on page 37 of

[9]this autopsy report the only protrusion or the only

[10]area where the actual disk material came out was on the

[11]anterior or the front part of the patient, is that

[12]correct?

[13]A. It contradicts what he said earlier, so I

[14]don't know how to answer that question, sir.

[15]Q. Were you aware of this information when you

[16]rendered your opinion that there was an anterio-lateral

[17]herniation?

[18]A. I was aware of everything in the post, yes,

[19]including that line.

[20]Q. So understanding that this was

[21]contradictory information, you didn't explain that to

[22]the jury in an answer to Mr. Vardaro's question, is

[23]that correct?

[24]MR. VARDARO: I am going to object to

[25]that.

[1]64

[2]THE COURT: Sustained. Strike

[3]counsel's comment.

[4]Q. So clearly there is contradictory

[5]information in that aspect of the autopsy report, is

[6]that correct?

[7] **[*53]** A. I didn't interpret it as such. He wouldn't

[8]have added lateral if there wasn't lateral, in my

[9]interpretation.

[10]Q. Doctor, if there was not a lateral

[11]herniation, which nerve root would not be affected, if

[12]it was just an anterior herniation?

[13]A. With just an anterior herniation on the

[14]right, more commonly just the L4 nerve root would be

[15]affected, but without question with just anterior

[16]herniation on the right the L3 nerve root can also be

[17]affected depending on how close it's running to L4.

[18]Q. And when you spoke about before -- and I'll

[19]just hold it up so -- can you see it?

[20]A. Yes, sir.

[21]Q. This particular chart gives you, I think

[22]what you describe as the more common distribution of

[23]the nerve root?

[24]A. Yes, sir.

[25]Q. So that the L3 nerve root would be affected

[1]65

[2]if this disk herniation was anterior and lateral, is

[3]that correct?

[4]A. More commonly affected.

[5]Q. More commonly?

[6]A. Yes.

[7]Q. The L3 distribution is in the shaded area,

[8]the darker area that my pen is pointing to, is that

[9]correct?

[10]A. Yes, sir.

[11]Q. **[*54]** And the L4 distribution is in the darker

[12]area below the L3 distribution, is that correct?

[13]A. Yes, sir.

[14]Q. And you say commonly there's some

[15]overlapping in all the nerve root distributions, is

[16]that correct?

[17]A. Yes, sir.

[18]Q. And what doctors do and what they did back

[19]in 1986, understanding that there were some variations

[20]from patient to patient, they took that into account,

[21]is that correct?

[22]A. Yes.

[23]Q. All right. And just holding up the chart

[24]once again, we see distributions in what I'll describe

[25]as -- here's this anatomical representing right leg and

[1]66

[2]left leg, can you see that?

[3]A. Yes, sir.

[4]Q. I guess this is an anterior view, is

[5]that --

[6]A. Looking from the front.

[7]Q. Looking at the front, anterior. This would

[8]be posterior, looking from behind?

[9]A. Yes, sir.

[10]Q. So there's an area, shaded area where I'm

[11]pointing right now to L1, L2 and L3, is that correct?

[12]A. Yes.

[13]Q. Okay. And would that be also true on the

[14]other side, on the left leg?

[15]A. Yes, you could draw the same lines over

[16]there. **[*55]**

[17]Q. So this shaded area which starts out L1,

[18]that's the distribution of basically L1, and then we

[19]see in the genital area there's an S1-S2 distribution?

[20]A. I can't see it, but there is, yes.

[21]Q. Right here, S1-S2?

[22]A. Yes.

[23]Q. Let me just get back here. Pointing to the

[24]genital area, there's a distribution, S1-S2. And those

[25]are nerve roots that run lower in the sacral area, is

[1]67

[2]that correct?

[3]A. Yes, sir.

[4]Q. And this chart just gives the doctors

[5]information about generally or commonly where, if there

[6]was an injury to a nerve root, where the distribution

[7]of pain would commonly be?

[8]A. Yes, sir.

[9]Q. By the way, the front of the thigh is

[10]called the anterior?

[11]A. Yes.

[12]Q. And that's a medical term of art?

[13]A. Of art? Yes. It's a medical term.

[14]Q. In other words, if you use the word

[15]anterior another doctor is going to know what you mean?

[16]A. Generally, yes.

[17]Q. And posterior is behind?

[18]A. Yes.

[19]Q. And medial is on the inside?

[20]A. Yes.

[21]Q. And lateral, lateral is on the outside?

[22] **[*56]** A. Yes, sir.

[23]Q. Mr. Vardaro referred you to Dr. Brown's

[24]consult note that's dated July 18, do you remember

[25]that?

[1]68

[2]A. Yes, sir.

[3]Q. And read from the note where Dr. Brown

[4]describes just touching the inside of the thigh causes

[5]pain, do you remember that?

[6]A. Yes, I do, sir.

[7]Q. Let me just get the exact wording. Quote.

[8]He says, talking about Mr. Isaacson, he had so much

[9]pain on the inside of his right thigh that just

[10]touching it bothered it. Now Mr. Vardaro asked you

[11]would that area, the inside of the right thigh, in your

[12]opinion, would that be consistent with L3-L4 disk

[13]herniation pain, do you remember that question?

[14]A. Yes, sir.

[15]Q. And you said it would be consistent?

[16]A. Yes, sir.

[17]Q. My question is just a little bit different.

[18]Could the description of so much pain on the inside of

[19]his right thigh, that just touching it bothered it,

[20]could it be inconsistent with L3-L4 disk herniation?

[21]A. No, sir. In other words, an L3-L4 disk

[22]herniation would explain such a finding.

[23]Q. Would there be other explanations for the

[24]inside **[*57]** of the right thigh being so painful that just

[25]touching it bothered it?

[1]69

[2]A. I'm sure there could be, yes.

[3]Q. And what would be the explanation back in

[4]1986?

[5]A. He could have a burn there. He could have

[6]a rash there. He could have traumatized it somehow

[7]there. I mean, a multitude of different explanations.

[8]Q. We know he didn't have a burn?

[9]A. Yes.

[10]Q. We know he didn't have a rash there?

[11]A. Right.

[12]Q. Is there any indication of trauma there?

[13]A. Not that I'm aware of.

[14]Q. Was there any reference to inside -- and by

[15]the way, that's the medial part, inside thigh would be

[16]called medial?

[17]A. I think so, yes.

[18]Q. Do you have any question that it would be

[19]called medial?

[20]A. No. These aren't so precise, that you

[21]can't put your finger on one spot and say everyone

[22]means the same thing. I have always -- I am just

[23]careful about answering that type of question.

[24]Q. But when you look at this hospital record,

[25]and that's what we have to go on, the hospital record,

[1]70

[2]is there any indication before Dr. Brown saw this

[3] **[*58]** patient that the patient had any pain on the inside of

[4]his thigh?

[5]A. In the chart, not that I am aware of, sir.

[6]Q. Is there any indication that he had pain in

[7]the front of his thigh?

[8]A. What I have to work with is the chart, and

[9]my recollection is that that's where we got our

[10]information. I'm not sure I understand your question,

[11]sir.

[12]Q. The question I think is simple. Is there

[13]any reference in the hospital chart that before Dr.

[14]Brown saw the patient, that there was a history given

[15]of pain on the anterior or the front of the thigh?

[16]A. I'd have to look at the chart. He gave a

[17]history, and I'm a little hesitant to say just before

[18]Dr. Brown or just after Dr. Brown. So if you can show

[19]me what you're referring to, it would help me

[20]tremendously. There's mention in the admission history

[21]by Dr. Leivy of right lower extremity to thigh

[22]anteriorly but not below the knee, but I don't know,

[23]timing, whether that was before or after Dr. Brown. I

[24]believe Dr. Leivy saw him before Dr. Brown so I presume

[25]it's before Dr. Brown.

[1]71

[2]Q. Well, let's presume, and I'll ask you **[*59]** to

[3]assume that Dr. Leivy testified and he said that this

[4]admission history he received when the patient was

[5]first admitted to the hospital, and the history that he

[6]received was that the pain was -- he developed a back

[7]pain which became progressively more severe and

[8]radiated down the right lower extremity to the thigh

[9]anteriorly but not below the knee.

[10]A. Yes, sir.

[11]Q. And I want you to assume that that was

[12]prepared about 14 hours or so before Dr. Brown saw the

[13]patient.

[14]A. Yes, sir.

[15]Q. My only question is is the anterior thigh

[16]medically a different description than the inside of

[17]the thigh?

[18]A. Oh, yes, sir.

[19]Q. Now Dr. Brown did not feel that the pain --

[20]so much pain on the inside of his right thigh, that

[21]just touching it bothered it, did not feel that that

[22]was necessarily consistent with herniated disk, is that

[23]correct?

[24]A. I don't know what he was presuming, sir.

[25]Q. Well, I'll read the next line. One

[1]72

[2]wonders, and I assume Dr. Brown was wondering, was

[3]wondering if he might develop herpes zoster.

[4]A. Is there a question, sir? **[*60]** I'm sorry.

[5]Q. Are you familiar with Dr. Brown's

[6]wondering?

[7]A. Yes.

[8]Q. And herpes zoster is a virus, is that

[9]correct?

[10]A. Yes, sir.

[11]Q. And do you agree with Dr. Brown's

[12]assessment, that herpes zoster may be developing on the

[13]inside of his thigh?

[14]A. I just don't have enough information to

[15]agree or disagree, sir.

[16]Q. Would herpes zoster -- or does herpes

[17]zoster follow a nerve root distribution?

[18]A. It very often does, yes.

[19]Q. And is there any nerve root distribution

[20]that just runs, just runs to the inside of the thigh?

[21]A. Now you are going to have to be very

[22]specific and draw me a picture because L1, L2 and L3

[23]all partially cover the inside of the thigh.

[24]Q. Okay. Well, my question is is there any

[25]nerve root distribution that just runs to the inside of

[1]73

[2]the thigh where a patient would describe pain just on

[3]the inside of his thigh so much so that just touching

[4]it causes him extreme pain?

[5]A. There are a couple of questions in there.

[6]There are nerve roots when irritatesd that can cause

[7]pain just on the inside **[*61]** of the thigh, which I think was

[8]the first of the questions.

[9]Q. In terms of herpes zoster, if there was an

[10]inflammation of a nerve root with respect to a -- a

[11]herpes zoster is a virus, is that correct?

[12]A. Yes, sir.

[13]Q. Would one expect that the pain from a

[14]herpes zoster type of condition would just be located

[15]in one spot on the inside of the thigh?

[16]A. It can be.

[17]Q. It wouldn't follow the entire nerve root

[18]distribution?

[19]A. It doesn't have to.

[20]Q. Can it?

[21]A. It can.

[22]Q. But the development of herpes zoster is

[23]something that's different than pain from a herniated

[24]disk, is that correct?

[25]A. Yes, sir.

[1]74

[2]Q. And Dr. Brown thought about something

[3]different than a herniated disk, is that correct?

[4]A. In addition to thinking about a herniated

[5]disk, he thought about something else, yes.

[6]Q. With respect to your review of this case

[7]and coming in with your opinions on behalf of the

[8]defendant, we know from autopsy he had a herniated

[9]disk?

[10]A. Yes, sir.

[11]Q. We know from autopsy that he had a

[12]pulmonary **[*62]** embolism?

[13]A. Yes, sir.

[14]Q. We know from autopsy that he had a blood

[15]clot that became a pulmonary embolism, is that correct?

[16]A. Yes, sir.

[17]Q. We also know that he never developed or

[18]never had herpes zoster, is that correct?

[19]A. I can't say that he never had herpes

[20]zoster. As far as I know he never developed a rash

[21]that would show it. That doesn't totally rule it out.

[22]Q. We know he never developed a rash?

[23]A. Yes, sir.

[24]Q. And we know on autopsy there's no mention

[25]of herpes zoster, is that correct?

[1]75

[2]A. No, there's not, but you have to look very

[3]specifically for it. You have to culture the dorsal

[4]root.

[5]Q. Do you know if the pathologist looked for

[6]it?

[7]A. There's no indication that he did, sir.

[8]Q. Do you know that he didn't look for it?

[9]A. No.

[10]Q. Doctor, you answered certain questions from

[11]Mr. Vardaro talking about your expectation. I think

[12]you mentioned if a person had a blood clot in the deep

[13]venous system, that blood clot would become larger and

[14]the pain would increase, is that correct?

[15]A. It could **[*63]** happen, yes, sir.

[16]Q. When you say, "It could happen," isn't it

[17]true that it doesn't have to happen?

[18]A. I would be going beyond my expertise to

[19]give other than my opinion. So I would presume yes, it

[20]doesn't have to happen as well.

[21]Q. Isn't it true, doctor, that in fact that

[22]medical knowledge back in 1986 of those people who were

[23]expert in the field recognized that the pain of venous

[24]thrombosis is not characteristic at all?

[25]A. I don't understand the question.

[1]76

[2]Q. Well, isn't it true that you may have an

[3]ache, you may have a cramp, you may have a sharp, you

[4]may have a dull, you may have a severe or you may have

[5]a mild pain or you may have no pain at all?

[6]A. I'm sure all of those things are true.

[7]Q. Isn't it true that the pain may be either

[8]constant, progressive, intermittent, isn't that true?

[9]A. I can only respond by my experience, if

[10]that's allowed, that it's constant and progressive.

[11]Q. Doctor, are you familiar with an article

[12]called "Natural History and Clinical Features of Venous

[13]Thrombosis" by Dr. Jack Hirsch and Dr. Russell D. Hull? **[*64]**

[14]A. No, I am not, sir.

[15]MR. VARDARO: Can we have the year?

[16]MR. HESS: 1983.

[17]THE COURT: Okay. He said no, he

[18]wasn't familiar with it.

[19]Q. Do you know the names Dr. Hirsch and Dr.

[20]Hull?

[21]A. No, I don't, sir.

[22]Q. Doctor, would you agree that the pain of a

[23]deep venous thrombosis is aggravated by movement?

[24]A. In my experience it's usually constant and

[25]not affected particularly by movement.

[1]77

[2]Q. So you would disagree that pain of

[3]venous --

[4]THE COURT: Just a minute, counsel.

[5]You want to approach the bench, please?

[6]Doctor, step down.

[7]THE WITNESS: Sure.

[8](Discussion off the record at the

[9]bench.)

[10]THE COURT: All right, let's resume.

[11]Q. Doctor, you mentioned before upon

[12]questioning by Mr. Vardaro that in the autopsy report

[13]that we have in this case there is no mention as to the

[14]origin of the blood clot that became the embolus, that

[15]became the massive embolus in this case that killed

[16]Mr. Isaacson?

[17]A. I believe that they said they couldn't find

[18]a site. I would like to see the precise wording before

[19] **[*65]** I answered the question yes or no.

[20]Q. Well, I assume you reviewed the hospital

[21]record before you came in with your opinions before the

[22]jury?

[23]A. Yes, sir.

[24]Q. So I'm asking you based -- this same

[25]opinion that you ventured before upon Mr. Vardaro's

[1]78

[2]question, I'm asking you is there anything in the

[3]pathology report that mentions the origin of the site

[4]of the blood clot?

[5]A. I'm sorry, I didn't understand the

[6]question. No, there is not.

[7]Q. But in medicine back in 1986 with respect

[8]to pulmonary emboli, blood clots that travel, medicine

[9]recognized that 95 percent of the time those emboli

[10]originated as a blood clot in the lower extremities, is

[11]that correct?

[12]A. Yes, sir.

[13]Q. With a 95 percent certainty that blood clot

[14]that ended up as an embolus in Mr. Isaacson's lungs

[15]started out in his legs?

[16]A. Somewhere in the region of the leg, yes.

[17]Q. Now is there any, any reference in the

[18]autopsy report about the clinical signs, symptoms and

[19]complaints that went on in the hospital record?

[20]A. I believe there's a clinical summary, and I

[21]presume **[*66]** that in there there's mention of some things.

[22]Q. Is there any mention of any other

[23]complaints that Mr. Isaacson had, in other words, did

[24]he complain about his right leg or his left leg?

[25]A. There's a notation, complaining of right

[1]79

[2]leg pain and backache.

[3]Q. When you look at the autopsy report without

[4]any reference whatsoever to the hospital record and the

[5]patient's course in the hospital, one, a doctor, you,

[6]sir, can surmise from medical knowledge that the blood

[7]clot originated in one of his legs, is that correct?

[8]A. In the region of one of his legs, yes.

[9]Q. And utilizing the hospital record and

[10]understanding that all the complaints in the hospital

[11]record all deal with the right leg, would that indicate

[12]to you that more likely than not the blood clot was in

[13]the right leg?

[14]A. No, sir.

[15]Q. It doesn't matter that there were no

[16]complaints whatsoever about the left leg?

[17]A. No, sir.

[18]Q. As a matter of fact, you told the jury that

[19]all the signs and symptoms that are available to you in

[20]your review of the hospital record are all consistent

[21] **[*67]** with herniated disk?

[22]A. Yes, sir.

[23]Q. Doctor, an elevated temperature, is that

[24]consistent with herniated disk?

[25]A. No, sir.

[1]80

[2]Q. There are elevated temperatures in this

[3]hospital chart, aren't there?

[4]A. Minimally, if that's all. No. 99.

[5]Q. Well --

[6]A. 99-2 I don't consider an elevated

[7]temperature, sir.

[8]Q. What about 99-5?

[9]A. No.

[10]Q. Is that his normal temperature?

[11]A. It may well be.

[12]Q. Well, how about if I told you when he came

[13]into-the hospital he had 98.2?

[14]A. Well, I'd say he was still fluctuating in

[15]what I see as the range of normal temperatures measured

[16]on patients in the hospital.

[17]Q. How about if I told you that when he came

[18]in he had 98.2, then they put him on Tylenol with

[19]codeine -- and by the way, Tylenol is a fever reducer?

[20]A. Yes, sir.

[21]Q. And after they put him on Tylenol with

[22]codeine his temperature went to 99.5, is that

[23]consistent with a herniated disk?

[24]A. No, sir.

[25]Q. How about if I told you that there's a

[1]81

[2]white blood cell count of 17,600 white blood **[*68]** cells, is

[3]that consistent with a herniated disk?

[4]A. No, sir.

[5]Q. Doctor, the prognosis -- what's prognosis,

[6]by the way?

[7]A. Prediction of outcome.

[8]Q. Doctor, the prognosis for a patient with

[9]pulmonary embolism, that's after the clot breaks loose,

[10]in whom therapy is promptly instituted, that prognosis

[11]is excellent, is that correct?

[12]MR. VARDARO: Your honor, my objection

[13]is that it's beyond direct.

[14]THE COURT: Well, it is, but I think

[15]it is allowable under the circumstances, if

[16]the doctor can answer it.

[17]A. The answer to that question is partially

[18]beyond the scope of my knowledge, but my knowledge very

[19]clearly states that it's very much determined by the

[20]size of the pulmonary embolus.

[21]Q. Doctor, would the prognosis for a patient

[22]with the discovery of a blood clot in their leg, a deep

[23]venous thrombosis, the prognosis for that patient is

[24]even more excellent with the institution of therapy

[25]than a patient who is discovered with a pulmonary

[1]82

[2]embolism, isn't that correct?

[3]A. I don't -- I can't give you numbers. The

[4]answer is that it's **[*69]** better if you find the clot before

[5]it's a pulmonary embolus, but I don't feel qualified to

[6]agree with excellent, more excellent, whatever

[7]percentages those are, because I don't have that

[8]information available to me, sir.

[9]Q. Doctor, in the hospital record I think you

[10]mentioned to Mr. Vardaro that there were no complaints

[11]of thigh pain documented on the 19th of July, is that.

[12]correct?

[13]A. I believe that is correct, yes. There were

[14]some other -- I would have to have the question to

[15]remember exactly what it was, but --

[16]Q. Well, assume that's what was asked of you.

[17]A. Yes, sir.

[18]Q. With respect to we know on the 18th that

[19]Dr. Brown's note talks about the inner thigh, just

[20]touching it causes incredible pain, and we know about

[21]on the 21st the physical therapist mentions about the

[22]groin pain, do you remember that?

[23]A. Yes, sir.

[24]Q. And then we know on the 22nd Dr. Leivy

[25]mentions the inner thigh pain and -- by the way, you

[1]83

[2]were comfortable that in your opinion at least to this

[3]jury that nothing else was going on other than a

[4]herniated disk, is that correct? **[*70]**

[5]A. I was comfortable in stating that the

[6]clinical signs and symptoms he was presenting were all

[7]explainable and consistent with herniated disk, yes.

[8]Q. But that's not what doctors do in treating

[9]the patient, they don't just concern themselves with

[10]whether one condition and all the symptoms fit within

[11]that one condition, doctors also concern themselves

[12]with whether the complaints, the symptoms, the signs

[13]also fit into perhaps something more serious, isn't

[14]that correct?

[15]A. Yes, I could agree with that.

[16]Q. Isn't that what a differential diagnosis is

[17]utilized for in medicine?

[18]A. Yes, sir.

[19]Q. And doctor, in this particular case Dr.

[20]Leivy on the 22nd at least wasn't comfortable with what

[21]was going on with Mr. Isaacson, was he?

[22]A. I don't know if I can answer that question.

[23]Q. Well, we know on the 22nd that Dr. Leivy

[24]ordered a bone scan?

[25]A. Yes, sir.

[1]84

[2]Q. Now the bone scan wasn't ordered for the

[3]diagnosis of the herniated disk, was it?

[4]A. That's correct.

[5]Q. Because if you wanted to just confirm your

[6]diagnosis of **[*71]** herniated disk you would do an MRI,

[7]correct?

[8]A. In '86 I'm not sure what was available.

[9]Q. All right. So in '86 we certainly know

[10]that CAT scans were available?

[11]A. Yes, sir.

[12]Q. So you would do a CAT scan in '86?

[13]A. Yes.

[14]Q. You wouldn't do a bone scan that requires a

[15]radioactive substance be injected in a person unless

[16]you were concerned that something was going on here

[17]other than what I think it is and that's why you would

[18]order the bone scan?

[19]A. I can agree with that, other than or in

[20]addition to.

[21]Q. So despite the fact that your opinion is

[22]that you were comfortable with all the signs and signs

[23]here of being a herniated nucleus pulposus or a

[24]herniated disk, in fact the defendant himself wasn't

[25]comfortable and ordered a bone scan on July 22?

[1]85

[2]MR. VARDARO: Objection. That's not

[3]the testimony in this case regarding the

[4]bone scan.

[5]THE COURT: Sustained.

[6]Q. Dr. Leivy thought there was some bony

[7]pathology going on, isn't that correct?

[8]A. I don't know if he thought that or not,

[9]sir. I would guess that's what **[*72]** he was trying to rule

[10]out but it would be a guess only.

[11]Q. Well, you know, doctor, you said you read

[12]his deposition, didn't you?

[13]A. Yes, sir.

[14]Q. And in fact at the deposition Dr. Leivy was

[15]asked, "This bone scan, what was that?" And Dr.

[16]Leivy's answer was, "To exclude any bony abnormalities

[17]which was not apparent on the physical examination."

[18]So that's in fact what Dr. Leivy testified to?

[19]A. Yes, sir.

[20]Q. And Dr. Leivy -- a bony abnormality is not

[21]a herniated disk?

[22]A. That's correct.

[23]MR. HESS: Judge, just two minutes and

[24]I think I'll be through.

[25]Q. On the 19th of July, 1986, in the nurses'

[1]86

[2]notes, if you want to look at it.

[3]A. Page, sir?

[4]Q. It's page 15.

[5]A. Thank you.

[6]Q. You told this jury there was no reference

[7]to thigh pain on the 19th. But in fact in the nurses'

[8]notes it says medicated for leg pain, is that correct?

[9]A. I'm sure it's there. I didn't pick it out

[10]but I'm sure it's there.

[11]Q. I think it looks like a 3 A.M. note or a 3

[12]P.M. note, do you see that?

[13]A. I'm sure it's there, **[*73]** sir, yes.

[14]Q. Patient complains of pain, earlier

[15]medication for leg pain?

[16]A. I can see it.

[17]Q. What part of his leg was hurting?

[18]A. I don't know, sir.

[19]Q. Well, when you tell the jury that there was

[20]no indication that he had thigh pain, the leg pain very

[21]well may have included his thigh pain?

[22]MR. VARDARO: Objection, your honor.

[23]THE COURT: Yes, sustained.

[24]Speculation.

[25]Q. Do you know what part of his leg was

[1]87

[2]hurting him?

[3]MR. VARDARO: Your honor, it's

[4]obvious. I object to the question.

[5]MR. HESS: What's obvious?

[6]THE COURT: Speculation. Sustained,

[7]counsel.

[8]Q. On July 19, 1986, do you know what part of

[9]his leg was hurting him?

[10]MR. VARDARO: By this record?

[11]MR. HESS: By this nurse's note.

[12]MR. VARDARO: I have no objection.

[13]A. No, sir.

[14]Q. As a matter of fact, throughout the

[15]hospital record there are some references to leg pain

[16]and you don't know what part of his leg was hurting

[17]him?

[18]A. That's correct, sir.

[19]Q. With respect to Dr. Leivy's note, what's

[20]the purpose of **[*74]** a doctor putting a medical note in a

[21]chart?

[22]A. To document his findings and to communicate

[23]with other people who are assisting in the care of the

[24]patient.

[25]Q. The doctor puts down his findings?

[1]88

[2]A. If they're pertinent, if he considers them

[3]pertinent, yes.

[4]Q. And is there a difference between a

[5]doctor's note and a nurse's note?

[6]A. The doctor is writing one and the nurse is

[7]writing the other.

[8]Q. Are you aware on July 18 Dr. Leivy wrote,

[9]and the entirety of his note for July 18 is bad night,

[10]now a little better? Does that give you any medical

[11]information?

[12]A. It tells me that he's not in as much pain

[13]but nothing more than that, sir.

[14]Q. Does it tell you where his pain was?

[15]A. No, sir.

[16]Q. How about a note on the 19th, lots of pain

[17]when changed beds and when sits up, does that tell you

[18]where his pain is?

[19]A. No, sir.

[20]Q. How about on the 21st, pain may be

[21]subsiding, will add PT, does that tell you anything

[22]about where his pain was?

[23]A. No, sir.

[24]MR. HESS: That's it, judge. I have

[25]nothing else. Thank **[*75]** you.

[1]89

[2]MR. VARDARO: Just a few, your honor,

[3]if I may.

[4]REDIRECT EXAMINATION

[5]BY MR. VARDARO:

[6]Q. Doctor, with respect to the bone scan, in

[7]1986, doctor, was that a diagnostic test, a bone scan?

[8]A. Yes.

[9]Q. Okay. And doctor, what if anything does a

[10]bone scan reveal?

[11]A. It will hopefully reveal any abnormal

[12]pathology in the bone itself.

[13]Q. And some of that pathology might be a

[14]tumor?

[15]A. Yes, sir.

[16]Q. Osteomyelitis?

[17]A. Yes, sir.

[18]Q. Osteomyelitis is an infection, true?

[19]A. Yes, sir.

[20]Q. And also if the patient has any arthritis?

[21]A. Yes, sir.

[22]Q. Doctor, when Dr. Leivy received the

[23]complaint on the 22nd, ordered a bone scan, was he

[24]entertaining a possible differential diagnosis?

[25]MR. HESS: Objection.

[1]90

[2]THE COURT: Overruled. If you could

[3]answer it.

[4]A. I presume he was because he wouldn't be

[5]trying to diagnose a herniated disk by the bone scan.

[6]Q. Okay. Doctor, one of the things that I

[7]think you were also asked about, an elevated

[8]temperature with respect to the **[*76]** white counts. On the

[9]18th was there a urinalysis also taken?

[10]A. Yes, sir.

[11]Q. Okay. And doctor, did that show white

[12]blood cells, two to three white blood cells?

[13]A. Yes, sir.

[14]Q. Did it also show red blood cells in the

[15]urine, 14 to 17?

[16]A. Yes, sir.

[17]Q. Is that normal, doctor?

[18]A. No, sir.

[19]Q. Doctor, is that suggestive of some urinary

[20]tract infection?

[21]A. Possibly.

[22]Q. Could it also be suggestive of a resolving

[23]prostatitis?

[24]A. Possibly.

[25]Q. Doctor, one of the other things that I

[1]91

[2]think you were asked by Mr. Hess is that long sitting

[3]in cramped spaces, can that cause a thrombus, do you

[4]remember that question?

[5]A. Yes, I do, sir.

[6]Q. Doctor, was this patient from the time of

[7]admission, the early morning hours of July 18 of 1986,

[8]till July 22 of 1986, was he in a cramped bed to your

[9]knowledge?

[10]A. Not to my knowledge, no.

[11]Q. Is a bed a cramped position or location?

[12]A. No, sir.

[13]Q. Can you have free movement of the legs in

[14]all direction?

[15]A. Yes, sir.

[16]Q. Doctor, **[*77]** a patient on bedrest such as

[17]Mr. Isaacson, and I think you were asked by Mr. Hess,

[18]is he at high risk for a thrombus?

[19]A. No, sir.

[20]Q. Doctor, a thrombus, is that determined or

[21]diagnosed by clinical signs and symptoms?

[22]A. It is very often impossible to diagnose it

[23]at all by clinical signs and symptoms, if there are

[24]signs and symptoms which we have reviewed which would

[25]be indicative of the same.

[1]92

[2]Q. And doctor, anywhere in the hospital chart

[3]were there any signs and symptoms of a thrombus in this

[4]patient?

[5]A. No, sir.

[6]THE COURT: Any questions?

[7]MR. HESS: Just one.

[8]RECROSS-EXAMINATION

[9]BY MR. HESS:

[10]Q. Did Dr. Leivy call for a urologist to

[11]diagnose this possible urinary tract infection?

[12]A. Sir, I don't recall if he did.

[13]Q. Okay: Thank you.

[14]REREDIRECT EXAMINATION

[15]BY MR. VARDARO:

[16]Q. On the following day, doctor, was there a

[17]urinalysis taken after the first one on the 18th?

[18]A. Yes, there was, sir.

[19]Q. And did it show just occasional white

[20]cells?

[21]A. That's my recollection, yes.

[22]Q. And the **[*78]** second urinalysis showed ho red

[23]blood cells, correct?

[24]A. That's my recollection.

[25]Q. Doctor, is that an indication of a

[1]93

[2]resolving urinary tract infection or possible

[3]prostatitis?

[4]A. It could be.

[5]Q. Doctor, was there any need based on that

[6]second urinalysis to call in an urological consult?

[7]A. No, I don't think so.

[8]Q. Thank you, doctor.

[9]MR. HESS: I have nothing.

[10]THE COURT: Thank you, doctor.

[11]THE WITNESS: Thank you.

[12]THE COURT: You may step down.

[13]Mr. Vardaro, do you have a witness for

[14]after lunch?

[15]MR. VARDARO: Your honor, I have a

witness for tomorrow. We will take a

witness out of turn. But this afternoon I

would like to read a small EBT of

approximately 47 pages.

THE COURT: All right. Retire the

jury for lunch until 2 P.M.

Retire the jury.

(Jury retired.)

(Luncheon recess taken.)

End of Document