WILLIAM CAPICOTTO, M.D - TRIAL TESTIMONY

SUPREME COURT OF THE STATE OF NEW YORK

COUNTY OF ERIE : CIVIL TERM : PART 8

- -

DONALD J. COLLINS and
DENISE J. KEELS,

Plaintiffs,

vs. Index No. I2004-10034

ANTHONY J. IANNICELLI, JR.,

Defendant.

- -

25 Delaware Avenue
Buffalo, New York
April 22, 2008

B e f o r e :

HONORABLE TIMOTHY J. DRURY
Supreme Court Justice, and a Jury

A p p e a r a n c e s :

SHAW & SHAW, P.C.
BY: LEONARD D. ZACCAGNINO, ESQ.
Appearing for Plaintiff Collins

CELLINO & BARNES
BY: RICHARD J. BARNES, ESQ. and
JOHN A. SHEEHAN, ESQ.
Appearing for Plaintiff Keels

BOUVIER PARTNERSHIP
BY: RAFAEL D. GOMEZ, ESQ.
Appearing for Defendant

Michael Martin
Official Court Reporter

(Proceedings of April 22, 2008. All counsel present.)

(Plaintiff's Exhibits 17 through 29 marked for identification.)

MR. BARNES: Judge, very briefly a couple of things. Plaintiff's Exhibit 17 and 18 we are stipulating into evidence. Plaintiff's 17 is the report that pertains to the MRI of Denise Keels of April 5th, 2004. That MRI is on a disc that I'll be showing to the jury and using for the doctor's testimony. We agreed to mark the report as an exhibit. And then we'll transfer it to the disk once we're completed with that.

THE COURT: So that will be in evidence, correct?

MR. GOMEZ: Correct.

MR. BARNES: The disk.

THE COURT: What if they want to see it during the deliberation?

MR. GOMEZ: We'll have to pull out a computer and put it on for them.

THE COURT: You can do that on a computer?

MR. BARNES: We can show them right on a laptop.

Plaintiff's Exhibit 18, your Honor, is also stipulated in evidence. It is the MRI of Denise Keels of March 15th, 2005. This will be in evidence. This same exact MRI is mounted on a board that I'm going to use with the doctor. But this will be what will go into evidence.

THE COURT: Fine.

MR. BARNES: Just clearer on the board.

MR. GOMEZ: I agree with that. your Honor.

THE COURT: Is that it then?

MR. BARNES: Yes.

THE COURT: All right, jury in, please.

(All jurors present.)

(Plaintiff's Exhibits 17 and 18 marked in evidence.)

THE COURT: Please be seated. Good morning. I apologize, I was the reason for the delay here. Everything's fine. You have an expert waiting?

MR. BARNES: I do.

THE COURT: Call your witness then.

MR. BARNES: Dr. William Capicotto, please.

W I L L I A M C A P I C O T T O, having been duly called and sworn as a witness on behalf of the Plaintiff Keels, testified as follows:

THE CLERK: Please state your full name, spelling your last name for the record.

THE WITNESS: William Capicotto, C-A-P-I-C-O-T-T-O.

THE CLERK: And the city, town or village in which you work.

THE WITNESS: Buffalo, New York.

THE CLERK: Thank you. You may be seated.

DIRECT EXAMINATION

BY MR. BARNES:

Q. Good morning, Dr. Capicotto.

A. Good morning.

Q. Dr. Capicotto, what is your profession, please, sir?

A. I am an orthopedic surgeon.

Q. And do you have a particular specialty of orthopedic surgery that you practice?

A. Yes. Yes, I do. I limit my practice to spine surgery.

Q. And just in general, Doctor, what is an orthopedic spine surgeon? What do you do?

A. An orthopedic surgeon is -- orthopedics is the field of medicine that deals with injuries or conditions or disorders of bones, joints, ligaments, discs. Basically in

the field of orthopedics we cover all muscles, tendons, bones, joints and discs from the base of the skull down to the baby toe. I limit my practice just to the spine.

Q. Can you tell the jury, Dr. Capicotto, about your educational background that led you to your position as a orthopedic surgeon?

A. Sure. I graduated from the University of Buffalo undergrad -- I have to go back and think about all the dates -- in 1976. I started medical school in August of 1976 at the University of Buffalo, graduated in 1980. And from there I received my -- sorry, graduated in 1980. I did a year of surgical internship, which is a very rigorous year of general surgery. I received my New York State physician's license in the spring of 1981. And then I performed four years of an orthopedic residency. And that part of my education was devoted just to orthopedics, so bones and joints, like I said, from the base of the skull down to the foot. That was from '81 through '85. I completed that. And then I did an additional year of training solely dedicated to spinal disorders or conditions or injuries which involve primarily not only operative treatment, but also nonoperative treatment of those disorders.

Q. Doctor, do you hold any board certifications in your specialty?

A. Yes. I am board certified in orthopedic surgery -- actually I'm board certified and recertified twice. Board certification is a -- when you go to your doctor's office and you see that they're board certified, the American Board of Internal Medicine or the American Board of Obstetrics and Gynecology, that means that your doctor after completing their training took a series of tests and passed those tests to be certified by the American board of whatever their specialty. Mine is orthopedic surgery. But you may find family practice, internal medicine, cardiology. And it goes to state that your doctor spent extra time to pass those series of examinations.

When I went into practice in 1986 the certificate became time-limited. Before that once you were board certified, you were board certified forever. And so every ten years I have to recertify. So I just recertified a second time in 2007

Q. Doctor, in your career in medicine have you taught in any capacity other doctors?

A. Yes.

Q. Tell us just in general about that, please.

A. Both interns, residents, fellows. I've also been an instructor in a number of courses put on by the American Academy of Orthopedic Surgery in which I was one of the

instructors. Also in other -- in Canada, in Toronto, and also in Vancouver, teaching spine surgeons different aspects of spine surgery.

Q. And in your medical career, Doctor, have you given presentations, not only to other doctors, but to the public as well?

A. Yes.

Q. Tell us just again generally about that.

A. I've given a number of presentations or lectures, not only I would say professionals, but also I would say, as Mr. Barnes asked, to the lay public about different conditions. I've done a few public access programs on spine disorders over the years.

Q. By the way, Doctor, would you like a glass of water while you're testifying?

A. I'm fine right now, thank you.

Q. You're fine. Let us know.

Doctor, have you written on any subject related to orthopedic surgery, spinal surgery in particular, over the years in your career?

A. Yes. I have a publication from my fellowship that was on screws and rods to be used to fix the lumbar spine. And that was -- it's still one of the -- it's one of the earlier papers on that fixation. It's still used, we use it

all the time, called pedicle screw fixation. I've had a few other papers on aneurysmal bone cysts in the spine.

Q. Do you have memberships in any professional societies within your field of medicine?

A. Yes.

Q. Could you tell us about that?

A. I'm a member of the American Academy of Orthopedic Surgery, the New York State Orthopedic Society. I'm also a member of the North American Spine Society.

Q. Doctor, you told us, I believe, that you were licensed to practice medicine. When was that again?

A. 1981.

Q. And have you maintained a private practice in the field of orthopedic spinal surgery?

A. Yes.

Q. And do you still maintained that practice?

A. Yes, sir.

Q. Do you have privileges at any of the area hospitals?

A. Yes. I have privileges in the Kaleida Health System. I do -- over the past years I've done all my work at the Buffalo General Hospital. But I also have privileges at Mercy Hospital and also at Sisters of Charity Hospital.

Q. Doctor, given the length of your career to date, I

take it you've performed orthopedic spinal surgeries in the past?

A. Yes.

Q. And how many, approximately, if you can give us an approximation?

A. At least a few thousand.

Q. And have any of those involved patients of yours that have sustained traumatic injuries to their spine in motor vehicle accidents?

A. Yes.

Q. And other traumatic events?

A. Yes, sir.

Q. With respect to some motor vehicle accidents, do you have any idea what percentage of the surgeries you performed may have been related to injuries sustained in those type of events?

A. 25 to 30 percent, perhaps. I don't really record all of them, but probably overall I would say close to that. I've been in practice -- I'll be starting my 23rd year of practice in July, so I would say 25, 30 percent, maybe more.

Q. So you see a lot of it?

A. Quite a bit. Quite a bit, yeah.

Q. Doctor, did there come a point in time when you began to treat a patient by the name of Denise Keels?

A. Yes, sir.

Q. The young lady sitting here with us?

A. It is.

Q. When -- and I see, Doctor, you brought with you some papers and documentation. Can you identify what is that in front of you?

A. This is my personal medical chart on the care and treatment of Denise Keels from the time that I started to see her up until last week.

Q. And there should be an exhibit sticker on there just so we can identify it for the record.

A. Yes, Exhibit 24.

Q. Plaintiff's Exhibit 24?

A. Yes, sir.

Q. If you need to make reference to that, Doctor, so your testimony is clear and accurate for the jury, please do.

When was it, Dr. Capicotto, when you first began to treat Denise Keels?

A. September 1st -- September 1st, 2004.

Q. And what were the circumstances, Doctor, that brought her to you if you recall?

A. She was referred to me by John Ward, a chiropractor, for injuries that she sustained in a motor vehicle collision.

Q. Is it common in your practice, Doctor, to have referrals come from chiropractors?

A. Yes.

Q. And do you have any idea why that is, how does that seem to occur?

A. In my experience I would say that when -- my experience is of the some 20 some odd years I've been in practice -- when somebody has an injury to their back one of the first places they have access to or will go to will be their neighborhood chiropractor. Many times they may go there before they can even get an appointment with their family --

MR. GOMEZ: Your Honor, I'll object to the speculation.

THE COURT: Overruled.

BY MR. BARNES:

Q. Go ahead.

A. Many times they'll be able to see the chiropractor before they'll be able to see their family practitioner. And chiropractors have great success early on after injuries such as these in the treatment and resolution of patient's injuries.

Q. When Denise came to you, Doctor, in September of 2004, did she present you with any information, such as a

history of what had gone on with her, things like that?

A. Yes. She advised me that she was a belted passenger in a 1997 Ford Explorer stopped at a traffic light and was struck from behind by another vehicle which she described as a sports utility vehicle.

Q. And did she advise you when the date of that motor vehicle accident was?

A. December 3rd, 2003.

Q. Doctor, in your experience as a spinal surgeon, is it unusual for there to be a gap in time between when motor vehicle accidents occur and when patients first come to see you?

A. Yes.

Q. In your experience in your field, why is that?

A. Well, I think there are a number of reasons. Usually the surgeon is not the first place the patient seeks. On occasion I may see somebody that had a fresh injury within a few -- if I get called to the emergency room. But usually as a patient that comes to the office it may be anywhere from a few weeks to a few years before they see me. And most -- once again in my experience -- the pattern of treatment will be many patients will wait before they see a doctor, thinking it's going to get better; when it doesn't they will seek treatment. Many patients will be seen either by a

chiropractor or family practitioner. And then if the pain doesn't go away or significantly improve, then they will be referred on to my practice. So I may see them at three months, six months, a year after the injury, such as Ms. Keels.

Q. What -- did you take a history from Ms. Keels on your first visit with her?

A. Yes.

Q. And what history were you given?

A. Well, in regards to the injury, as I noted, she was a belted passenger, 1997 Ford Explorer, stopped at a traffic light on Transit Road, at the intersection of Transit Road and Wehrle Drive. The vehicle that Ms. Keels was in was struck from behind by a SUV. She suffered immediate pain throughout her spine. She was taken by ambulance to the Erie County Medical Center. At the emergency department she was examined, x-rayed and discharged home with some pain medicine.

Shortly thereafter she followed up with Dr. Ward, the chiropractor. As I note in my letter of September 1st, 2004, which is basically nine months after her injury, she continued to suffer pain. She was treating with Dr. Ward three days a week, which gave her mild temporary relief and has helped with her flexibility. However, within a day or so

of her treatment with Dr. Ward her pain was as bad as it was prior to the treatment. She rated her pain at 8 or 9 out of 10 for most of the day, however at times the pain could be 10 out of 10.

In medicine we use what's called a visual pain analog scale. It's a pain scale. So if you go to a doctor's office or to an emergency room you may see a number of signs on the wall that has a series of faces and one may be a happy face and another face will be a frown with tears. And the happy face usually has a 0 or a 1, meaning that there's no pain. And then the sad face with the tears means -- 10 out of 10 means the pain's as bad as you could imagine it could be. That's one way, that's a standardized way in the United States of helping to determine how severe a patient's pain is.

Denise Keels explained to me that most of the time she was an 8 or 9, at times she was a 10 out of 10. The pain was waking her at night. She had pain not only in her low back but also in her neck. Typically the low back pain was worse than the neck. Her symptoms were aggravated by prolonged sitting, prolonged standing, leaning over a wash basin. As I noted, the pain would wake her at night. And the pain in the low back predominated, and tended to travel down the right leg. Her bladder and bowel were working

normally. She had undergone, in addition to the chiropractic treatment that she had about nine months of, she had undergone three separate spinal injections which we call epidural injection. Those are injections put into the spinal canal of Novocaine and cortisone, and they help -- they will help to relieve pain. They can -- at times they can be very effective. She, unfortunately, she had three injections and they did not give her any lasting relief.

Q. Your experience, Doctor, does that occur?

A. Usually what happens is if it's -- if the problem is a limited problem that does not require surgery, if the patient gets to the point that they need an injection, either after one or two injections their pain is -- their pain either goes away or becomes very controllable, so there's no consideration that they would ever need an operation. If they have a lot of break-through pain, they get the injection, they have no effect from the injection, or the pain gets better for a day or so and then it's back to where it was, that's in medicine, we would say that's a negative or a bad prognostic sign, that they're probably going to need to have surgery.

So she had gone through time. She modified her lifestyle. She had undergone chiropractic care, which has the best track record of getting patients better early

after injuries, better than anything else. Better than physical therapy, better than medications, chiropractic has proven in those early months to be above and beyond all other forms of treatment. So she failed the test of time. She failed chiropractic care. She modified her lifestyle. She underwent -- she had oral medication and she had three epidural injections and she still had severe pain that was waking her at night and limiting her activities. So that's to a spine surgery, particularly to me, is a pretty significant history.

Q. I take it, Doctor, that based on what you just testified to, that the course of conservative treatment that she had had before she came to see you, you thought was appropriate and proper?

A. Oh, yes, no doubt about it. And she had nine months of treatment. That's more than enough time -- a fair enough period of time to note whether or not a patient is going to require an operation. 90 percent of disc herniations are all better within three months. So if you have a herniated disc on January 1st, there's a 90 percent chance that on April 1st, you know, January, February, March, you're going to be all better. Or you're going to be so much better that it's not a problem. So not only had she passed that three-month, six-month and nine-month mark, still having

severe pain. Once again, that's another bad prognostic sign that it's not going to get better.

Q. Doctor, was there significance to you in the fact that she experienced pain immediately following the impact, the car crash?

A. We can see all different patterns of pain. Sometimes the pain will come on the next day or there will be times that it may kind of linger and not be so bad and then it will get a little worse over a number of weeks. But it's very interesting to note some patients they will tell you right there they have never experienced that before; out of all the bumps and bruises that they may have had in their entire life, that they knew right then when they got hit something bad happened. They just knew something bad happened. She had immediate pain, that was it, and it never got better. That's a significant history.

Q. Is there any other information that Denise provided to you that day that you utilized in your evaluation of her on the first day?

A. On a history basis I -- well, she had also used a TENS machine. I think that was prescribed by Dr. Ward. A TENS, T-E-N-S, transcutaneous electrical neuro -- it's a long -- it's a acronym. It's basically a device that has adhesive pads that the patient can place on their skin and

then they turn on this little electrical device and it causes electrical stimulation to the muscle. And it's supposed to interrupt the pain. And it does help some patients. But, once again, it's a symptomatic treatment. It's like, you know, taking -- taking a pain pill; that it gets better for a period of time and then it loses its effect.

Q. Did you perform any kind of an examination of Denise on that first visit, Doctor?

A. Yes.

Q. Could you tell us about that, please?

A. First, just from my letter on page two, physical examination shows a fatigued and painful-appearing four-foot-eleven, 158-pound black female. To me as a physician and as a spine surgeon, there are many times that it's almost that you don't even have to examine the patient; you just look at them and you know they're going to need an operation. And to somebody -- I don't want to sound flip about that, but you just look at them and you say this patient looks terrible. Denise reported she couldn't sleep. The pain was so bad she was not able to sleep fully at night. Once again, that's another bad prognostic sign. As adults, many of us -- many of us will have aches and pains that may keep us awake a night or two. But nine months of not sleeping, it really starts to wear on people and they look

different. They just get almost like a mask about them. They just look withered and worn and fatigued. And as I noted here physical examination shows a fatigued and painful-appearing four-foot-eleven, 158-pound black female. So just looking at her I knew she had a significant problem.

Q. Did you then perform an exam?

A. Yes. I examined her neck. Her low back was the worst. But in regards to her chin, she could bring her chin not quite two inches from her chest. As an adult you should be able to bring your chin to your chest. She could extend about five inches from -- you should really be able to get up seven or eight inches from your chin to your chest. Her rotation was low, 30 degrees to the right and 50 degrees to the left. You should be able to go pretty much 90 to 90 on a normal adult. She had generalized weakness when I examined her muscles for her size and her stature, she just felt weak. Not that it was paralyzed, but she just didn't have any vigor to her muscles when I tested her biceps and triceps and her grip muscles. Her low back showed that her spine was severely tender right above her buttock, right above her derriere. So the fourth lumbar, the fifth lumbar and the first part of the sacrum were severely tender. I note lumbar examination reveals severe tenderness L4, L5 and S1, most severe at L5-S1.

Q. Doctor, if I could stop you just for a second. I don't want to belabor this, but just to be clear. Yesterday we had testimony from Dr. Ward about the anatomy of the spine. I won't take up the jury's time to go over that.

MR. BARNES: Your Honor, may I approach?

THE COURT: Yes.

BY MR. BARNES:

Q. For the purpose of your testimony now -- first of all, the lumbar spine is where?

A. The lumbar spine would be -- one, two, three, four, five -- yes, these five, lumbar 1, 2, 3, 4 -- I'm sorry. 5, 4, 3, 2, 1. Lumbar 1, 2, 3, 4, 5. And then we have the sacrum down here. So the derriere, the buttock is here. And this is the sacrum forms the tail bone, all right. So she was severely tender at this interval at L5-S1 and she was tender up to L4. The rest of her back up here was not tender. So it's specific right to this area and mainly right there.

Q. And what, if any, medical significance was that to you at this point in the examination?

A. Well, she had explained that she had severe low back tenderness. She appeared fatigued. When we do confirmatory testing -- and I assume we'll get there with other methods, whether it's an x-ray or a CAT scan or an MRI,

they should be fairly consistent with where the patient's complaining of pain. And it ultimately showed that it was. But she had -- she was severely tender at that bottom section immediately above her buttock, and that's the bottom most disc, L5-S1.

She gets in and out of a chair with difficulty. When somebody has a really sore back it's hard for them to get in and out of a chair. It takes a few seconds. Where somebody who doesn't have a sore back, you stand up and can just sit down; you don't think about it. But if you're really sore it's hard to get out. And as I note, she gets in and out of a chair with difficulty, which is consistent with her saying I got a really sore low back. That's consistent. Her gait was normal, meaning she didn't have a limp. When she bent forward she could only bend 30 degrees from the vertical. About that much (indicating.) An adult, we should be able to bend over 80 or 90 degrees and either touch our ankles or touch our toes, if you have a painless spine, you should be able. She can go only go 30. If normal is 90, she could only do 30 percent of what was normal. She could not bend backwards, all right. Most adults should be able to bend at least 10 and probably 20 degrees backwards. So if you say that in a normal adult can bend backwards 20 degrees and forward 90, that's like 110

degrees of potential motion. She had 30. Quite a loss. She could walk on her heels and toes with difficulty. Because of pain in her low back it hurt her to do that. Many times we'll have ladies who have low back pain, they'll tell you I can't wear high-heels, it just hurts too much. So when we try to put them on and walk on their toes or heels, it just simulates -- it hurts. But she could do it. Straight leg raising was 90 degrees on both the right and left side. However, it was painful for her to do. And worse on her right than left. And her right side was more painful than her left side.

Q. Why do you do the straight leg?

A. The classic straight leg test is to look for what we call nerve root tension. If one of the nerves -- a lot of it depends on where in the canal a disc herniation is. If it's really hanging up -- a herniation is really hanging up a nerve root -- it's hard for the nerve root to slide over it and then it's hard for the patient to straighten their leg out, and that may be 30 or 40 or 45 degrees they'll start to have severe pain. Most patients that have a herniated disc don't have that problem; they can bring their leg up 90 degrees. And they may have back pain or back and leg pain that may be worse on one side than the other. The classic straight leg raise test is looking for something we call

nerve root tension, which most patients don't have. And she did not have it either. But it hurt her to do that.

Q. What did you do next as far as the exam?

A. Oh, she had brought along a MRI examination.

Q. And we had some testimony yesterday, Doctor, about that, and I'm sure the jury heard it. Just to refresh their recollection and clarify it, MRI meaning what?

A. An MRI is a special technology. It means magnetic resonance imaging. It's basically a patient is put into a big electromagnet, and through the wonders of science they spin our electrons in our body and they can make a picture. I don't know all the physics involved, but it's what we call in medicine nonevasive. Translates, they're not sticking you with a needle or sticking a tube somewhere, so it's noninvasive, for the doctors to obtain a picture of part of our body. And in this situation Dr. Ward had sent her for an MRI of her lumbar spine. And that showed that she had a problem with a herniated disc and a tear at that disc at L5-S1, which is the area that she was sore. As I said a little bit earlier, when a patient comes in complaining of pain in a certain area and you get a test, it should confirm their complaint. If it doesn't then you have to start considering other possibilities.

Q. Now, Doctor, you actually reviewed this MRI film?

A. Yes, I did.

Q. And is reviewing MRI films part of what you do in your day-to-day practice as a spine surgeon?

A. Every day, seven days a week.

Q. Is that an important diagnostic tool?

A. Yes, it is.

MR. BARNES: Your Honor, if I may, we have the MRI in question set up to be projected on the screen. It was given to us on a disc.

THE COURT: Go ahead.

MR. BARNES: It may take me a moment just to fire it up.

This is Exhibit 17 in evidence, MRI of April 5th, 2004. May I ask the doctor to step down?

THE COURT: Yes, Doctor.

MR. BARNES: Judge, I'm wondering if the jury can really see from where they are.

MR. GOMEZ: Could we move the screen closer to the jury.

THE COURT: Why don't you do that.

MR. BARNES: The problem is if we move the screen closer -- do you see what I'm saying? Judge, would it be permissible, I ask the Court for the jury to just occupy this space.

THE COURT: Fine. If you want to come closer, please do so. Doctor, if you're showing a particular picture there, would you tell us what it is.

THE WITNESS: Yes. This is an MRI scan, Denise Keels, April 5th, 2004. And this was from Greater Amherst Imaging. We're going to look basically at the screen on our right. This is what we call in medicine a sagittal image. It means a side view.

BY MR. BARNES:

Q. Just so it's clear, Doctor, this is the film that you reviewed on your examination?

A. Yes, it is.

Q. Thank you.

A. Now, Denise Keels was laying down when this was taken. And we tend to put the pictures upright because it's easier to conceptually understand them.

What we're seeing here is the spine. This is the lumbar 5, 4, 3, 2 and 1, just as we looked on the model just a few minutes ago. The big square parts are the vertebra. These other little flat things are the discs. This is the spinal cord that comes down. So you go 5, 4, 3, 2, 1. The cord ends right up here around L1. It's a little

darker gray right here. And then what we have down here are the nerve roots. And you can see the little lines. The white is the spinal fluid. Now, this disc at the bottom, this L5-S1, and it's got a herniation back here with a tear right there.

Q. Let me stop you right there for a moment, Doctor. When you're talking about a herniation, what do you mean in lay terms?

A. In medicine a hernia means that a structure has broken through a barrier and is in an area that it shouldn't be. Most of us are familiar with hernias in children, they get hernias in their groin or a hernia in their bellybutton. And what happens is that the abdominal wall has an opening in it, whether it happened traumatically or they were born with it, and the bowel goes through. So sometimes you'll see a young child with what we call an umbilical hernia. It means a hernia in their bellybutton. It has to be pushed back in and the abdominal wall has to be sewn closed over it.

In a disc hernia or herniated disc, the wall, which in medicine is called the annulus, tears, and the jelly on the inside starts to spill out. So the jelly, as we also call that the nucleus, pushes out through the wall in the disc and sits in the spinal canal. So it's herniated. It's supposed to be -- the jelly in the disc is supposed to be

here and it starts to spill out to the wall. These other discs here you note are kind of whitish with a little gray blush or a line through the center. Those are normal, healthy discs. The reason they've got this whitish here is that they're filled with jelly and the jelly has got a lot of water in it. This disc down here is darker because the water in the jelly is spilling out of the disc because there's a tear in the back of the disc. This little white line right here, it's a little bit more difficult to see, but is the biological attempt for the body to try to heal that tear in the wall. What happens is that it becomes inflamed. Just as if we have a paper cut, if you're going through your notebooks and you cut your finger, within a day or two and it feels real sore, if you look at it, it's reddish. That's the body's attempt to heal that laceration, heel that cut. So all these chemicals come in with white blood cells and trying to get everything to heal. The same thing happens if you tear a disc, if you tear a ligament in your knee and we get what we call some swelling and some edema and some redness, that inflammation. And that's what this little disc -- just that little crease here, you know, probably three or four millimeters, that's all it is. But it's a big enough hole and a big enough tear in a ligament that the jelly starts to spill out. And as the jelly spills out, not only is it a

tear in a ligament, which is painful, same as if you tore a ligament in your thigh, you have the mechanical disruption of the tear, but then you have the body's attempt to heal it which is bringing in all the inflammatory chemicals, the prostaglandins and all these other kind of crazy chemicals that cause inflammation. There's also little nerve roots around here that become inflamed, you can feel the pain. And as you notice here what happens is the disc, which is a shock absorber, it still has an ability to be a shock absorber, but it's not as good as it was. And if you kind of look here you can see where the back here, it's almost bone on bone here compared to these areas. The bone's away, the bone's away. Here the bone is almost touching. So if you bang -- you're banging bone on bone, banging. So this is where Denise Keels was saying this is my back is killing me right here, right above my buttock. And this confirms that she's sincere in telling the truth. It's not like the herniation was up here and she's saying I'm painful down here. She says, Doctor, this is where I'm hurting. And I pushed there. That's it, herniated disc.

Q. But, Doctor, you're using the term herniated disc. Are you familiar with the term a bulging disc?

A. Yes.

Q. All right. Is there some discussion within the

medical community, particularly within your area of expertise, about the distinction between bulging discs and herniated discs?

A. Yes, we in medicine, unfortunately, have no uniform vocabulary in describing herniation, bulging, protrusion. There have been many attempts, but there's been no general agreement among physicians or groups of -- like the American Board of Orthopedic Surgery and the radiologists, the neurologists, the neurosurgeons. They can't agree on what the exact terminology should be. They're trying to. And I would assume some day we'll have a uniform -- there will be a definition and we'll all be able to follow that. But she has -- clinically she's complaining of pain right above her derriere area. She has a limitation of motion. This pain started with a solitary event, which is a rear end motor vehicle crash. The pain did not go away in spite of time, modifying her lifestyle, taking oral medications, going to the chiropractor three days a week for nine months and having three epidural injections and a TENS machine. And she's got -- the MRI says she's telling the truth. It's right there.

Q. Doctor, we'll let the jury sit down in a moment. Just a couple other questions while you're at this film.

We've had some testimony in this case

yesterday regarding, not Ms. Keels, but Mr. Collins, about the issue of degeneration of the spine and does that affect the disc. As you examine that photograph, that MRI as you look at it today, do you see evidence there of degeneration as to Ms. Keels that pertains to her complaint?

A. I think it's fair to say if we're talking about degeneration -- degeneration is a total body kind of thing. Like you can't -- why isn't the rest of her spine degenerated? If we're going to say Denise Keels, this is not a injury, this is just degeneration, well, how come -- not how come, why? Why isn't this disc degenerated? And why isn't that one degenerated? Or this one or this one or this one or this one? They're all normal. She's not complaining of pain in these areas. So why all of a sudden should this be degeneration. On one day she gets hit from behind and we get disc's degenerated? No. The color of this disc or the shading of this disc is different than all the other discs. That's because the disc tore and the jelly's spilled out. The jelly has water. The spinal fluid has water. Nice and white. The fat under her skin, nice and white. It's juicy, a lot of water in it. This disc has lost some jelly and therefore has lost some water. Therefore, it is darker. Now, you can say it shows some degeneration, but in all fairness it really shows loss of signal. If this was a

degeneration issue, you'd see it in a lot of discs, not just one.

Q. Doctor, our discs do change as well as the rest of our body as we age, correct?

A. Yes.

Q. Is there anything age inappropriate that you see in -- and Denise would have been 39 years old at this date?

A. Her spine, other than this -- if you just forget about that level, her spine looks absolutely perfect. I don't see any degeneration. I don't see any infection. I don't see cancer. I don't see anything that she was born with, you know, as we say congenital problems. This to me is a -- you know, a traumatic injury, not degeneration, not age-related, not activity-represented. It's related to a solitary event.

Q. Based on all the information that you had, Doctor, the exam, the review of this, your history you took, any question in your mind about the proximate cause between the motor vehicle accident and that injury?

A. No, there is not.

Q. Within a reasonable degree of medical certainty?

A. With medical certainty. See, this was a landmark event for her. It didn't happen weeks before. It didn't happen a year before. This was it, right there.

MR. BARNES: All right. Thank you. Your Honor, I think we can have the jury return to the jury box and Dr. Capicotto return to the witness stand.

THE COURT: Doctor, you were talking about what scan, what picture?

THE WITNESS: Sagittal scan 6. 6/11.

BY MR. BARNES:

Q. Doctor, after you completed your examination of Denise and you reviewed that film, what if anything was your next course of action during this first visit that she had with you?

A. I apologize.

Q. I'm sorry. After you did your exam you reviewed this film, you've told us about the medical conclusions you drew, what if anything else did you do at that first visit?

A. Well, I advised her at the time she should stay on with Dr. Ward. However, I did -- and I'll read from my letter. This is not standard verbiage for me. I have been rather candid with this lady and I tend to believe that she's probably going to require surgery of the lumbar spine for relief of her low back pain. Unfortunately, a small operation is not going to help her and she's going to require a lumbar fusion, which would include a lumbar laminectomy,

discectomy, posterior lumbar fusion at L5-S1, with bone struts and bilateral, post lateral fusion with bone graft and spinal instrumentation with titanium rods and screws. I would say that it's rare that I tell a patient on the first visit they need to go to the operating room.

Q. And I'm going to get into for the jury's information, Doctor, I'm going to get into the details of all that stuff you just told us about, the nature of that surgery. But you at least advised Denise that that was your medical opinion as of that first visit?

A. Yes.

Q. At the conclusion of that first visit had she agreed at that point to undergo this surgery that you described?

A. Not after the first. She continued to treat with Dr. Ward for a period of time.

Q. She was going to go back and try some more chiropractic?

A. Right.

Q. Was that okay?

A. Yeah, I didn't have a problem with that. Realistically speaking -- and once again, I'm not trying to be glib about this. This was not cancer that was going to take her life. She had a very sore back. She was having a

hard time getting through her day. She couldn't sleep. But -- and I explained to her the surgery in my letter. I told her that I thought I could get her only about 50 or 60 percent better. I did not -- I explained to her that I did not think I was going to get her back to what I would consider a normal functioning life for a young lady. However, I think that that was the best we had at the time.

Most patients, to be quite frank, they don't want to hear -- they -- thank you very much, I'm going back to my chiropractor. And if she had a life-threatening problem, say this was of the nature of cancer that would take her life, I would have been much more forward leaning, so to speak, and say, listen, no, no, you're making the wrong decision. This must be operated, this must be operated now.

Dr. Ward, I know Dr. Ward professionally. He watches his patients very closely. If there's ever a change in a patient's status he is right on top of that. And he'll just say, look, this is it, you get no more. You have to be fixed. And I work with Dr. Ward. We share a number of patients for a number of years. So I had no -- I had no objection to her -- this needed to settle through her mind. She had had an injury nine months ago and she comes to see this guy, this surgeon, and he says, well, you're going to need to have an operation. That's not what she wants to

hear. So go back to Dr. Ward and try and see if it gets better. And that's what she did.

Q. Dr. Capicotto, you understood I think from your history at the time of this first examination that Denise had been working as a home care aide, is that correct?

A. Yes.

Q. And did you have a general understanding of what the duties and responsibilities of a home care aide would be, in terms of what she had to do at work on a day-to-day basis?

A. Well, my experience over the years with patients that work as home health care aides are most of them have -- it's fairly vigorous work, helping to clean, move -- they use the word clients, I would use patients. Helping to get their patient on and off of a toilet, in and out of bed, in and out of a chair, assist them with walking, feeding, many times housecleaning. So it's -- it is not light duty work. It is not sedentary work.

Q. Given your findings and conclusion at the end of this first examination, Doctor, did you have an opinion as to whether or not she was disabled from returning to work because of her condition?

A. I don't see where I entered --

Q. It may not be reflected in your notes, Doctor?

A. I don't see where I have it. I would say I had her

totally disabled.

Q. As you sit here today, you refresh yourself as to your findings and her condition, what would your opinion be as to her ability to go back and do that stuff?

A. She was unable to do that stuff. She would be disabled from work, as I would put temporary total disability.

Q. Did Denise return to your office for a second visit at some point?

A. Yes. That was on March 2nd, 2005. So about six months after our first visit.

Q. And what did you do with her on that second visit -- first of all, what were her complaints, let me ask it that way?

A. Basically her complaints were the same. She had come to the conclusion that she wanted to have her back fixed in the operating room. As I state, she is suffering miserably. It's been over a year since injury. She continues to note pain in the low back and right leg. She was treating with Bextra, which is a type of pain medicine. Treating with Dr. Ward three days a week. And in spite of that continued to suffer severe pain to the point that she could not work.

Q. Did you do any further examination of her on that

second visit?

A. Yes. Her spine was severely tender at L4-L5 and S1. She had a difficult time getting in and out of a chair. Her lumbar flexion was limited to 40 degrees compared to a normal of 90. Extension was 10 degrees. Normal is 20. Her gait was normal. She could walk on her heals and toes. And her straight leg raising was 90 degrees.

Q. What was that medication you mentioned?

A. Bextra.

Q. What is that?

A. It's a synthetic -- I don't prescribe it. It's a -- I believe it's a synthetic narcotic. It's a strong medicine.

Q. And it's designed to do, hopefully, what?

A. It's what we call in medicine an analgesic. It's meant to take away or reduce pain.

Q. Based on the history you're getting from her and your examination, was that pain medication working? Was it doing what it was supposed to do?

A. It was -- I think it was taking the edge off, but it wasn't giving her sufficient pain relief.

Q. And based on your experience with people with these type of injuries, is that unusual that pain medication doesn't make it just all go away?

A. For patients that need -- for patients that have a surgical problem, nothing makes the pain go away. It makes -- pain medicine may take the edge off a bit and the chiropractor may make them feel a little bit better for a short period of time. However, nothing makes the pain go away until that painful structure is taken out. It's almost like -- it's a simple comparison, but it's like having a stone in your shoe and you got to stop, take your shoe off, get the stone out and then you can walk again. And it's, like I said, it's kind of simple in comparing it, but a problem such as that, whether it's in the low back or a torn cartilage in the knee, or torn ligament in the knee, or torn tendon in the shoulder, a rotator cuff, nothing will make that pain better and it just has to be fixed and then the pain gets better for most of the patients.

Q. What else, Doctor, other than your examination and your discussion with Denise, what else occurred on that second visit in March?

A. Well, we had another -- we had an informed consent discussion regarding her condition. One of the duties of your physician is that if you're going to undergo a procedure or -- an operation is a procedure, they should advise you of, No. 1, what your condition is, what are the alternatives. If you're going to have a surgery, what type of surgery. And

how would you contrast one or more surgeries and why you should have that. And then what are the potential benefits, the potential risks and complications. And the other issue is you try to give a patient an idea of what can really be done, realistically can be done.

Q. Did you try to explain to Denise?

A. Yes.

Q. What do you recall that you advised her about?

A. I explained that she was going to need a lumbar discectomy and fusion. That the fusion should give her 50 or 60 percent pain relief. The risk of major complications, including death, heart attack, stroke, paralysis, partial paralysis, spinal fluid leakage, blood clot, pulmonary emboli, which is blood clot that goes to the lung, are all quite low. And, you know, I try to explain to them that those are issues that I think about. And that surgery would hopefully give her 50 or 60 percent improvement in her overall condition.

Q. Now, Doctor, it was your understanding that Denise's knowledge of medicine was pretty limited, correct? I mean, she was relying on you to inform her about this surgery and tell her what was involved in it, correct?

A. Yes.

Q. And did you utilize a model when you explained to

her this surgical process so that she could understand what was involved?

A. Yes.

Q. And showing you what we've marked as Plaintiff's 25. Is that the model you used?

A. Yes.

Q. Would it assist you in explaining to the jury what you told Denise if you could utilize that model?

A. Yes.

Q. Why don't you tell us as you explained to her what was involved?

A. Well, I explained to Denise, as I do with my other patients, that the type of operation that she would have was a spinal fusion and it's performed with an incision on the back. Patient is given a general anesthetic. And so that they're completely unconscious. They can't hear, they can't see, they can't smell, they have no -- the anesthesiologist has total control over all their functions. And during surgery they're basically paralyzed. They're got going to hear anything or remember anything. They'll have total amnesia for that. They're placed on a table, operating table facedown. And we give them antibiotics to reduce the risk of infection. We can't make infection go away completely, but we can reduce it substantially so that one percent or

sometimes less. And that we have them give a couple pints of their own blood before surgery because there's a fair amount of blood loss with this type of surgery. And instead of trying to get all the blood from the blood bank, it's safest to use the patient's own blood. So we would usually ask them to give two of their own pints of blood for the surgery. We also use a machine in the operating room called a cell saver, so that any blood from the incision gets filtered and gets given back to the patient.

We make an incision, come down through the skin and then sharply take the muscle off the spine. And then open up this area. This is the lamina, the back part where the bumps are, that's called the lamina. So we do a laminectomy, but taking the lamina out and then actually go in and move the nerve roots out of the way and take the discs out. That's called a discectomy. Any time in medicine something's taken out it's called a ectomy. So a laminectomy or discectomy or tonsillectomy, something's coming out. So we do a laminectomy and then a discectomy. We'll put screws. These are actual type of screws that we use in the spine, basically the same company. Screws in the spine. These are called pedicle screws. They're made of titanium. We implant those. And then we look on the other side. In the front here we implant these bony struts that are cadaver bone in

here. We take the whole disc is taken out and then we replace it, we try to jack it out and open the space up a little bit so the bone's not banging on the bone and then support it by putting these cadaver bone struts in there. And then we'll also take some bone graft and put it back here and hook the rods and the screws up.

Q. Thank you, Doctor. Did Denise seem to have a understanding from a lay perspective of what was involved with all this?

A. Yes.

Q. And do you know, Doctor, was it on this visit that she consented to undergo this surgery?

A. I had her -- I don't think so. I think we had talked one more time. I wanted to send her for an updated MRI. On the date that we seen her in March of '05, March 2nd, '05, I did get an x-ray of her spine just for measuring purposes. And what that showed was she had lost part of the natural curve of her spine, which is consistent with a patient with a disc herniation. In my letter I state she has a loss of lordosis. So that was consistent with her having a disc herniation.

I sent her for a new MRI just to make sure that we're still dealing with the same problem that she had when I originally saw her in September of '04.

Q. Did you in fact receive another one of those MRI's?

A. Yes. She came back to the office on April 13th, 2005. We had scheduled her surgery for June 13th of 2005. She underwent an MRI at Physician's Imaging Center on March 15th which showed a herniated disc at L5-S1.

MR. BARNES: Doctor, I'm going to stop you there for a moment. Your Honor, may I -- I'm going to use the stand to show an exhibit to the Doctor.

BY MR. BARNES:

Q. Doctor, I want to show you what we marked previously as Plaintiff's 18 in evidence. I'd ask you to just take a look at that. Can you identify that exhibit?

A. Yes. This is Plaintiff's Exhibit 18. It's an MRI performed at Physician's Imaging Center of Denise Keels on March 15th, 2005.

MR. BARNES: May I ask the doctor to step down?

THE COURT: Yes.

MR. BARNES: Would you step down again, Doctor?

BY MR. BARNES:

Q. Now, referring you, Doctor, to plaintiff's 19, particularly to the right-hand side of this exhibit. Doctor,

have you seen this exhibit before?

A. Yes.

Q. And have you compared the film image on the left-hand side of this exhibit with the exhibit that is in evidence?

A. Yes.

Q. And are they identical?

A. Yes, they are.

Q. This is just that mounted on a board?

A. This complete sheet has one, two, three, four, five, six, seven, eight, nine, ten images. This is image No. 5, which is this picture right here magnified.

Q. Have you identified that?

A. I did. This is image 5,. Denise Keels, March 15th, 2005. And right here, image 5. And so that's this guy right here.

Q. Doctor, I'm going to ask you just to step to the side a little bit so that the jury -- maybe to that side and kind of peek around. Doctor, first of all, when you look at the left-hand side, the actual film, had anything changed, gotten better or worse from the MRI image that you identified earlier on the screen?

A. Not substantially. She has -- what I would say is that everything else is -- the discs that were normal on the

first MRI are still normal. They haven't shown any degeneration or any changes, any herniations. They're normal. The curve of her spine where it's straight and then has a mild curve down here, that is not normal. And it's the same as it was on the first MRI. What we call a loss of lordosis. This bottom disc is darker than these other discs. Now, these are two different machines, so the software is a little bit different, the magnets are a little bit different. But this shows that the disc is herniated. And once again you see that little whitish area right there, that's the area that was torn that the body was trying to heal but couldn't get it to heal.

Q. Doctor, on the right-hand side of Exhibit 19 is a color enhancement. You've seen that exhibit as well?

A. Yes.

Q. Would that be an aid to you in explaining to the jury just so it's clear to them this issue of the herniation process and why it's causing those pain symptoms?

A. Yes. Once again if we look at the area that is actually from the actual scan, we can see the confines of the disc. And this is a big, thick ligament wall, really thick, tough tissue. And the center is with the nucleus or the jelly which has a lot of water in it. What's happened here is that there's been a disruption or a tear, this little

white area here, signified by here, there's been a tear in the wall of the disc. So that ligament remained. And as with many things in life, the jelly follows the path of least resistance. It just goes where it's going to go, the path of least resistance, and to come out here because it can. And it starts to herniate. So you have a tear and then the fluid, or the jelly starts to come out and it starts to get into an area where it's not supposed to be. This is supposed to be on this side. But once it gets across that line it gets in an area that it's not supposed to be, therefore, it's herniated. It's a structure that's supposed to be in that compartment and not in this compartment. So the disc is now herniated. And along with the mechanical disruption, the nerve roots are being squeezed, there's inflammatory changes, and this is an area that just hurts a lot. It's very painful.

Q. Did any of this information change your opinion, Doctor, that she needed this surgery?

A. No, it did not change my opinion.

Q. And did she following this visit agree for a surgery?

A. Yes.

Q. And do you remember -- I could have you return to your chart, but do you remember the date of the surgery?

A. I think it was June 13th of 2005.

Q. 2005?

A. Right.

Q. Now, Doctor, you previously looked at similar exhibits that were prepared that depict the type of surgery that was done here, the specific type of surgery?

A. I did.

Q. And would those exhibits be useful in explaining to the jury the surgery itself?

A. Yes.

Q. I'd ask you to maybe just remain there then, Doctor. Doctor, start with -- which one is that, Doctor?

A. That is Plaintiff's Exhibit 20.

Q. And utilizing Plaintiff's 20, Doctor, can you explain to the jury, please, the way this surgery began as it's depicted up to the point that the exhibit itself shows the surgery?

A. Yes. This is artist's picture of -- actually would be taken looking straight down on Denise Keels' back. And she has a scar in the midline of her back. It's fairly generous.

Q. About how big? Do you know?

A. Five, six inches.

Q. Five or six inches?

A. Maybe a little longer. We make an incision in the skin, go down through the skin and the subcutaneous fat. So that -- most of us have a little bit of fat under our skin, not all of us. And then open up the spine and actually sharply cut the muscle off the spine. And so this is a picture of the spine. Here's the muscle. These are the edges of the skin. And then the yellow is -- this is how it looks in the operating room, the yellowish fat. And then we see the muscle, spinal muscles. And these are big, heavy retractors that are metal devices that we use to pull away the muscle and to keep them out of the way, otherwise muscle keeps falling back in. Just pull the muscle out of the way.

Q. How deep do you have to cut into the spine itself in this surgery, Doctor?

A. Denise Keels' spine is probably about a hand's breadth, this deep from her skin.

Q. What would you approximate for the record?

A. Another five inches.

Q. Another five inches?

A. Yes, it's much deeper than one would appreciate until you get into the operating room. And even in somebody who is really tiny, it's quite deep. So we have the spine exposed. This is L5 and S1. We always take an x-ray to make sure we're at the right level. And then we take this out

here. Remember I said that this is the lamina. Can I use --

Q. Yes, please do. Identify it for the record.

A. This is the model, Plaintiff's 25. So that would be this area right in here. This is the spinous process. Like if you see somebody that's skinny or little kid you see all these bumps in the middle of their spine. That's their spinous processes, and that's hooked up to the lamina. So we take that whole area out. That's before I said a laminectomy. We're taking something out. So you take the lamina out at L5-S1. And this is what you're going to see, the spinal cord or spinal nerve roots. We're just looking right at them.

Now, the bone, we're not going to discard or throw anything away because this bone that we take off can be used to do the spinal fusion. So what we do is clean it off real well and chop it up into really, tiny small pieces like Rice Krispies. Very, very small pieces. And then we take a needle and put it into the pelvic bone, which would be right over here, and suck out the bone marrow. And the bone marrow has cells in it that can make bone. As we talk about you hear on the news about stem cell transplantation. We all have stem cells. And the pelvis happens to have a lot of stem cells that make bone. So we suck out that bone marrow and we mix it with the bone that we have here, plus a few

other -- some other bone from the bone bank, and we'll have a large mass of bone to use to fuse the spine. And so that's the first part of the operation.

Q. Thank you. Now, Doctor, putting up Plaintiff's Exhibit 21 for identification. And I'd ask you to continue with your explanation, please.

A. The next step -- during surgery we have a computer in the room that's hooked up to the patient's skin and also we have leads that we actually put into the spine in the spinal muscles. The last thing that we want to have is an accident in the operating room and have somebody paralyzed or partially paralyzed, so we're constantly monitoring -- not only the anesthesiologist monitoring their temperature, their blood pressure, how much oxygen, we're also measuring how their spinal cord and their nerve roots are working throughout the entire surgery.

Q. As long as you've mentioned that subject, Doctor, you indicated earlier that one of the risks you had to explain to Denise here was the risk of paralysis. How could that -- thank God it didn't happen, but how could that potentially happen as a risk in a surgery like this?

A. Well, there's a few -- there's a few ways it could happen. No. 1, they usually say in the textbooks, a surgical misadventure. You know, a surgical misadventure.

Q. We call it something else, but --

A. Yeah. A nerve root is cut, you're not careful enough. It's usually a technical problem. But it can be due to loss of blood pressure. There can be other areas. But I would say that it's usually a surgical problem that goes on.

Q. I see. Thank you. I didn't mean to interrupt. Please tell us about the next step in the surgery.

A. So what I do next in my series of performing this operation would be to put the screws into the spine, into the pedicles. And that's kind of a -- that's -- it's a tedious part of the operation, where we take visual cues and we also use the spinal cord monitor. The canal is opened and there are certain landmarks, plus we use x-rays or a fluoroscope to help us, assist us. And we'll make a -- get an electronic burr and make a little hole and then use an awl, which is a sharp device, and by hand go down through the pedicles, which are these -- these bones right in through here. These are the pedicles. So it's a tube of bone, maybe about a centimeter in diameter. But you can't always see the pedicle, you have to feel it and you have to kind of know where anatomically it goes and the proper angle that you're working at. So you can't go just plunging through. You have to kind of feel your way through. And what I typically do is I'll go into the pedicle with what we call a pedicle finder

or an awl. And then when I'm at the area I'm supposed to be we'll start taking a bunch of electronic measurements. And that's where the spinal cord monitoring tech comes in. And at the same time the anesthesiologist has to change the patient from being paralyzed to not being paralyzed. So there's a lot of stuff that goes on in the operating room during this time phase. And what we're looking for is that we want the screw to have high resistance. Bone does not conduct electricity well. So we test the probe and if it shows it's got a high number, good. If it's a low number, you better change direction, get it into a better area. So we'll do each one, very painstaking take it out, put the screw out. Do the next one, screw in.

Q. Let me interrupt you for a second. Let me show you what we've marked as Plaintiff's 26 just for identification. Would you tell us what are those things?

A. These are pedicle screws. They're titanium screws.

Q. You also have in your hand just for identification Plaintiff's 29?

A. 29.

Q. Would you explain what both of those devices are?

A. The device is actually a screw rod, a screw and rod construct. And these are actual screws that we use in the operating room. These have never been used. And we actually

implant these. These are what we implant into our patients. And then they get hooked onto a rod. And then locked down onto the rod. So these were fixed solidly in bone and then the rod is fixed solidly, it's actually torqued onto the screws so that there's no wobble.

Q. Now, Doctor, this rod that you're talking about, what is the length of it as you're putting it into Denise's back in particular?

A. Well, her rod's shorter. That's been cut. The rods come out -- I believe this is a 110 or 120 degree rod, or length rod. And so we'll use big bolt cutters, just like you'd do for a Master lock, big 30-inch bolt cutters to cut the rod.

Q. Thank you. Maybe you could step back to the exhibit, Doctor, and explain to us the next step in the surgery.

A. I put the screws in next and make sure that I have the fixation that I need. And then once I have the four screws in and electronically they've been checked by the technician, the resistances are appropriate and the x-rays show that they're in the proper place, then the next step is to take the disc out. And that's what this H., this square right here showing that the disc is being removed on both sides of the nerve root. And then the next step is to take

these struts of bone that we looked at here --

Q. Again, you're making reference for the record, Doctor, the exhibit?

A. I'm sorry, this is Exhibit 25. These are the little struts of bone. You can see them. And we'll put a -- we'll put a distractor on to open the area up. So spread the area up just a few millimeters to increase the height and then tap these bone struts down and let it compress down on them. So if the space was, say, 10 millimeters, we may open it up to 12 or 13 millimeters and put a 12 or 13 millimeter spacer in, these bone spacers, so it holds it open. And once we get that in, when we're doing that under continuous monitoring because we have to move the nerve roots out of the way. Once we have those in then we connect the rods onto the screws, lock it down and pack in the rest of our bone graft.

Q. And then at some point the patient's closed up?

A. Yes, once that's done we take confirmatory x-rays to make sure everything is in the appropriate position. We take final runs on the spinal cord monitor to make sure all the electronics, that all the nerves are working the way they're supposed to be working. And at that point we'll then close the incision and put the sterile dressings on and send the patient to the recovery room.

Q. All right. One other exhibit I'm going to show

you, Doctor. These screws and rods and the hardware that you've put into Denise Keels' pack, it remains there, I take it, is that correct?

A. Yes.

Q. It's a permanent part of her body?

A. Yes.

Q. The bone you took out, that's gone, the stuff you had to take out?

A. No, the bone's still in there. But it's not where God put it. It's not where she was born with it. I took it from her lamina and I put it around the sides of her spine. But everything I put where it was supposed to be is still there.

Q. Once you finished that surgery -- and I'm going to refer you to Plaintiff's 22 for identification. Does this give us an idea what it looks like inside of the patient's body?

A. Yes, this is an intra, this is an x-ray taken before we left the operating room. That's what this is. This is an intraoperative x-ray. Denise was laying flat down. So she would be like this. And what it shows are the screws --

THE COURT: What number is this?

THE WITNESS: This is 22.

THE COURT: 22.

THE WITNESS: It shows the screws, two screws at L5 and two screws at S1. It shows -- it shows the bone struts. The bone struts are on top of each other, so to speak, so that you can't see them. But from the front you see two. And that's how that looks. And this was the artist's kind of drawing of it.

BY MR. BARNES:

Q. How long did this operation take? Do you recall, Doctor, approximately?

A. For me to do an operation like this, I probably average around three and a half hours, close to.

Q. Three and a half hours. Thank you. You can return to the stand. Thank you, Doctor.

Dr. Capicotto, just so it's clear for the jury, what did you hope to accomplish medically speaking for Denise in performing this operation you explained to us

A. I hoped to make her 50 or 60 percent better than she was before surgery.

Q. And do you recall how long she remained in the hospital, if your notes reflect that?

A. No, I do have that. She had surgery on June 13th for surgery, June 13th, 2005, and June 18th, 2005 went home.

Five days in the hospital.

Q. Doctor, when would the -- after her discharge from the hospital, when was the next time you would have seen Denise, if you recall?

A. I saw her on July 26th, 2005, which is approximately six weeks after surgery.

Q. I'm going to ask you, was that a visit at your office?

A. Yes.

Q. And I'm going to ask you about that, Doctor. But, the six weeks in between, from her discharge from the hospital until she saw you, what would your instructions have been to her in terms of her level of activity or what she should be doing as a patient?

A. I keep my patients after a fusion such as this quite sedentary. They're given a back brace to wear when they're out of bed. Most patients go home with one or two canes to help them ambulate. I don't really want them running around town. I prefer that they don't drive or do any housework or grocery shopping. And I typically after an operation such as this, my standard is to keep them temporarily and totally disabled for any and all work for about six months.

Q. And would she have been on pain medication during

that period of time?

A. Yes, she was.

Q. Now, just to jump back for a second, Doctor, to the operation. You told us about the two MRI films you looked at and the damage to the disc you saw and its relation to this accident. When you went in there surgically and you opened her up and you saw with your own surgical eyes that area of her back, did it change your opinion at all about the damage to that area of the spine?

A. No, it did not.

Q. You could see the damaged area of the spine?

A. Yes.

Q. And that's actually what you took out?

A. Correct.

Q. Tell us about that visit that she had with you in July. How was she doing?

A. She was pretty sore. I think that most patients that have a spinal fusion, the first -- the first three months are quite difficult. They're in quite a bit of pain.

Q. They're in pain?

A. Yes. She was six weeks status post surgery. She rated her pain at 8 out of 10. She had pain in her low back that went down the back of the leg, occasionally on the front. She was taking Lortab, which is a narcotic,

Hydrocodone, ten milligrams, two tablets, twice a day. Her incision had healed. She was using two canes to walk. She moved about the office in a guarded fashion, meaning she was quite careful and methodical in how she moved about. Her spine was tender in the surgical area. She did rely on her cane mildly. So she was putting a bit of weight on her cane. She wasn't just walking in and using them -- she was actually putting weight on them.

Q. Would you expect that given her surgery, her condition?

A. Yes. Her forward bending was 40 degrees. Backward bending, which is extension, zero degrees. She couldn't walk on her heels and toes. She could do a straight leg raise test, 90 degrees both on the right and left and only had pain on the right side. Her calves were soft. She didn't have any blood clots. Her pulses were normal. Her vascular exam was normal.

Q. Did you make any determination at the conclusion of that visit, Doctor, about her level of disability at that point?

A. I note she will remain totally disabled under my prescription from the date of surgery, June 13th, 2005, for a full six months, which brings her date of disability to December 13th, 2005.

Q. And was another visit then scheduled for her to come back to see you?

A. Yes.

Q. What would you have advised her as far as what she should be doing between those exams and what her level of activity should be, you know, based on what you saw on that last exam?

A. Well, at the time I wanted to try to get her into the pool for some pool therapy and -- getting into a pool, kind of lighten her, we say off weight the patient, and makes it a little bit easier for them to get around. And if we can get them moving earlier sometimes that helps the rehabilitation. So my hope was to send her to pool therapy for about six weeks and then get her back to Dr. Ward so he could start doing a lot of muscle work and stretching for her and help mobilize her.

Q. All right. And did you then have her come back to your office for a follow-up?

A. Yes.

Q. When would that have been, Doctor?

A. She rescheduled. She was supposed to be seen in September. I just have rescheduled. And she was seen in November 22nd of 2005, which was five months after surgery.

Q. And how was she doing five months after the

surgery?

A. She had pain in her lower back, once again, 8 out of 10. No pain in her legs. She had a slip-and-fall two weeks prior to the date I saw her, landing on her buttocks. That aggravated her pain. And she noted that since the cold weather started her pain was getting worse.

Q. Is that something based on your experience that you see in patients?

A. Yes. I think that, once again in my experience, being a lifelong resident of Western New York, when it gets cold the patients, they'll tend -- their symptoms will worsen. And I think not only is the cold weather, we start to shiver and clamp down a little bit, go into -- they'll go into a little bit more spasm. You have to wear heavier garments, boots, walk through some snow, slippery surfaces. And so the winter months for many patients, I'd say for most patients, are rather difficult. When they have a condition, whether they have, you know, say somebody has a herniation or after surgery, they'll find that the winter is much more difficult to tolerate than the summer.

Q. What else did you learn on your examination of Denise in November?

A. She had trouble getting to pool therapy because of lack of transportation. She had only gone a few times. And

so we were trying to help her with that. And she had -- I believe she had started back with Dr. Ward because he was closer to her home.

Q. Now, this was five months after the surgery, Doctor, Denise is reporting to you that she's still got a pretty high level of pain. What from a medical standpoint did you -- or would you attribute that to?

A. It could be a number of things. The weather, little aggravation of pain when she had this little episode a few weeks prior, not being able to get into the pool. It could be various things, you know.

Q. Would you expect her at that point to be pain-free?

A. No. No, the best -- as I explained to her, my hope was that surgery was going to make her 50 or 60 percent better. I -- it's very rare to have a patient, at least in my practice, it's very rare to have a patient come back and be pain-free, without symptoms. It happens every now and then, but it's unusual. Most patients have at six months, I would have expected her pain to go from a 8 or 9 down to maybe a 6, somewhere in that area. It takes a good 12 to 18 months for most patients to really, after a fusion, because the fusion has to heal, they have to rehabilitate, the muscles have to strengthen, they got to get their flexibility back and then the fusion has to mature. It's the same thing

as if -- if you had a broken wrist and the doctor put you in a cast, you know, for six weeks or eight weeks and then the doctor takes you out of the cast and say, well, the fracture is knitting, it's healing, but it's not completely healed. It's going to take some time. So the process in which a fusion heals and a broken bone heals is the same biological process. So it takes -- not only does it have to heal, but then it has to kind of mature. And it takes about 18 months for it to really harden and mature and the muscles to recondition.

THE COURT: Would the lawyers come up for a second, figure out what we're going to do.

MR. BARNES: Yes.

(Bench conference. All counsel present.)

(Proceedings continued in open court.)

THE COURT: We'll break for lunch now, ladies and gentlemen. I'm sorry, it's my fault we started late. If you could be back here at quarter to two, I'd appreciate it, and then we'll hear the rest of this doctor's direct and cross-examination. I have another matter on at 1:30, it shouldn't concern you. Let's have lunch now. See you at quarter to two. Thank you very much.

(Court recessed.)

(Proceedings continued as follows. All jurors and counsel present.)

(Plaintiff's Exhibit 30 marked for identification.)

THE COURT: Please be seated. In your absence I had an argument about a planning issue, about whether this house could go forward on a lot. We had the argument, now we're ready to go. Proceed.

MR. BARNES: Thank you, your Honor.

DIRECT EXAMINATION (Continued)

BY MR. BARNES:

Q. Dr. Capicotto, I believe that questioning broke in the morning at the point you were talking about a visit, postsurgical visit in November of '05, is that correct?

A. Yes, sir.

Q. And did you explain to the jury pretty much everything that occurred at that? I think you did.

A. Yes.

Q. All right. Was there a follow-up visit that Denise had with you, Doctor, after that November?

A. Yes. Her next visit was on January 18th, 2006.

Q. And what symptoms did she present with and what

went on during that visit, please?

A. She was feeling a bit better. Dr. Ward had been treating her with chiropractic rehabilitation. That's a lot of stretching, a lot of deep massage, not classical what we think of manipulation type of therapy. It's more of a stretching and deep massage type of routine. She noted that she had pain in the early morning and stiffness which took a few hours for that to subside. If she was active during the day her evenings were difficult and she had more pain the next day. She was getting reasonable relief from the pain medicine. Her examination showed tenderness at L4-L5 and S1. Her flexion was limited to 15, 1-5, 15 degrees. On that day, as I noted, it was nine in the morning, it was damp and rainy, and part of her symptoms were that she was stiff and sore in the morning. Extension was five degrees. She could walk on her tip toes but not her heels. The visit before she couldn't walk on her tip toes or her heels. Straight leg raising was 90 degrees. So she was a bit better than she was two months earlier.

Q. In your opinion was the continued use of pain medication at that point appropriate?

A. Yes.

Q. And was there a follow-up visit to that one, Doctor?

A. Yes.

Q. When would that have been?

A. The next visit was March 14th, 2006.

Q. How was she doing then?

A. Low back pain still 8 out of 10. Pain in the low back, right buttock and right hip. She was taking two Norco, N-O-R-C-O, tablets, like Lortab, Hydrocodone a day. She walked with a stiff, slow and steady gait. She had mild tenderness in her spine at L4-L5 and S1. She could forward bend to 25 degrees. And she could extend five degrees. She was able to walk on her heels and toes, so she was getting stronger as time went on. Straight leg raising was 90 degrees on the right and left. We did x-rays that day. It appeared that the fusion was going on to heal.

Q. And did you consider her to be disabled from her employment at this point?

A. Throughout the entire time I kept her temporarily and totally disabled.

Q. When was the next time that you saw Ms. Keels, Denise?

A. She had a brief visit in my office in May. It was basically for pain medication check. She wasn't having any side effect. It wasn't a real spine examination. And then our next spinal examination was on June 14th, 2006, one year

after surgery. Rated her pain at 8 out of 10. Pain in her low back went to her right groin, the back of her right calf and leg with weakness.

Q. Why would that be, Doctor, based on her condition and your knowledge of that?

A. Usually the side that's more symptomatic -- like a person is symptomatic more on the right side, they tend to -- right side tends to be more symptomatic even after surgery or a little more sensitive.

Q. Okay.

A. Her examination showed flexion of 10 degrees, backward bending of five. She couldn't walk on her tip toes or heels on that date. Straight leg raising was painful on the right side. I had kept her totally disabled. I wanted to get x-rays that day but I wasn't able to so I had her come back the next week. And the x-rays showed that the fusion appeared to be healed.

Q. When you say that the fusion appeared to be healed, what does that mean to us?

A. Well, the bone -- if you recall earlier, I was talking about the bone graft, how I took the bone and cut it into small pieces like Rice Krispies and packed it around the spine. The early x-rays you can see the graininess or the Rice Krispy kind of look to the bone graft. At a year

afterwards as it healed it became just like a sheet of bone, so you can tell it's healed. If there are a lot of black lines in it or grainy appearance, that would mean it's probably not healed.

Q. I see. When is the next time then that you saw Denise?

A. September 7th, 2006. Her pain was waxing and waning. On that day it was 6 out of 10. She was taking the Norco once a day on average. Her gait was slow but steady. She was tender at L5-S1. She could bend 30 degrees and bend backwards five degrees. She could not walk on her heels and toes. Straight leg raising was normal. It was about 90 degrees bilaterally.

Q. Did she during that visit, Doctor, raise the question of wanting to o return to work with you? Do you recall?

A. Well, she talked about it on a continuous basis. She did want to go back to work. I mean, her ultimate goal was to get back to some form of work. And I had to explain to her early on that it was unlikely that she was going to be able to go back to moderate or heavier work, which she had been performing prior to the injury. But this is what she knew and she wanted to get back to. That was her goal.

Q. She's the one that raised that with you?

A. Yes. I mean, that was a constant theme of hers. She did that, she wanted to return to work.

Q. After September of '06 did she come back for a follow-up?

A. Yes. She once again for medication check late November 29th, 2006. She was not having any side effects from the medicine. She rated her pain at 8 out of 10 that day. She was using one or two Norco tablets every eight hours, so up to six tablets a day on a bad day.

Her next actual spine visit was December 12th -- I'm sorry, December 11th, 2006. Her pain was 8 or 9 out of 10. She was starting to have pain in both legs. Her examination showed tenderness at the bottom of her spine, L3-L4, L5 and S1. She could only forward bend ten degrees and backwards zero degrees. She could not walk on her heels or toes. And at that point we arranged to send her for an updated testing for an MRI to see if there was anything else going on in her spine.

Q. Why is it, Doctor, if you had an opinion, that those pains at kind of a high level would persist at this point?

A. Something else is occurring in her spine. Provided the fusion is healed, which it looked like it was healed, the painful area, which was a disc herniation at L5-S1 was

removed and that area was stabilized with a fusion. So pretty certain provided that healed, the pain from that area should be gone. Taking that painful anatomic part out and stabilized it, that pain should be gone. Now, she could having some postoperative pain. The problem that we have in spine surgery that that -- and it's the same as with any areas of orthopedics, if a joint is fused, the joint next to it can go on to have what we call adjacent segment degeneration. In this situation Denise Keels had a fusion at L5-S1. L4-5 and L3-4 have to take up the work that L5-S1 was doing. L4-5 and L3-4 can then go on to rapid degenerative change or arthritic change. It would be similar as if a person had a knee fusion -- or let's say a person had a hip fusion. Back in the '50s and '60s before we had hip replacement, if a person had arthritis they would get a hip fusion. And it worked. It would take their hip pain away. The problem is they would get arthritis in their knee and then their sacroiliac joint, adjacent levels would get arthritic. Same thing happens when you do a spine fusion. The level next to it can go on to arthritic changes or herniation at that level from being over stressed. This is -- this is what happens to a patient with -- one of the problems we have with patients that have spinal fusions, the level next to it can blow out, so to speak.

Q. Now, following this visit did she come back to you again, Doctor, for follow-up?

A. Actually I saw her about six weeks later on January 23rd of 2007. Her pain was 7 out of 10. I'd say her examination was pretty much the same. She could only bend forward ten degrees, bend backwards zero degrees. She could not walk on her heels and toes. X-rays showed that L4 was shifting backwards on L5. So they weren't lined up nice in a row, like nice ducks in a row. It was falling backwards on L5. She had not had the MRI at that point. And we scheduled her MRI.

Q. Was an MRI done?

A. Yes, it was done eventually. Yeah, on February 19th, 2007.

MR. GOMEZ: Your Honor, could we approach on this?

THE COURT: Yes.

(Bench conference. Mr. Barnes and Mr. Gomez present.)

(Proceedings continued in open court.)

BY MR. BARNES:

Q. Doctor, let me ask you this: Ms. Keels has been your patient since that first visit since September of '04?

A. Yes.

Q. She remains your patient?

A. Yes.

Q. In conjunction with your treatment of her did you participate in the preparation of a document referred to as a life care plan?

A. Yes. Yes, with Mr. Winship.

Q. And Mr. Winship is who?

A. Mr. Winship is a rehabilitation coordinator and he does assessments on patients that have medical problems to note what their abilities and disabilities are and to help with future planning of their care.

Q. And what do you understand a life care plan to be in conjunction with that?

A. Well, in my experience with situations such as Ms. Keels', it's been that what happens next with this person. A patient of mine has been injured, they may or may not have had a surgical procedure. Defining their injury, defining the state that they're in now and then trying to project their medical care and their ability to work and if they're going to need future surgery or future testing or rehabilitation, kind of a blueprint so we have an idea of what a patient can expect from their life. That's been my experience with this.

MR. BARNES: Judge, may I approach the