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1

THE COURT OF COMMON PLEAS

WASHINGTON COUNTY, OHIO

MARILYN F. DODD, Plaintiff, CIVIL ACTION NO. 03-PT-24

VERSUS

ABDI SEYED GHODSI, M.D. and MARIETTA MEMORIAL HOSPITAL, Defendants

Deposition of DR. FRASER LANDRENEAU, 7777 Hennessy Boulevard, Suite 10000, Baton Rouge, Louisiana 70808, taken in the offices of Pilant Court Reporting, 8146 One Calais, Suite 108, Baton Rouge, Louisiana on Tuesday, the 6th day of April, 2004 commencing at 6:05 p.m.

APPEARANCES:

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REPORTED BY:
BETTY GLISSMAN
CERTIFIED COURT REPORTER

2

EXAMINATION INDEX

PAGE

MS. CLOUSE..... 3

EXHIBIT INDEX

Exhibit #1..... 0
Curriculum Vitae

Exhibit #2..... 8
Dr. Landreneau's Report dated December 7, 2003

Exhibit #3..... 60
Sketch drawn by Dr. Landreneau

3

DR. FRASER LANDRENEAU,
after being first duly sworn by the above-mentioned court reporter, did testify as follows:

EXAMINATION BY MS. CLOUSE:

Q. Dr. Landreneau, my name is Karen Clouse and I represent Dr. Ghodsi in a lawsuit that's been filed by Marilyn Dodd. I understand that you have been retained as an expert on her behalf to express opinions about the care that Dr. Ghodsi provided. So I am here tonight to find out what those opinions are. If I ask you anything at any time that isn't clear to you, please let me know and I will rephrase the question, okay?

A. Okay.

Q. And if you would please remember to answer verbally and try to refrain from saying things like uh-huh and hu-huh because those don't translate very well onto paper and it is sometimes hard later on to understand what it was that you were trying to convey and things like that. We will get to the exhibits in a minute. Have you had

4

your deposition taken before?

A. Yes.

Q. Can you give me an idea about how many occasions?

A. Probably 30 times.

Q. In what connection have you given a deposition?

A. Mainly as a treating physician in cases of accidents or work related injuries, things like that.

Q. Have you served as a retained expert in the past such as what we are doing here tonight?

A. Not in a deposition.

Q. Have there been other cases where you have been asked to review records as a potential expert?

A. Yes.

Q. On how many occasions, approximately, have you done that?

A. Probably about five.

(Recess taken.)

BY MS. CLOUSE:

Q. On any of those five other occasions where you reviewed records, have

you agreed to do anything further as an expert witness?

A. I have on one.

Q. And the case just hasn't progressed that far yet; is that right?

A. Right.

Q. In those five other cases where you have reviewed records, were the attorneys who contacted you representing the plaintiff, the defendant physician or was it some mixture of the two?

A. A mixture.

Q. Can you give me an idea of what the mixture was?

A. Three and two. Three in plaintiff, two defense.

Q. The one other case where you agreed to go further, is that a plaintiff case or a defense case?

A. A defense case.

Q. So I take it the three plaintiffs' cases, am I correct that when you looked at those cases you did not believe there was any malpractice involved in those cases?

A. That's right.

Q. And in the one other defense case that you looked at you did not believe that you could defend the physician's care; is that right?

A. No. It just didn't progress and so I don't know what's happening.

Q. Have you reviewed any other cases for Ms. Tresl or her firm?

A. I have.

Q. How many?

A. Two.

Q. And that is two of the other three plaintiffs' cases that you mentioned?

A. Right.

Q. Do you know how it is that that she or her firm came to contact you here in Baton Rouge?

A. I am not altogether sure. I have a partner by the name of Dr. Flynn who does independent exams and I can only assume that he had a full plate and said, you know, see if Landreneau wants to do this.

Q. Do you know that Dr. Flynn has reviewed cases for her firm or is that just a supposition on your part?

A. That's just a supposition.

Q. There are various services that assist attorneys in finding experts, are you in any way listed or affiliated with any of those services?

A. No.

Q. I take it since you told me that the one defense case where you have agreed to be further involved has not progressed further than just your review, that none of the depositions that you have given have been in a context such as we are doing here tonight where you are giving a deposition as an independently retained expert witness where all that you have done is reviewed records and have not been involved in a person's care; is that correct?

A. That's correct.

Q. And obviously then you never testified at trail as an expert witness where you have not been involved in a patient's care; is that correct?

A. Well once there was a case in residency of a battered woman and somehow I got called to try and establish how close to death or what was her extent of injuries and so that was in the courtroom. And that was it.

Q. But that's the only time that you have ever testified in a courtroom?

A. That's right.

Q. Was that a patient that you had actually treated prior to her death?

A. That's right. She didn't die, we saved her.

Q. We have marked as Exhibit #2 a report that I understand that you authored; is that correct?

A. Right.

Q. Dated December 7, 2003?

A. Right.

Q. Is that the only report that you have written in this case concerning your review of the materials?

A. Right.

Q. And I take it that you wrote that report as opposed to Ms. Tresl writing it and then signing off on it; is that right?

A. Right.

Q. In that report you identify a

9

series of four numbered items that you have reviewed in connection with this case. Have you since reviewed any additional materials concerning the case?

A. Everything that I reviewed I have brought today. But whether or not, you know, the depositions here, I am happy to give those to you but, no, I don't recall anything new.

Q. In the course of doing your review, did you make any notes either on the records in deposition or on some sort of legal pad?

A. Sure.

Q. Or anything else?

A. I had some outline like some, I regret to say that it was in pink so there was no connotation there. But for some reason I used pink but I did write, what I am handing to you now is a Volume 2 of expert's copy, I don't think that -- most of that was things that I didn't write on. But there were different things that I circled or that I tried to, you know, to remember and you can see that they are here and just, you know, stars and I remember this. Just to narrow

10

down things but I did write some but unfortunately it is in pink, here you go. I don't think that there is anything else.

Q. Aside from the notes that you made on the records, did you make any other notes?

A. No.

Q. And I see that you did receive a copy of the report of my expert Dr. Miely?

A. Right. That may have been a draft or a rough draft of this letter.

Q. Just so when we read the deposition and know what that is referring to, you are referring to the various notes that you made on the discharge summary?

A. It just happened to be on a discharge summary, I felt that was a good review.

Q. In looking at your report you identify reviewing the x-rays from January of 2002 through May of 2003. I take it that you did not review any of the preop studies that had been done at the time of her initial injuries; is that correct?

A. Just to clarify, I brought all of the x-rays that I looked at as well, you got

11

them.

Q. In formulating your opinions, did you review any medical literature?

A. Not in a specific manner at all really. I try to keep current and usually if I am going to do a certain case, I would beef up on that. But I think as someone who is reviewing something, I try to kind of keep myself as average, you know, maybe who I am not really what I am going to be for this case.

Q. What journals do you try to keep up with on a regular basis?

A. The medical journal are the Journal of Neurosurgery, Spine, Neurosurgery, Red Journal, New England Journal of Medicine, Epilepsy, and North American Spine Society Bulletin, the Neurological Institute Journal, but I am not really religious on all of them. You know, I try to see what is mainly going to make an impact in my practice.

Q. What text do you keep in your office?

A. I have a Wilkinson William Cherry, and one by Berger in neurosurgery, I have --

12

my partner has a Yoman's that I reference. I have a Greenberg, a couple of anatomy textbooks. And then I have a really cool Franklin Mint library of just kind of old medical historical books that was from my dad. I haven't read as many as I should have. That's about it.

Q. Are the texts that you named ones that you refer to from time-to-time if you have a question about a particular procedure or issue that's going on with a patient?

A. Well I have textbooks and then I have like walking books, I have a couple of partners that have been in the business for 25 years so I am one of eight so we kind of bounce ideas off and the books. And I have a library which has, I would hesitate to guess how many textbooks are in there.

Q. Tell me a little bit about your experience in performing vertebroplasty, how many of them have you performed in the course of your career?

A. Well vertebroplasty singularly, probably 20. Now I do a cousin operation which is kyphon, I have done several of

13

those.
Q. Now is kyphon something different than kyphoplasty?
A. Right. Kyphoplasty, I meant the same thing. I have done several of those not vertebroplasty but sometime I am not able to do certain techniques that are defined in that procedure and I result in doing vertebroplasty. And in my review of my cases I think probably about 20 have been a vertebroplasty.
Q. Are those 20 cases that you have done since being in private practice or does that include cases in residency?
A. Private practice.
Q. Is vertebroplasty something that you were trained to do in residency?
A. No. We were doing it but I had not done any. I guess that I was taught in it but I hadn't laid my hands on it.
Q. When you got out into practice then did you take some additional seminar type courses in it?
A. Right, I sure did.
Q. Is that a procedure then where you

14

went through some sort of proctorship or how did you go about starting to do it in practice once you had gone through your seminar courses?
A. I adapted current surgeries that I was doing in a way to become familiar with the approach and evolved into doing it. It took about three months of this process.
Q. What sort of procedures would you adapt to make yourself familiar with vertebroplasty?
A. Fusions, percutaneous instrumentation. The use of the C-arm, the nuances of how do you really use a C-arm in a way to see osteo product, bone. Maybe taking that extra time in an average case with the C-arm to visualize something for the second case. I think that one of the guys that taught me would always say, you know, what could we learn from this case and try to make it, medicine is a constant science.
Q. And you said that you also done the kyphoplasty procedure and sometime do kyphoplasty along with vertebroplasty?
A. Right.

15

Q. About how many kyphoplasties have you done?
A. Probably about 70. Now when you that take them altogether, you know, I am about 95, you know, because they are so related, you know, that it is about 95.
Q. At the present time, do you still do both procedures?
A. Yes.
Q. Do you favor one procedure over the other at this point?
A. I do both procedures. I have recommended certain cases for vertebroplasty in very unique situations. For instance, my anesthetic would be general and so I haven't had any interest in doing an awake procedure. And if someone has a lung problem, I may prefer vertebroplasty to another colleague. But I would do either depending on certain findings at surgery.
Q. Do you wait then until the time of surgery to decide which of the two procedures that you are going to perform?
A. Yes.
Q. So it I take it then you consent

16

the patient or discuss both of the procedures with the patient and tell them your intraoperative findings will dictate what you do?
A. Exactly, exactly.
Q. What sort of things do you do look for intraoperatively in deciding which procedure is the better procedure for the patient?
A. Will the balloon fill, will the bone expand, that is the main question.
Q. And as I understand it, with the kyphoplasty the balloon is inserted into the bone?
A. Right.
Q. And expanded in order to create the space?
A. Right.
Q. And then the balloon itself is removed?
A. Right. It is kind of like you break your arm and you try to set it and then fixate it.
Q. In the 95 percent or so vertebroplasty and kyphoplasty procedures

17

that you have performed, have you ever had a cement leak?
A. Yes.
Q. How often have you had that occur?
A. It is good that I am approaching 100 because I can look and answer it. About seven out of those.
Q. Have any of those cement leaks gone into the spinal canal?
A. None. That is the sacred part of the procedure. You know, it is kind of like if I were doing brain surgery, you know, there are certain things that you don't want to touch. You don't want to touch the hypothalamus, you don't want to cut the spinal cord, you don't want to cut the optic nerve, it makes you want to vomit. You know, you don't want to put any type of visible thing, at least, anything that's going to be in the spinal canal.
Q. The cement leaks that you did have occur, where did the cement leak to?
A. Either anterior or laterally or cephalad and that is actually, I think probably a benefit. I mean, I am not really

18

sure if you can count that as an extravasation, you know, along a fracture line or anything like that. It is, but it is actually beneficiary.
Q. How is it beneficial?
A. You regain height which is the purpose of this whole deal. You see the ladies have, you know, they are shorter and they get shorter and shorter until their rib cage lands on their iliac crest.
Q. Is it possible to have neurologic deficits from a cement leak even without the cement going inside the dura?
A. Yes. Let me answer that again. Is it possible to have deficit without cement going in the dura?
Q. Yes.
A. Yes.
Q. How does that occur?
A. I don't know. I mean, I imagine it could happen several different ways but I am not really sure which one that you are talking about. But it is possible, I imagine.
Q. Is there some sort of compression

19

that can occur on the nerve root?
A. Sure.
Q. Or the spinal canal?
A. Yes.
Q. Even without it being inside?
A. Yes.
Q. The dura is what I am asking?
A. Yes. And that is a -- that's a possibility. And the definition of compression from ages historically in spinal surgery is, you know, that's obviously a big thing is the problem in the spinal cord that it has a certain subset of problems. Is the problem outside of the dura; is the problem inside of the dura, those three, yes, there are classifications of pathology in those three compartments and a mixture of each.
Q. Have any of your cement leaks ever caused any neurologic deficit?
A. Never.
Q. The cement leaks in those seven patients that you had, did you recognize intraoperatively that the cement was leaking?
A. Yes.
Q. What steps did you take when you

20

recognized that cement was leaking?
A. #1, I saw it. #1, I completely manipulate the machine to identify early on, you know, kind of this you can fool me once, shame on me; you fool me twice, shame on me. I mean, constant visualization in a dynamic process while I put the cement is ever dictating how much I am going to put in, at what pressure, and when to stop. The question that you didn't ask me is how many did I abort, I mean, I have not done -- I have left. My complications, I can tell you all of my complications in my cases. As I said, I have reviewed them and not for this case but because, you know, just as you reach into that 100 you kind of go, how many am I doing? My complications, what I tell someone when I go through an informed consent is that, you know, I had one death, I had a lady have a heart attack; and I have had about three or four or five where I just didn't do it. I said it is too risky, I stop, didn't put the cement, put them in a brace and fought another day. But my complications as I would tell someone when I

21

do this, is that you know that I had one lady -- because they are elderly people, I had one lady have a heart attack and she died. And then I have had about four or five times where I just stopped and just said, you know, it is too risky, I can do this a different way or we cannot do it but I am not going to put this where I am not in control of the situation.

Q. In the cases where you have had cement leak, what was the route or the mechanism by which the cement leaked out?

A. I have no idea. I just knew that it did and, you know, and kind of put the brakes on.

Q. I have heard different theories is the reason that I ask, porous nature of the bones and epidural vein.

A. Well whoever you heard it from, they need to cut that bone opened and tell you the right answer because I don't know. You can ask the pathologist but I don't know.

Q. When you are performing a vertebroplasty, have you had occasion where you are not happy initially with where you

22

have inserted the vertebroplasty needle and you feel like you need to adjust or reposition that needle?

A. Yes.

Q. How often does that occur that it just doesn't look like it is in the right position initially?

A. Well, you know, that fluctuates the learning curve. And the way that I was taught to do this was that you go slow, check to make sure that your approach is visualized in several different planes. And in doing that you can minimize, you know, a trajectory that is less than optimal. The main key is to be, I think, deliberate and cautious.

Q. You said something about visualize it in several planes.

A. Right. It is kind of like parking a car. Especially if you have to reverse into a slot where there is paint and, you know, when you drive somewhere and maybe not where there is cars on either side but paint on the ground. And you park in there, you are going to do this the next week and you are going to go, okay. I am going to park

23

this car here and you are looking here, you look this way and you are making sure that, you know, if you are not quite sure, you are going to slow down and then you may, hell, you may open the door and say, look, I am on the paint. That kind of thing. I think that, you know, my wife really has a challenge going in reverse and we have gone over this. And she will laugh about it. But if you take your time and I think reversing a car really tells you, you are not going to mess up if you just got the wheel and if you don't slam on the gas or the brake. If you don't slam on the gas, how could you mess up, okay, baby steps, baby movements. I don't know. I guess that's how to explain it.

Q. So you are talking about with the C-arm fluoroscopy actually having the C-arm manipulated in the AP to the lateral view?

A. Yes. Guidelines to do this procedure, you have to have fluoroscopic view. And you have to be confident in it. If you don't, you are to abort.

Q. If I understood you, though, even with taking the time and the care, there are

24

occasions where the placement isn't what you want it to be and you need to reposition that needle, correct?

A. Correct.

Q. And when that happens, is it sometimes a matter of just pulling the needle back partway and repositioning it?

A. It would depend on this, you know, theoretical deal would have to depend on, you know, different aspects of the that anatomy. But the cement delivery is at the end of the needle. That's it. It goes not out the side or out the top, it goes through that bottom of the needle. So I guess what I am trying to say is you can put that shaft through the bony channel to the bone, outside the bony channel to the bone as long as you get that, you know, as long as you can get -- if I have a gun and put the side of it. But I can put the side of this like this, you know, pointing my finger away from Ms. Tresl and shoot all that I want, I am never going to shoot her, you follow me. You have to put, you know, the working end of the gun to shoot that gun, to hurt somebody. To have a bad

25

problem, you have got to put that working end, that is where the bullet comes out. There are techniques to gaining acces into the vertebral body. And when you go and you are trying to do vertebroplasty and kyphoplasty, you are supposed to do at different elements and different spinal segments. Anyway I hope that helps. And yet you can change all you want but as long as you haven't destroyed something in your changing and then maybe that's not going to hold the tube anyway, you know. But it is like a gun, the working channel is what can hurt you, the end.

Q. If you have to pull the needle back out the first time and reposition it, I know that you are talking in your report about your opinion that Dr. Ghodsi should have left this first needle in place, is it also necessary to leave that first needle in to avoid the creation of a tract where cement can leak out?

A. It depends. I mean, if you are talking about, you know, was that first try through the spinal canal, I would have

26

stopped the case. If you are talking, you know, if he had a decent tract but, you know, it just didn't for some reason didn't like it and it was uncomfortable and maybe wanted to put it in a different way, then if it didn't hold, I would have aborted the case. If the tract was less than ideal, you can leave everything in place the first time and go in from the opposite side and still put a bunch of cement in and have an excellent outcome. And you have kind of blocked that area where you were worried about. You know, you have got two chances to get this cement in this thing. You don't like one, stop, put it in the other side and just get that. And don't try to, you know, if you think oh, you know, I have gone out there, I have gone through in here and I am now in here, okay, just leave that one and maybe just kind of work through the one that you are comfortable with. For instance, there are times when I only go on one side. There are times when, you know, I told you that I aborted this many times but there are times when you can only safely gain access on one side meaning for visualization

27

or things that you are talking about. So they get the same surgery but I just kind of give the procedure through one side. And that is swell, that's how you are taught. So yes, you know, in my discussion of this, I felt like those are break points, those three that I discussed just on the needle placement.

Q. So if I am understanding you correctly, it is not a matter of leaving, and I believe this is on the right side of the L2 vertebra, it is not a matter of leaving needle #1 in on the right side, it is trying to put a second needle in the right side of that?

A. Just go on the left side, yes, why not.

Q. From your review of Mrs. Dodd's records, did you agree that she appeared to be a candidate for vertebroplasty to treat the kyphosis and pain that she had?

A. Yes, ma'am.

Q. And you talked earlier about elderly women with osteoporosis and how the vertebral bodies continue to collapse, is

28

that something that you believe Mrs. Dodd would have continued to have experienced without surgical treatment that her kyphosis would have continued to progress or that was something that she was perspectively facing in the Fall of 2001?

A. I think that in 2001, she had a risk. Does that mean that it is without a doubt that that's going to happen to her, no. I have had people walk out of the office and just say, do you know what, I don't hurt enough for it. And I discuss with them bracing which is used to be the standard of care for this and medical therapy, and I am at peace with those people.

Q. Are there circumstances in which a cement leak during vertebroplasty occurs without negligence on the part of the operating surgeon?

A. Where does it leak?

Q. Does that make a difference in whether or not there is negligence in the occurrence of the leak?

A. Yes.

Q. If it leaks inside the dura, can it

29

ever occur without negligence on the part of the operating surgeon?
A. Not to my knowledge. I think that you have cement in the dura, I would lose sleep, I would just be -- I would break into a cold sweat, I would freak out and I think that that is because, you know, from day one in the training, you know, it is like the holiest of holiest of all of this. I mean, there are a lot of people who both in medicine and actually in law where they had these pedicle screw cases, you may have been familiar on "60 Minutes" and what have you. Man, let me tell you, you put one screw in the dura, what do you think, you answer that. This is similar. It is unfortunate, this is such a perfect picture but it shouldn't be in the dura.
Q. I understand that you would lose sleep over it and feel badly for a patient if that complication were to occur, but my question is whether there are circumstances in which the reasonably prudent neurosurgeon performing the surgery and taking all of the appropriate steps and precautions that that

30

reasonably prudent neurosurgeon should take in performing the surgery could nonetheless have that complication occur and have a cement leak into the dura?
A. Not to my knowledge. Not that I have read or have been taught or I have never seen that in a casual discussion of, you know, that is bad luck or, you know, the medical evidence was unknown that there was some connection between the CSF space and the bony space of the bone, no.
Q. I want to go back to something that you said a minute ago when we were talking about needle placement. You talked about repositioning the needle and said if the needle went through the dura you needed to leave that needle in place in order to plug up that channel?
A. Yes.
Q. How is it that you know that the needle has gone through the dura?
A. You feel it. You will see it on x-ray. You will have the CSF come up the tube. You will feel the breach. I think that in medicine it is a very common

31

procedure, it is called a lumbar puncture, you know. But if you are doing a vertebroplasty and it feels like you have done a lumbar puncture, you should take that to heart.
Q. And I think that you said also something that you think should be visible on the fluoroscopy?
A. Yes, ma'am. Your medial pedicle wall is toast, it is the only way that it could happen. Or you even just put it in, you didn't see the pedicle, you just put it right through the dura or a nightmare, I mean, no.
Q. When you say your medial pedicle wall?
A. Right, it is a landmark. You don't want to breach that bone. That's your no man's land, you don't go there, you don't cross it. That's how you avoid this.
Q. So what may have happened and obviously you don't know but the needle may have gone through the pedicle wall and breached the dura in that way?
A. I don't know.

32

Q. But that was the one suggestion that you were postulating there? I am just trying to make sure what you were saying.
A. I have no idea. But I know how to avoid it, I don't go medial, ever, nothing, the medial wall of the pedicle. Not in putting in a screw, not in putting anything through extra or transmitted through a route which is how these procedures are done. You stop before you get to the medial and it is just an AP lateral film. You see something medial, this is medial, stop before you get there, you have plenty of time to just reroute. I mean, it is a matter of taking the pen and doing this. I am showing how I am changing the angle of how the pen interfaces with the page.
Q. I asked you a minute ago about whether a cement leak could occur without negligence on the part of the operating surgeon and you indicated it could if the cement went into the dura. If the cement leak is not into the dura, can that occur without negligence on the part of the operating surgeon?

33

A. It can. However, your question can be better qualified as to where the leak occurs. I think that can there be canal leaks, can there be extra vertebral body leaks that are negligence. As I said, I had seven and they were outside away from the canal. Can those hurt something, yes, you can die from a pulmonary embolism, you can stab the artery, you can have a punctured lung, you can have a punctured intestinal viscus, all of those can happen. You know, it doesn't mean that just in the canal there is a complication. I think in this example there is cement everywhere, there was cement on the canal here, there is cement in front of the vertebral body there. There is more cement out of the bone than there is in it. I mean, that's this particular case. I mean, yes, you can have, I think, negligence if cement is unfortunately placed maybe not in the canal vertebrally and a complication results, yes, that can be a problem too. Now there are tricks to avoid all of these things, you know, stop, wait, make sure that your cement is not maybe as liquid as, you

34

know, the consistency of the cement is important. You have control of these things. You are taught how to use it in a manner that oh, you see it going out, well you have only put it in a real kind of play-do consistency anyway so it is not going to go very far if you do this the right way. The fact that you get this star burst octopus type, when you get those where if you don't hit it anywhere, your cement is way too liquid and there is no control. And that is what I think that we are dealing with here. And that is a common thing, you know, when liquid is uncontrollable why does it go everywhere, well you know, it hits everything. You know, if you put peanut butter in a hole versus milk, which one is going to run further, I mean, my little kid, five years old can tell you this, you know.

Q. And as you look at the films that you looked at in this case, is there something that you see about the distribution of the cement that suggests to you that the consistency was --

A. I have no idea. I just think it

35

looks, it looks unsafe to me. I think that is an excellent question, someone can ask Dr. Ghodsi, you know, tell me how thick, was it running, you tell me.

Q. You indicated in your report that the tubes delivering the cement routinely hold 1.55 cc's and that there was four times that amount delivered into the canal.

A. Right. I should clarify that in my practice they are delivered in 1.5 cc channels. And that is commonplace, that's how it's always been.

Q. That is like a premixed syringe that you use?

A. Yes, ma'am. And so whether or not in this particular instance those guidelines were followed, I don't know. But you know that there is only -- you got one cc really to put somewhere that potentially could be dangerous. You can stop then but, you know, I think that the radiology report says what, 6 cc's outside of the vertebral canal. I mean, it seems like there were four or five break points. I was just reading the CT report. I can tell you when I look at it, it

36

looks like it is over 1 cc. But somewhere between 4 and 6 or definitely in my practice it would be -- I would have had to have removed a delivery system once, twice, three times and be looking at the x-ray continually through this process and had at any point an opportunity to say, hey, do you know what, I don't like this. I was just reading the radiologist report.

Q. As you look at the films, did you have any way of trying to estimate yourself?

A. It looked like a lot. And that is kind of Baton Rouge answer but, you know, tres beaucoup.

(Recess taken.)

BY MS. CLOUSE:

Q. Okay. We were talking about this 6 cc's and that's based on your review of the records, that is not your actual estimate in the films?

A. Yes, ma'am.

Q. Are you aware of any medical literature concerning the amount of cement that should be injected into an individual vertebral body?

37

A. No.
Q. Is that something that's just based on your clinical judgment as you are working intraoperatively?
A. You have a pressure, a volume, and a radiographic criteria that I use, yes.
Q. Are those criteria that you can explain or that it is just sort of a matter of feel?
A. I can explain some of it.
Q. If you would.
A. Well, I mean, there are only a certain amount of volume of the space that you are trying to fill so you try to not overdue that volume. There is a certain pressure that you can gauge as you put this in as to when you can retain or maybe it is too much pressure for that element of bone. And then finally there is certain visual formation of what you think an ideal piece of bone should look like in this area and you try to make that your final radiographic outcome.
Q. When you talk about the pressure, is that a matter of feel as you are injecting

38

it or is there some sort of gauge that you use?
A. Both, both.
Q. When we talk about a gauge, is there some maximum pressure that you don't want to go beyond injecting?
A. Well I don't want to get too much into kyphon versus vertebroplasty. But most of the pressures that you can gauge that I am aware of are in kyphon so I am not real sure if that is going to add or subtract to the actual quality of what this case is about. But, I mean, if you are asking me how I do kyphon, I will be happy to go forward.
Q. Well if it doesn't really translate well into vertebroplasty.
A. Well I don't know. When I do vertebroplasty, I do it through the kyphon tube and all of that stuff. I don't routinely find in the vertebroplasty literature that there is a pressure gauge, I don't know, for instance, if there is. So I hate to say something that I am not sure about.
Q. I noticed that on your CV, I think,

39

Kyphon Inflatable Bone Tamp Technology Course, is that a technique that you learned at that course or is that something that you have adapted in your own practice of using the same tube?
A. That's, I think, the training course to do kyphon.
Q. Just so I understand then what it is that you do, why don't you tell me about the pressure gauge and what you look at it when you do it?
A. It is a balloon and at the point where you decide that you are going to reduce the fracture, you insert a balloon, it has a radiopaque material in it. So you go down the straw, put the balloon in the bone and you take x-rays front and back, side to side. And you place the balloon, it is not inflated, it is guided on a wire and it has a handle. And then you inflate looking at a pressure and volume gauge and an x-ray. If you are lucky, the bone expand and then you deflate the balloon, makes your cement -- wait for the cement to be ripe and then put it in. And you take more x-rays and you do

40

the process again until you are done sculpting.
Q. Now you said that you use that same tube for your vertebroplasty procedures?
A. Exactly. Say, for instance, that the balloon did not inflate well, then I go straight to the cement and put the cement in and that is vertebroplasty.
Q. How does the pressure gauge help you with the vertebroplasty if you haven't used the balloon?
A. If the balloon does not inflate, the pressure will be very high. Obviously it will tell you, you are not -- this is the pressure inside the balloon but you look on the x-ray and it is not inflating.
Q. Does that then tell you anything about the pressure that you are going to get when you are injecting the cement into the bone?
A. Sort of, yes. You still can have a very nice vertebroplasty from it. But it is vertebroplasty commonly done without pressure, I think so. Without pressure monitor, yes. It is one of the reasons why,

41

you know, perhaps there may be another safety in using a particular monitor. And one of the reasons why I look both at vertebroplasty and kyphon and felt that I was more of a surgeon with kyphon.

Q. I take it, though, that you are not critical of the decision in this case to do vertebroplasty rather than kyphoplasty?

A. Not at all. As I said before, I have referred people to have vertebroplasty, I have done vertebroplasty.

Q. I don't know if you recall the questioning but Dr. Ghodsi was asked a couple of questions in his deposition about prophylactic fenestration, is that something that is at all an issue in your mind in this case that should have been done in this case?

A. Not really.

Q. He was also asked questions about the type of fluoroscopy equipment that was available to him in the OR and the fact that it was single plain fluoroscopy that had to be moved from one direction.

A. That is exactly like mine. Although, you know, having looked at some of

42

the depositions in that discourse, I think that perhaps the familiarity with the C-arm, the C-arm tech experience, you know, maybe the -- it sounds like the team, the nurses who were involved in the OR, it sounds like the team really was kind of sounds like in an away game, you know, just it was not -- I mean, they left Ghodsi high and dry. And everybody was like, you know, I don't know nothing about nothing, you know. And so the poor fellow, you know, unfortunately he is the doctor involved in this case. And it sounded much like if I were maybe going to an away hospital that was maybe there wasn't good, you know. I can tell you having run into this in my hospital, if there is an equipment problem, you know, if I have to do the operation in a closet with a flashlight, it still has a name on it and maybe I should have sterilized the closet. Because, you know, that's your responsibility to go into the case knowing what you are using, who you are working with. You are the conductor of an orchestra and there is no dress rehearsal so you have to do it right.

43

Q. Postoperatively then Mrs. Dodd wakes up and she has a right foot drop which, as you may recall from Dr. Ghodsi's deposition, as he walks through the differential, he thinks maybe due to a nerve having been hit with a needle. First of all, is that something that can reasonably be within the differential diagnosis after a vertebroplasty?

A. I think that question, I am going to answer it but I think that that's kind of leading. I mean, obviously Mrs. Dodd deserves, you know, to be stated that she has a little bit more than a foot drop, wouldn't you think? I mean, you know, maybe that -- so in your answer did, A, I would call this more a cauda equina syndrome. And so is it either a misdiagnosis of a cauda equina syndrome or did she get the bowel and bladder deficits, which she has now where she has to give herself a catheter every day, twice a day, did that just happen months later or was that immediately after the surgery. I mean, so it is not just -- so to answer your question, in a hypothetical sense, can a

44

needle cause a nerve injury. Well all different kind of things can, that's why in my, you know, later here I state, you know, yes, it could be anything. It could be -- it could have been a seizure but what I think is important is that I know that there no x-ray or CAT scan taken to try to figure out would the hell that it is. And there is a -- and I think more than just, you know, in my opinion that would say that in any neurosurgical case if you have somebody are waking up with a new neurological deficit, you know, the shoe doesn't fit. You need to, I think that you have a new diagnosis. You waking up with a new diagnosis. Well okay, it could be a herniated disc, could it be an epidural hematoma, could it be a -- and none of this is going to show unless you start looking. Yes, you can write it off as whatever you want to say that you think that it is, but unless you do a diagnostic workup, I don't know. And I know that you probably got more than you wanted out of that question. But I think in all fairness, I think that it would be, I just kind of feel,

45

you know, like we need to call a spade a spade, it is not just a foot drop.

Q. You go on in your report to indicate that emergent decompression surgery could have been performed and an immediate CAT scan had been done and the cement seen in the spinal canal.

A. Right. Is that a question or do you want to wait?

Q. Yes, just a second. If the surgery had been done on the 25th.

A. Go ahead, I am listening.

Q. What do you envision or what is your opinion as to what that surgery should have entailed?

A. I think that there is -- I never took care of Mrs. Dodd, I'm not going to pretend like I did. But I will state that just because certain data is not available to be able to say just how bad it is, just how bad this compressive element is, does not mean that that's okay. Having stated that so that we understand that, you know, there is no investigation of the new deficit, I will move on. Once you accept that that is not

46

normal, not how things are handled today, that the timing of this, it is a big question and I doubt you will find anyone who will partake in the study as to when cement mixing with CSF is firm. And is it soft, you know, we are never going to know in this case but doggone, it really just kind of makes you wonder, golly, what if it was soft, what if we would have got that out, you know. Then there is a shape that I think is critical and it can be drawn if you draw a circle and put dots in it and the dots are the nerves and they are inside the circle of we will say a cement coffin and they are never going to be free. They are like, you know, forever ensconced in the cement. Obviously nothing can be done about that. However, what if it is a snowflake and there is a nerve outside of this, there may be one or two in the snowflake but there is like a nerve that is kind of almost impinged on the nerve and what if it is soft, I don't know. But that's just my idea. I think that just like as we studied the universe, you know, we can say there is some in this galaxy but there are

47

some stars in this galaxy and there are some stars not in this galaxy. But what I am trying to say is, if the cement is the shape of a snowflake, which I doubt seriously that it is a perfect ball, then in that theory maybe one of these nerves on the outlier and then I would beg the question, how much does the cost for one nerve, you know, what would you put on if that nerve controlled your bladder, what would you put if that nerve right there made you able to lift your foot and then all that you had to do was just, okay, maybe get away from that, get the nerve away and then just take off that much cement, I don't know. But I do know having been in, you know, I have had plenty of problems as a surgeon and I do know that it does in the opinion of the guys who taught me how to operate, it does help the doctor/patient relationship when you go down fighting. And you say, you know what, you have got some cement in there, and it shouldn't be in there but I am going to go and look if there is something that we can sort out. Or, do you know what, you can get a new deficit, good

48

God, let's go see what this is all about, you know. I think that there is break points and then there are some point of potential rerouting of this case that we are not going to be able to answer it. But just because we can't answer it, #1, the timing is the cement automatically hard when it mixes with CSF, and then is it a snowflake with nerves on the periphery or is it all just one big cement coffin, I don't know. It sounds like it could have been a cement coffin, I didn't look at this. But obviously if given enough time, you know, you are going to, it is going to be modeled by the CSF, anyway.

Q. As I understand the nature of this cement, normally it hardens very quickly, correct?

A. Not so. It depends on the mixture. There are times when I wait forever for this stuff to set right. And I may have something else to go do, I may have, you know. And I am just waiting for this cement to set right. And there are times when it takes longer even dependent on what antibiotic you put in the mixture.

49

Q. Once you have it at the consistency though where you are going to inject it, you expect that it is going to harden quickly?

A. That's a great question. But it opens up, this cement went everywhere, there is all intents and purposes thinking this stuff was milk as far as I know. So I don't know that answer. Potentially two wrongs can make a right. If you put it in as milk, it went where you don't want it to, you have got time. As I was reading this, I was doing what would I have done, would I have just right then and there grabbed a scalpel and go down as soon as I saw that it was in there I don't know, I would have been driven to, you know, if it was, if I knew that it was liquid at the time but, you know, I am not going to say that that's what I would have done. But I am unsure, I think that you either -- I think that the consistency is a definite question and if it was hard then it shouldn't move much. I will put it that way, it shouldn't move much.

Q. And these questions that you have asked about the consistency of the cement and

50

whether its contact with the CSF changes how quickly it would harden and whether the cement was a ball or a more of snowflake shape, these are all questions that you have in your mind, these are not things that you are able to express to a reasonable degree of medical certainly; is that correct?

A. I am certain that I understand how the cement reacts when it hits objects. I am certain that the -- nothing with acrylate when placed in liquid will react differently than methylmethacrylate when placed in bone. Meaning the shape it will take will be dependent on fluid dynamics not on a housing. And I don't know much else about physical properties, I am not trying to pretend to be something that I am not. But I do have some common basic, you know, my little kid kind of knowledge of what snowflakes look like and what balls look like. And I think since the question that we are dealing with is timing of surgery, the answer is you either have to -- are you doing the surgery to try to sort out if it is a snowflake or if it is a ball, then if that's your goal it makes sense to me

51

to maybe do that earlier as opposed to later. And here is why, because if it is a snowflake then and I mean one nerve or two maybe, then you are going to be able to have less compression on that nerve if you do it earlier. And then it begs the question how much is one worth, how much is it, you know. If it was me and you were going to tell me if you were counseling me, yes, this cement can be in there and if I see in a case, I am going to stop. But if there is one nerve that I can help you with, I will try. I think if that type of thing and do you know what, and if you are counseling me and you say hey, you know, and it makes sense to me that time means something when you have compression, physical compression not like encasement or whatever but physical compression. So I don't know. I mean, I think my little kid would understand if I take her arem and bend it a certain way until the nerve hurts her, the longer I hold it there, the more that it is going to hurt her. And the longer the cement pushes on potentially as you said before, one that's on

52

the periphery, and then that's worth it in my mind. Obviously when you look at that CAT scan, there are some nerves that aren't involved. There are some that are. So is it night and day or a continuum of where the cement is. There is one on the edge, would that make a difference, I don't know. But I would go down trying. And because I think that time means something, I would have counseled probably earlier. Does that make sense?

Q. I think so. So if I understand what you are saying, you are saying, you believe looking at your little drawing here, that the shape of the cement within the canal was likely the snowflake shape and not the ball of cement shape?

A. I am saying if you look at this, I am saying which leg is it that has a foot drop, both.

Q. It is my understanding that it is the right foot that has the foot drop?

A. Right, exactly. So it didn't hit the left. There is some nerves in there that aren't devastated but there are some that

53

have dual control of the bladder, of the bowels, dual control from both sides that potentially if they are on the periphery, you can remove and maybe gain some function back. Meaning you answered, her left leg is fine, that leg is not hurt. The right one is paralyzed somewhere and not all the way, some muscles are, some muscles aren't. Somewhere in there, there are nerves that may be compressed but may not and may benefit from being decompressed. I don't know. I am just saying if you are going to think that way and you said it made sense to you because the left leg works, then why wait. It is my opinion and that's, you know, my own common sense approach to this. If it were a ball and nerve was in it, she wouldn't move anything.

Q. If it is a snowflake and some nerves are in it and some nerves are out of it --

A. Let me draw it a different way. So what I have drawn here, a bunch of lines, some going through an object, some never touching the object, some being bent by the

54

object. I think this is a potential save, the one that's being bent. How in the hell do you fix, I don't know. But I think that I would look at it and try to assess if that was a possibility. I am not trying to dive more into this, I am just trying to say that it is, I think that it is some type of continuum, it is not a mixture. So for two reasons, I don't know if the cement is hard or soft, and I don't know if there is, you know, something to save.

Q. Do you know what the window of opportunity is for to do that surgery to see if there is anything to save?

A. No. But if I did or say there was a chance, I would do it tomorrow, you know. There are plenty people when you talk about paralysis or spinal cord injury or nerve -- peripheral nerve injury, there is a lot of people that are taught to go down fighting. Now I mean, if it was obvious. If there was an advantage to waiting, if you had a CAT scan, which we never got, that showed, hey, this thing really didn't involve any nerve, it is just in the dura, as you brought out

55

earlier, then who knows what I would do. I may wait, I may go, I don't know, I probably would go but at least I would -- it would be a different operation. I mean, this is in the nerve, this is in the thecal space.

Q. Do you have an opinion whether doing the surgery on January 27th when Dr. Ghodsi performed it, was outside that window of opportunity or whether there was just nothing that could have been done?

A. I don't know. I think that at that point I think that he did a couple of -- he shared other people's opinion, which I thought was good. And he went in and tried to see what he could do and I like that. I mean, I think that I commend him for, you know, just not loosing all heart and he was trying to help her at that point, I think that was good. I don't know. I mean, some of it is just some of the perception and obviously that part of this is going to be a difference of opinion. I don't think that you can fault him for going in and I think he did try to get some ideas before going in. The only thing that I would say is that if I

56

were counseling him I would say hey, do you know if I was this man's friend hey, you know, if you are thinking about going in, why? Well do you just want to prove that there is cement wrapped around nerves, well you can do that any time. But do you just want to try to make a difference and then I would say, well, you know, it makes sense to once you know that it is in the wrong spot to go in and do it as soon as you can.

Q. Do you believe there was any component of thermal injury from the methylmethacrylate?

A. I don't think so. I think that it's kind of like, you know, are you shot or pistol whipped, you are still hurt, whatever.

Q. In terms of the various injuries that Mrs. Dodd described in her deposition, do you have an opinion as to which of those injuries are due to cement leak or whether there are any that are not related to the cement leak?

A. I think that they are all related to the cement leak. I think that is really the whole crux of the whole case. And you

57

think that, you know, shoulda, coulda, woulda present, post, during, after, all deal about what happened inside of the dura.

Q. You indicate in your report that if emergent surgery had been performed it is highly likely that her neurological deficits would have disappeared. Can you explain for me the basis of that opinion? The reason that I asked is based on what we just been talking about here, I am not sure.

A. I am trying to see where that was written.

Q. Down here in this paragraph, I believe right here down here. If it doesn't seem to me what we have just been discussing is that you can say that it is your belief her deficits would have disappeared.

A. I think that there are some. That if you read this sentence, "Had emergent surgeon been performed, it is likely that Mrs. Dodd's neurological deficits would have disappeared." I think when I wrote that I was talking about these salvageable areas. And granted there are some that are at the time of immediate postoperative care, it is

58

unknown to me what could have been preserved. Meaning, if I do this and I see the cement going in a place that I am really freaked out about, I think that I would cut her right there, I wouldn't let her leave the room, okay. And I think that is the only time when someone could be completely well from this. This sentence does not mean that she is going to be -- that all neurologic deficits. I think that I could have easily put some in that and it would have been more kosher. And I would let the record state that I would recant and maybe put some. But regardless, as I said earlier, you tell me what's the price of one or two nerves when you are going to be crapping on yourself, I mean. I think that, you know, little can be a lot in some circumstances. But had emergent surgery been performed in that case, you know, let me put it in a different way. Say Ghodsi just put the cement and we are talking last second he saw it, what is he going to do now. I bet he opens them up right there and says let me get this milk out of there before it turns hard on me. That's what I think. I think that's

59

the only way to have a happy ending, I really do. And when I say emergent surgery, I don't mean well you are hours, days, I am talking as soon as my x-ray tech and I look and say we have got posterior extravasation, done, boom. Because I think that it is something that our team is always looking for. That's the only way this thing could go wrong. You have got a nice old lady, all of them are, they are all complaining, they can't walk, all that they want to do is walk. And, you know, say you take away some or all of their pain, well you know what, I did a good job. This thing is right where it is, your pain is still here, I will give you some medicine, but you are not going to collapse more, it is not going to lead to a second fracture and there you go. And that's when it is a good gig, you know. All that you have to do is prevent it from going posterior. It can go a little bit to the front, to the side, just don't let it go back in the midline, that's it. But that is what happened here and that is the -- that can't happen. You have control. That's all that you have got to do

60

is stop, anyway.

Q. Let me ask you about one of the things that she complains of. Memory and concentration problems, is that anyway related through that?

A. She's gone through a major depression. She is, you know, her disability rating is affected by this depression. I think somewhere along the way you are going to have to do a psychiatric evaluation, I would put her on suicide watch. I think that the lady is living, you know, if it was my grandmother and what does she have to live for now. Isn't she a nurse or something?

Q. Retired, yes.

A. But, I mean, my mom is a nurse, you know, she is always a nurse. You know that she knows enough to know what she has got to live for, I mean, I bet, you know, she is not on antidepressant and one of ya'll ladies need to give her one.

Q. Before I forget, Doctor, can we mark your diagram is Exhibit #3?

A. That's embarrassing, come on, it is not a good drawing.

61

Q. They never are. All that it is, it will help us know what you are talking about.
A. This should be time and this should be shape.
Q. Let's talk for a minute about informed consent. I am sure that you have read Dr. Ghodsi's deposition and you read the depositions of Mrs. Dodd and her daughter?
A. Yes.
Q. And you are aware that they tell different stories about what was told and not told?
A. Yes.
Q. Obviously, you can't resolve that?
A. Can't resolve it.
Q. If you assumed that Mrs. Dodd was told what Ghodsi documents telling her in the history and physical.
A. Right. And the surgery is done on the 24th, right?
Q. The 24th, yes.
A. Yes. And this is dictated on the 23rd, I think that is reasonable to think, yes, I think that he probably gave her informed consent. And it is just his word

62

against hers, you can never really prove it, prove it. It is like you are going to be -- I think sometimes you have got, you know, if you really went to counsel somebody, you can say, okay look, you were going to be shot here, a hundred of ya'll, I am going to shoot one of ya'll, that is going to have this affect that I am going to kill her. One of you is going to get shot and not move your leg anymore and you are going to crap on yourself, who wants to go see that movie. I think that it was made that blatant, I don't know. But to her mind, this nightmare, you know, that always happens when you can't resolve this, that's not the case.
Q. By what's documented there in an explanation and the risk?
A. And you saw what I wrote on it, he did that before the surgery that's when it was transcribed that was no -- the guy is an honest guy, it appears.
Q. You also in that same paragraph in your report where you talk about informed consent indicates, "Mrs. Dodd claims that she had been advised about treatment options,

63

such as kyphoplasty or fusion."
A. Right. That's real. He told her I got this new gig, here you go. And in that year those are the other options, bracing and fusion and those are other options. So that's real.
Q. Kyphoplasty and vertebroplasty are, as I understand it, in the same sort of class of surgery should both of them be presented as options to the patient?
A. I do. I tell patients that, you know, like I told you before, I mean, it kind of has a slant, I try to explain, okay, let's say you broke your arm. And in one case we are going to make it as straight as possible, in the other case we are just going to like put it in a cast deformed. It may not hurt you, one is a little bit prettier, that's all, they both work.
Q. Is there any treatment at this point that would be a benefit to Mrs. Dodd?
A. Yes. I would do a dorsal column stimulator trial. Has that been discussed?
Q. Not to my knowledge.
A. Right.

64

Q. What would that do?
A. I think that it would take away some of this neuropathic pain that she has. I would also see about really working hard on her depression. I think that needs to really be looked at when you have a lady with her experience as a nurse that she doesn't do something foolish.
Q. Are there any other opinions that you hold concerning deviations from the standard of care by Dr. Ghodsi that we have not discussed here this evening?
A. I was curious as to if her back pain would have other diagnoses, you know. A lot of times for me, I fix someone's broken back and afterwards they have other problems. It could have been, you know, another diagnosis that wasn't. And I think that that can involve, and just because this is a catastrophic problem, it doesn't mean that she's going to not have future degenerative scoliotic, hydrogenic and paralytic spine and lower extremity problems. There are going to be issues that, I mean, I think that she needs to plug herself in with a neurosurgeon

65

and just be followed and I think that needs to be taken into consideration. But, no, I think that we have covered most of it. I mean, I don't know. I think if someone was to read this they will have ample points of what I would call a stopping point or a break point to potentially make a decision with a reasonable and well thought out planned could have maybe avoided some problems before, especially during, and then immediately after.

Q. Let me ask you just a couple questions about these notes that you have written here on the discharge summary.

A. The first are, this must be the dates that I looked at it, would that be correct; yes, that's when I looked at it.

Q. Okay.

A. I wrote 67 code I circled that, I circled the date.

MS. TRESL:

I think from my understanding is you are going to ask him some specific questions about it and not have him go through the whole thing.

66

BY MS. CLOUSE:

Q. Yes. Why don't we do that, that might be easier.

A. Sure. I wrote #1.

MS. TRESL:

I think that she is going to ask you the questions, why don't you let her ask the questions.

THE WITNESS:

Yes, sure.

BY MS. CLOUSE:

Q. #1 is fairly self-explanatory, foot drop because she had a foot drop, correct?

A. Right.

Q. #2 C-arm x-rays, do you know what the significance was about the C-arm x-rays?

A. I thought that they looked pretty subpar and I felt like I can tell there was a problem.

Q. You are able to see cement in the canal on the C-arm films?

A. I think.

Q. And we can pull them out.

A. Yes, let's look at them. What I think that I am writing there is that the

67

pedicle is not visualized for sure. Why didn't you grab. This is the surgery. And then this is inside the operation, you see that?

Q. Yes.

A. That's in the canal. All of that, all of this, I'm pointing to the cement from this intraoperative view that shows it in the canal, this too. This kind of speaks for itself.

Q. Actually I'm not sure it does, why don't you read that and tell me what you mean about that?

A. #3, there was a psychiatrist that saw this lady and she is paralyzed and he told her that she had somatization. #4 the operative note I wrote, quote, after adjustment and correct positioning. I think that the word correct in there, I would just write, I was writing a note to myself that if I am dictating maybe I shouldn't word it that way. I think that if he had it over to do, I think he would probably not word it that way.

Q. You have a little arrow there with the word admission, so you took that as some

68

admission that it had been?

A. Well I think that there is either a problem in the way that he is dictating or he is saying that he is in the wrong space. I think that when you look at it, this is an admission of, you know, I am really, I mean, what's not correct. He says after judgment, well that means that he thought about something. And correct positioning, that means that he's in the wrong place. And usually what I would take that to mean is that, yes, these little nuances of placement that happened, as you said to me it happened to everybody, that doesn't even go in the dictation. I look at a dictation as what I am going to tell another physician when he comes and tries to do a re-operation to make this patient have a better outcome. Not to, you know, for some attorney to read or to have a nurse comment on or to tell my wife or obviously it wants to cut to the chase. If something is not in there, that doesn't mean that it didn't happen. But if someone says after adjustment and correct positioning, I wrote, I think that the guy is saying that he

69

did something not correct. And, you know, I think that, gosh, he is an honest guy, he is telling us, I messed up and there is a bad outcome and this isn't correct. And in my definition of breach of standard of care, something has to happen out of the norm, something that the random person won't do, something that the majority, that a reasonable person wouldn't do. And then something bad has to happen and that appears in this case like seven times. And just where he says this happened is an admission, anyway. We can go on if you want.

Q. All right. I understand what you are saying there. #5, I think that is self-explanatory. #6, I think is as well.

A. #7 is what they found.

Q. Okay. Then I am not sure what #8 is.

A. Then she starts having heart problems later on, February she starts having heart problems.

Q. What's #9?

A. #9 is just a leveling, a level sequence. And then hold on, let me look at

70

#10.

Q. Okay.

A. Yes, he says that he does a kyphoplasty but there is no mention of balloon. So is he doing a vertebroplasty or kyphoplasty, look at what he says that he does, the coding is even different. So I wrote, I put a question fraud. And that's just my thoughts, you asked me, I wouldn't have even brought that up. But he wrote an operative report that he does a kyphoplasty, look at that, isn't that interesting. Well he doesn't do a kyphoplasty, he does no mention of a balloon. And so he is saying that he's doing one thing and he's doing another. Now I guess that's kind unusual, don't you think. We clearly define that kyphoplasty was different than vertebroplasty. And here in his own operative report, he says he does a kyphoplasty. Well golly, man, what are you doing; at least have a plan. Did you have a balloon in the room? There is no mention of it. So I wrote no balloon even in the description, is this guy fraudulent. And

71

then this other stuff, that's about it.

I don't know. I haven't -- it is not like I was going to come out and just say obviously I don't think that the guy is, but is it the way that he is dictating, I don't know. But they are not the same. And maybe if that is in evidence of how he is writing, maybe talk to the lady the same way maybe Mrs. Dodd, does she know what she is getting; does she know if she is getting a vertebroplasty or the kyphoplasty, is the consent as confusing as it is for me to read his op report, I don't know. So there is a question about it. And why would he write kyphoplasty on the surgery if he is not doing one. I don't know.

Q. I don't know if you saw his discussion about that in his deposition about vertebroplasty and kyphoplasty and correcting a kyphosis being a kyphoplasty.

A. I know what this means, this guy says that he did this procedure but didn't do it.

Q. Does it make sense to call it kyphoplasty if you correcting kyphosis?

72

A. No, Dear, you have to use a balloons. As I told you before, no. I am curious as to what he billed, what code or surgical code did he put a vertebroplasty or did he put a kyphoplasty or does he know.

Q. There weren't any articles or publications or done any presentations on vertebroplasty or kyphoplasty?

A. I have not written an article or done a presentation. I have been asked to do one for like some of the nurses. I have met at a tumor conference at our hospital to try and just relay some information to the oncologists to let them know that this is a very good means of preserving neurologic function, people have tumors. They get a tumor and it causes what's called a pathologic fracture that the tumor won't hold the vertebral body so I have tried to discuss that with some oncologists, that's it.

Q. Is the instrumentation study that you are doing with Medtronic/Danek?

A. That is a bioabsorble stabilization. You put it in and it melts away and so the fusion stays but it goes

73

away. But there is others, I mean, I wanted to look at a couple of other different, you know, trying to look at some other retrospective use of instrumentation. That's about it.

Q. The fellowship that you did in Australia, did that have a particular focus?

A. Skull base surgery for the main part. And I grew a little bored of that so I hooked up with an orthopedist and tried to learn an orthopedic slant on spinal surgery. I shouldn't say get bored with it, it was a poor choice of words. That I had extra time on my hands and so.

Q. I mean no disrespect, but have you ever been sued for malpractice?

A. Four times. I have had a suit where the lady lost her disability, my last clinic note says that she is 80 percent better. I had a lady's family sue me four months after I gave her one dose of a seizure medicine for like death, four months later, the half life is a couple of days. She did have some vomiting from the medicine, okay. I have been sued for one guy who had a brain

74

biopsy and, you know, we got a diagnosis that was abnormal but not a particular tumor so he has another brain biopsy by somebody else and he gets a diagnosis of a tumor and he has no deficit, well he has some sensory change. And then I have been sued on one gentleman who is from the Middle East who I am not really sure what his deal is. I think that he had thought that he had pain after surgery, he thought that he had a recurrent disc herniation, CT was questionable, MRI was clean. And apparently he gets transported back to the Middle East east if he comes off workman's compensation or something. So, yes that's my biased, those are the four and I carry them with me and just like Ghodsi, you feel about them. I think that there is no question that man is probably a good guy and you carry them, it hurts. You know, it is a hard job, you fight dragons, you get burned.

Q. One other thing that I forgot to ask you about your expert review. What are your fees for?

A. Regardless win, lose or draw it is a thousand an hour.

75

Q. This case is scheduled to go to trial in June, have you been asked to come to Marietta to testify?

A. I'm ready. I would like to go see it in the summer, I hope that it is good.

MS. CLOUSE:

I think that we are done, Doctor.

76

REPORTER'S CERTIFICATE

I, Betty D. Glissman, Certified Court Reporter, do hereby certify that the above-named witness, after having been first duly sworn by me to testify to the truth, did testify as hereinabove set forth;

That the testimony was reported by me in shorthand and transcribed under my personal direction and supervision, and is a true and correct transcript, to the best of my ability and understanding;

That I am not of counsel, not related to counsel or the parties hereto, and not in any way interested in the outcome of this matter.

BETTY D. GLISSMAN
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#1 [2] 27:13 66:12
#10 [1] 70:1
#2 [2] 8:11 66:15
#4 [1] 67:16
#7 [1] 69:17
#8 [1] 69:18
#86150 [1] 76:25
#9 [2] 69:23 69:24

0
0 [1] 2:10
03-PT-24 [1] 1:4

1
1 [6] 2:10 20:2 20:2 36:1 48:6 66:4
1.5 [1] 35:10
1.55 [1] 35:7
100 [2] 17:6 20:16
10000 [1] 1:9
108 [1] 1:11
1660 [1] 1:16

2
2 [2] 2:12 9:19
20 [3] 12:24 13:10 13:12
2001 [2] 28:6 28:7
2002 [1] 10:20
2003 [3] 2:13 8:15 10:20
2004 [1] 1:11
212 [1] 1:20
23rd [1] 61:23
24th [2] 61:20 61:21
25 [1] 12:15
25th [1] 45:11
27th [1] 55:7

3
3 [4] 2:7 2:14 60:23 67:14
30 [1] 4:5

4
4 [1] 36:2
43085 [1] 1:20
44113 [1] 1:17

5
5 [1] 69:15

6
6 [4] 35 22 36 23 61 76 9:16
60 [2] 21 42 9:13
600 [1] 1:16
67 [1] 63:19
6:05 [1] 1:11
6th [1] 1:11

7
7 [2] 21 28:15
70 [1] 1:53
70808 [1] 1:10
7777 [1] 1:9

8
8 [1] 2:12
80 [1] 73:19
8146 [1] 1:10

9
933 [1] 1:20
95 [3] 15 51 56 16 24

_
_____ [1] 76:22

A
ABDI [2] 16 12:1
Ability [1] 76:13
Able [7] 13 64 52 04 7 11 48 55 06 51 46 6:20
Abnormal [1] 7:42
Abort [2] 20 11 23:23
Aborted [2] 26 6 26:23
Above-mentioned [1] 3:3
Above-named [1] 7:65
Accept [1] 45:25
Acces [1] 2:53
Access [1] 26:25
Accidents [1] 4:9
Acrylate [1] 50:10
ACTION [1] 1:4
Actual [2] 36 19 38:12
Adapt [1] 14:10
Adapted [2] 14:5 39:4
Add [1] 38:11
Additional [2] 9:3 13:22
Adjust [1] 22:2
Adjustment [2] 67:18 68:24
Admission [4] 67:25 68:1 68:6 69:12
Advantage [1] 54:22
Advised [1] 62:25
Affect [1] 62:8
Affected [1] 60:8
Affiliated [1] 7:4
Afterwards [1] 64:16
Ages [1] 19:10
Ago [2] 30:13 32:18
Agree [1] 27:19
Agreed [3] 5:1 5:17 7:8
Ahead [1] 45:12
Almost [1] 46:21
Altogether [2] 6:18 15:4
American [1] 11:17
Amount [3] 35:8 36:23 37:13
Ample [1] 65:5
Anatomy [2] 12:2 24:10
Anesthetic [1] 15:15
Angle [1] 32:16
Answer [13] 3:19 17:6 18:14 21:21 29:15 36:13 43:11 43:16 43:24 48:5 48:6 49:8 50:22
Answered [1] 53:5
Anterior [1] 17:23
Antibiotic [1] 48:24
Antidepressant [1] 60:20
Anyway [7] 25:8 25:12 34:6 48:14 60:1 60:4 69:13
AP [2] 23:19 32:11
APPEARANCES [1] 1:13
Appeared [1] 27:19
Approach [3] 14:7 22:11 53:16
Approaching [1] 17:5
Appropriate [1] 29:25
April [1] 1:11
Area [2] 26:11 37:21
Areas [1] 57:23
Arem [1] 51:21
Arm [7] 14:13 16:22 42:2 42:3 63:14 66:15 66:16
Arrow [1] 67:24
Artery [1] 33:9
Article [1] 72:9
Articles [1] 72:6
Aside [1] 10:4
Aspects [1] 24:10
Assess [1] 54:4
Assist [1] 7:3
Assume [1] 6:20
Assumed [1] 61:16
Attack [2] 20:20 21:3
Attorney [1] 68:19
Attorneys [4] 1:18 1:21 5:8 7:3
Australia [1] 73:7
Authored [1] 8:12
Automatically [1] 48:7
Available [2] 41:21 45:19
Average [2] 11:9 14:16
Avoid [4] 25:21 31:20 32:5 33:23
Avoided [1] 65:9
Awake [1] 15:16
Aware [3] 36:22 38:10 61:10

B
Baby [2] 23:15 23:15
Bad [6] 24:25 30:8 45:20 45:21 69:3 69:10
Badly [1] 29:20
Ball [5] 47:5 50:3 50:24 52:17 53:16
Balloon [16] 16:10 16:13 16:19 39:12 39:14 39:16 39:18 39:23 40:6 40:11 40:12 40:15 70:5 70:14 70:23 70:24
Balloons [1] 72:2
Balls [1] 50:20
Base [1] 73:8
Based [3] 36:18 37:2 57:9
Basic [1] 50:18
Basis [2] 11:13 57:8
Baton [4] 1:9 1:11 6:16 36:13
Battered [1] 7:24
Beaucoup [1] 36:14
BECKER [1] 1:14
Become [1] 14:6
Beef [1] 11:6
Beg [1] 47:7
Begs [1] 51:6
Behalf [1] 3:11
Belief [1] 57:16
Bend [1] 51:21
Beneficial [1] 18:5
Beneficiary [1] 18:4
Benefit [3] 17:25 53:10 63:21
Bent [2] 53:25 54:2
Berger [1] 11:25
Best [1] 76:12
Bet [2] 58:22 60:19
Better [4] 16:8 33:2 68:18 73:20
Betty [3] 1:24 76:3 76:23
Between [2] 30:10 36:2
Beyond [1] 38:6
Biased [1] 74:15
Big [3] 19:11 46:2 48:9
Billed [1] 72:3
Bioabsorble [1] 72:23
Biopsy [2] 74:1 74:3
Bit [4] 12:19 43:14 59:21 63:18
Bladder [3] 43:19 47:10 53:1
Blatant [1] 62:12
Blocked [1] 26:11
Bodies [1] 27:25
Body [5] 25:4 33:4 33:16 36:25 72:19
Bone [16] 14:15 16:11 16:14 21:20 24:16 24:17 30:11 31:18 33:17 37:18 37:21 39:1 39:16 39:22 40:20 50:12
Bones [1] 21:18
Bony [3] 24:16 24:16 30:11
Books [3] 12:5 12:13 12:16
Boom [1] 59:6
Bored [2] 73:9 73:12
Bottom [1] 24:13
Boulevard [1] 1:9
Bounce [1] 12:16
Bowel [1] 43:19
Bowels

[1] 53:2
Brace
[1] 20:24
Bracing
[2] 28:13 63:4
Brain
[3] 17:12 73:25 74:3
Brake
[1] 23:13
Brakes
[1] 21:15
Breach
[3] 30:24 31:18 69:5
Breached
[1] 31:24
Break
[6] 16:22 27:6 29:5 35:24 48:2 65:6
Broke
[1] 63:14
Broken
[1] 64:15
Brought
[4] 9:6 10:24 54:25 70:10
Bullet
[1] 25:2
Bulletin
[1] 11:18
Bunch
[2] 26:9 53:23
Burned
[1] 74:20
Burst
[1] 34:8
Business
[1] 12:14
Butter
[1] 34:16

C

C-arm
[10] 14:13 14:14 14:17 23:18 23:18 42:2 42:3 66:15 66:16 66:21
Cage
[1] 18:10
Calais
[1] 1:10
Canal
[16] 17:9 17:20 19:3 25:25 33:3 33:7 33:12 33:15 33:21 35:8 35:22 45:7 52:15 66:21 67:6 67:9
Candidate
[1] 27:20
Cannot
[1] 21:7
Car
[3] 22:19 23:1 23:11
Care
[10] 3:12 6:3 7:17 7:22 23:25 28:14 45:17 57:25 64:11 69:5
Career
[1] 12:22
Carry
[2] 74:16 74:19
Cars
[1] 22:22
Case
[38] 5:4 5:17 5:18 5:19 5:20 6:1 7:8 7:23 8:18 9:2 9:4 11:6 11:11 14:16 14:18 14:20 20:15 26:1 26:6 33:18 34:21 38:12 41:7 41:17 41:17 42:12 42:22 44:11 46:6 48:4 51:10 56:25 58:19 62:15 63:14 63:16 69:11 75:1
Cases
[16] 4:9 4:15 5:7 5:22 5:23 5:24 6:7 6:13 6:24 13:9 13:12 13:14 15:13 20:13 21:10 29:12
Cast
[1] 63:17
Casual
[1] 30:7
CAT
[4] 44:7 45:6 52:2 54:22
Catastrophic
[1] 64:20
Catheter
[1] 43:21
Cauda
[2] 43:17 43:18
Caused
[1] 19:19
Causes
[1] 72:17
Cautious
[1] 22:15
Cc
[3] 35:10 35:18 36:1
Cc's
[3] 35:7 35:22 36:18
Cement
[71] 17:2 17:8 17:21 17:22 18:12 18:13 18:15 19:18 19:21 19:23 20:1 20:7 20:23 21:11 21:12 24:11 25:21 26:10 26:13 28:17 29:4 30:4 32:19 32:22 32:22 33:14 33:14 33:15 33:17 33:20 33:25 34:1 34:10 34:23 35:6 36:23 39:23 39:24 40:7 40:7 40:19 45:6 46:4 46:14 46:16 47:3 47:14 47:22 48:6 48:9 48:11 48:16 48:22 49:5 49:25 50:3 50:9 51:9 51:24 52:6 52:15 52:17 54:9 56:5 56:20 56:22 56:24 58:2 58:21 66:20 67:7
Cephalad
[1] 17:24
Certain
[13] 11:6 13:7 15:13 15:19 17:13 19:13 37:13 37:15 37:19 45:19 50:8 50:10 51:21
Certainly
[1] 50:7
CERTIFICATE
[2] 76:1 76:25
Certified
[3] 1:24 76:3 76:24
Certify
[1] 76:4
Challenge
[1] 23:8
Chance
[1] 54:16
Chances
[1] 26:13
Change
[2] 25:9 74:5
Changes
[1] 50:1
Changing
[2] 25:11 32:16
Channel
[4] 24:16 24:17 25:13 30:18
Channels
[1] 35:11
Chase
[1] 68:21
Check
[1] 22:10
Cherry
[1] 11:24
Choice
[1] 73:13
Circle
[2] 46:11 46:13
Circled
[3] 9:22 65:19 65:20
Circumstances
[3] 28:16 29:22 58:18
CIVIL
[1] 1:4
Claims
[1] 62:24
Clarify
[2] 10:24 35:9
Class
[1] 63:8
Classifications
[1] 19:16
Clean
[1] 74:12
Clear
[1] 3:15
Clearly
[1] 70:17
Cleveland
[1] 1:17
Clinic
[1] 73:19
Clinical
[1] 37:3
Close
[1] 7:25
Closet
[2] 42:18 42:20
Clouse
[9] 1:19 2:7 3:6 3:8 4:23 36:16 66:1 66:11 75:6
CO
[2] 1:14 1:19
Code
[3] 65:19 72:3 72:4
Coding
[1] 70:7
Coffin
[3] 46:14 48:10 48:11
Cold
[1] 29:6
Collapse
[2] 27:25 59:16
Colleague
[1] 15:18
COLOMBO
[1] 1:19
Column
[1] 63:22
Comfortable
[1] 26:20
Commencing
[1] 1:11
Commend
[1] 55:16
Comment
[1] 68:20
Common
[5] 1:1 30:25 34:12 50:18 53:15
Commonly
[1] 40:23
Commonplace
[1] 35:11
Compartments
[1] 19:17
Compensation
[1] 74:14
Complaining
[1] 59:10
Complains
[1] 60:3
Completely
[2] 20:2 58:7
Complication
[4] 29:21 30:3 33:13 33:21
Complications
[4] 20:12 20:13 20:17 20:25
Component
[1] 56:12
Compressed
[1] 53:10
Compression
[6] 18:25 19:10 51:5 51:17 51:17 51:19
Compressive
[1] 45:21
Concentration
[1] 60:4
Concerning
[4] 8:18 9:4 36:23 64:10
Conductor
[1] 42:23
Conference
[1] 72:12
Confident
[1] 23:22
Confusing
[1] 71:12
Connection
[3] 4:6 9:2 30:10
Connotation
[1] 9:17
Consent
[6] 15:25 20:18 61:6 61:25 62:24 71:12
Consideration
[1] 65:2
Consistency
[6] 34:1 34:5 34:24 49:1 49:20 49:25
Constant
[2] 14:21 20:6
Contact
[2] 6:16 50:1
Contacted
[1] 5:9
Context
[1] 7:12
Continually
[1] 36:5
Continue
[1] 27:25
Continued
[2] 28:2 28:4
Continuum
[2] 52:5 54:8
Control
[6] 21:8 34:2 34:11 53:1 53:2 59:25
Controlled
[1] 47:9
Convey
[1] 3:24
Cool
[1] 12:3
Copy
[2] 9:20 10:8
Cord
[3] 17:16 19:12 54:18
Correct
[20] 5:22 7:17 7:18 7:22 8:13 10:23 24:3 24:4 48:17 50:7 65:17 66:13 67:18 67:19 68:7 68:9 68:24 69:1 69:4 76:12
Correcting
[2] 71:19 71:25
Correctly
[1] 27:10
Cost
[1] 47:8
Coulda
[1] 57:1
Counsel
[3] 62:4 76:15 76:16
Counseled
[1] 52:10
Counseling
[3] 51:9 51:14 56:1
Count
[1] 18:1
COUNTY
[1] 1:2
Couple
[7] 12:2 12:13 41:13 55:12 65:12 73:2 73:23
Course
[5] 9:10 12:21 39:2 39:3 39:7
Courses
[2] 13:23 14:4
Court
[6] 1:1 1:10 1:24 3:3 76:4 76:24
Courtroom
[2] 8:2 8:5
Cousin
[1] 12:24
Covered
[1] 65:3
Crap
[1] 62:10
Crapping
[1] 58:16
Create
[1] 16:16
Creation
[1] 25:21
Crest
[1] 18:10
Criteria
[2] 37:6 37:7
Critical
[2] 41:7 46:10
Cross
[1] 31:20
Crux
[1] 56:25
CSF
[6] 30:10 30:23 46:5 48:7 48:14 50:1
CT
[2] 35:24 74:11
Curious
[2] 64:13 72:3
Current
[2] 11:5 14:5
Curriculum
[1] 2:11
Curve
[1] 22:9
Cut
[5] 17:15 17:16 21:20 58:4 68:21
CV
[1] 38:25

D

Dad
[1] 12:6
Dangerous
[1] 35:20
Data
[1] 45:19
Date
[1] 65:20
Dated
[2] 2:12 8:15
Dates
[1] 65:16
Daughter
[1] 61:8
Days
[2] 59:3 73:23
Deal
[4] 18:7 24:9 57:2 74:8
Dealing
[2] 34:12 50:21
Dear
[1] 72:1
Death
[4] 8:1 8:8 20:19 73:22
December
[2] 2:12 8:15
Decent
[1] 26:2
Decide
[2] 15:22 39:13
Deciding
[1] 16:7
Decision
[2] 41:7 65:7
Decompressed
[1] 53:11
Decompression
[1] 45:4
Defend
[1] 6:3
Defendant
[1] 5:10

Defendants [1] 1:7
Defense [5] 5:16 5:19 5:20 6:1 7:8
Deficit [6] 18:15 19:19 44:12 45:24 47:25 74:5
Deficits [6] 18:12 43:20 57:6 57:17 57:21 58:9
Define [1] 70:17
Defined [1] 13:7
Definite [1] 49:20
Definitely [1] 36:2
Definition [2] 19:9 69:5
Deflate [1] 39:23
Deformed [1] 63:17
Degenerative [1] 64:21
Degree [1] 50:6
Deliberate [1] 22:15
Delivered [2] 35:8 35:10
Delivering [1] 35:6
Delivery [2] 24:11 36:4
Dependent [2] 48:24 50:14
Deposition [12] 1:9 4:1 4:7 4:14 7:13 9:12 10:11 41:14 43:4 56:18 61:7 71:18
Depositions [4] 7:11 9:7 42:1 61:8
Depression [3] 60:7 60:8 64:5
Described [1] 56:18
Description [1] 70:25
Deserves [1] 43:13
Destroyed [1] 25:10
Devastated [1] 52:25
Deviations [1] 64:10
Diagnoses [1] 64:14
Diagnosis [6] 43:8 44:14 44:15 64:18 74:1 74:4
Diagnostic [1] 44:21
Diagram [1] 60:23
Dictate [1] 16:3
Dictated [1] 61:22
Dictating [4] 20:8 67:21 68:3 71:5
Dictation [2] 68:15 68:15
Die [2] 8:9 33:8
Died [1] 21:4
Difference [4] 28:21 52:7 55:22 56:7
Different [18] 9:22 13:2 18:21 21:7 21:16 22:12 24:10 25:7 25:7 26:5 44:2 53:22 55:4 58:20 61:11 70:7 70:18 73:2
Differential [2] 43:5 43:8
Differently [1] 50:11
Direction [2] 41:23 76:11
Disability [2] 60:7 73:18
Disappeared [3] 57:7 57:17 57:22
Disc [2] 44:16 74:11
Discharge [3] 10:14 10:16 65:14
Discourse [1] 42:1
Discuss [3] 16:1 28:12 72:19
Discussed [3] 27:7 63:23 64:12
Discussing [1] 57:15
Discussion [3] 27:5 30:7 71:18
Disrespect [1] 73:15
Distribution [1] 34:22
Dive [1] 54:5
Doctor [3] 42:12 60:22 75:8
Doctor/patient [1] 47:19
Documented [1] 62:16
Documents [1] 61:17
Dodd [12] 1:4 3:9 28:1 43:1 43:12 45:17 56:18 61:8 61:16 62:24 63:21 71:9
Dodd's [2] 27:18 57:21
Doggone [1] 46:7
Done [27] 4:20 7:15 10:22 12:25 13:5 13:13 13:19 14:22 15:2 20:11 31:4 32:9 40:1 40:23 41:11 41:17 45:6 45:11 46:17 49:12 49:18 55:10 59:5 61:19 72:7 72:10 75:7
Door [1] 23:5
Dorsal [1] 63:22
Dose [1] 73:21
Dots [2] 46:12 46:12
Doubt [3] 28:9 46:3 47:4
Down [9] 10:1 23:4 39:15 47:20 49:14 52:8 54:20 57:13 57:14
Dr [17] 1:9 2:12 2:14 3:1 3:7 3:8 3:12 6:19 6:23 10:8 25:18 35:2 41:13 43:3 55:7 61:7 64:11
Draft [2] 10:9 10:10
Dragons [1] 74:20
Draw [3] 46:11 53:22 74:24
Drawing [2] 52:14 60:25
Drawn [3] 2:14 46:11 53:23
Dress [1] 42:24
Drive [1] 22:21
Driven [1] 49:15
Drop [7] 43:2 43:14 45:2 52:20 52:22 66:13 66:13
Dry [1] 42:8
Dual [2] 53:1 53:2
Due [2] 43:5 56:20
Duly [2] 3:2 76:6
Dura [18] 18:13 18:16 19:7 19:14 19:15 28:25 29:4 29:15 29:18 30:4 30:16 30:21 31:13 31:24 32:22 32:23 54:25 57:3
During [3] 28:17 57:2 65:10
Dynamic [1] 20:6
Dynamics [1] 50:14

E

Early [1] 20:3
Easier [1] 66:3
Easily [1] 58:10
East [3] 74:7 74:13 74:13
Edge [1] 52:6
Eight [1] 12:15
Either [8] 9:11 15:19 17:23 22:22 43:18 49:19 50:22 68:2
Elderly [2] 21:2 27:24
Element [2] 37:18 45:21
Elements [1] 25:7
Embarrassing [1] 60:24
Embolism [1] 33:8
Emergent [5] 45:4 57:5 57:19 58:18 59:2
Encasement [1] 51:18
End [4] 24:11 24:24 25:2 25:14
Ending [1] 59:1
England [1] 11:16
Ensconced [1] 46:16
Entailed [1] 45:15
Envision [1] 45:13
Epidural [2] 21:18 44:17
Epilepsy [1] 11:17
Equina [2] 43:17 43:18
Equipment [2] 41:20 42:17
Especially [2] 22:19 65:10
ESQUIRE [2] 1:15 1:19
Establish [1] 7:25
Estimate [2] 36:11 36:19
Evaluation [1] 60:10
Evening [1] 64:12
Everywhere [3] 33:14 34:14 49:5
Evidence [2] 30:9 71:7
Evolved [1] 14:7
Exactly [5] 16:5 16:5 40:5 41:24 52:23
EXAMINATION [1] 3:6
Example [1] 33:13
Exams [1] 6:20
Excellent [2] 26:10 35:2
Exhibit [5] 2:10 2:12 2:14 8:11 60:23
Exhibits [1] 3:25
Expand [2] 16:11 39:22
Expanded [1] 16:16
Expect [1] 49:3
Experience [3] 12:20 42:3 64:7
Experienced [1] 28:2
Expert [8] 3:11 4:12 4:17 5:2 7:14 7:20 10:8 74:22
Expert's [1] 9:19
Experts [1] 7:3
Explain [5] 23:16 37:8 37:10 57:7 63:13
Explanation [1] 62:17
Explanatory [2] 66:12 69:16
Express [2] 3:11 50:6
Extent [1] 8:1
Extra [4] 14:16 32:8 33:4 73:13
Extravasation [2] 18:2 59:5
Extremity [1] 64:23

F

Facing [1] 28:5
Fact [2] 34:7 41:21
Fairly [1] 66:12
Fairness [1] 44:24
Fall [1] 28:6
Familiar [3] 14:6 14:10 29:13
Familiarity [1] 42:2
Family [1] 73:20
Far [3] 5:5 34:6 49:7
Fault [1] 55:23
Favor [1] 15:10
February [1] 69:21
Fees [1] 74:23
Fellow [1] 42:11
Fellowship [1] 73:6
Felt [4] 10:16 27:6 41:4 66:18
Fenestration [1] 41:15
Fight [1] 74:20
Fighting [2] 47:20 54:20
Figure [1] 44:7
Filed [1] 3:9
Fill [2] 16:10 37:14
Film [1] 32:11
Films [4] 34:20 36:10 36:20 66:21
Final [1] 37:22
Finally [1] 37:19
Findings [2] 15:20 16:3
Fine [1] 53:5
Finger [1] 24:21
Firm [4] 6:8 6:16 6:24 46:5
First [9] 3:2 25:16 25:19 25:20 25:24 26:8 43:6 65:15 76:5
Fit [1] 44:13
Five [7] 4:21 4:24 5:7 20:21 21:4 34:18 35:23
Fix [2] 54:3 64:15
Fixate [1] 16:23
Flashlight [1] 42:18
Fluctuates [1] 22:8
Fluid [1] 50:14
Fluoroscopic [1] 23:21
Fluoroscopy [4] 23:18 31:8 41:20 41:22
Flynn [2] 6:19 6:23
Focus [1] 73:7
Follow [1] 24:23
Followed [2] 35:17 65:1
Follows [1] 3:4
Fool [2] 20:4 20:5
Foolish [1] 64:8
Foot [9] 43:2 43:14 45:2 47:11 52:19 52:22 52:22 66:12 66:13
Forever [2] 46:15 48:19
Forget

[1] 60:22
Forgot
[1] 74:21
Formation
[1] 37:20
Formulating
[1] 11:2
Forth
[1] 76:7
Forward
[1] 38:14
Fought
[1] 20:24
Four
[9] 9:1 20:21 21:4 35:7 35:23 73:17 73:20 73:22 74:15
Fracture
[4] 18:2 39:14 59:17 72:18
Franklin
[1] 12:4
FRASER
[2] 1:9 3:1
Fraud
[1] 70:8
Fraudulent
[1] 70:25
Freak
[1] 29:6
Freaked
[1] 58:3
Free
[1] 46:15
Friend
[1] 56:2
Front
[3] 33:15 39:17 59:21
Full
[1] 6:21
Function
[2] 53:4 72:16
Fusion
[3] 63:1 63:5 72:25
Fusions
[1] 14:12
Future
[1] 64:21

G

Gain
[2] 26:24 53:4
Gaining
[1] 25:3
Galaxy
[3] 46:25 47:1 47:2
Game
[1] 42:7
Gas
[2] 23:13 23:14
Gauge
[8] 37:16 38:1 38:4 38:9 38:21 39:10 39:21 40:9
General
[1] 15:15
Gentleman
[1] 74:6
Ghodsi
[13] 1:6 1:21 3:8 3:12 25:18 35:3 41:13 42:8 55:8 58:20 61:17 64:11 74:16
Ghodsi's
[2] 43:3 61:7
Gig
[2] 59:19 63:3
Given
[3] 4:6 7:11 48:12
Glissman
[3] 1:24 76:3 76:23
Goal
[1] 50:25
God
[1] 48:1
Golly
[2] 46:8 70:21
Gosh
[1] 69:2
Grab
[1] 67:2
Grabbed
[1] 49:13
Grandmother
[1] 60:13
Granted
[1] 57:24
Great
[1] 49:4
Greenberg
[1] 12:2
Grew
[1] 73:9
Ground
[1] 22:23
Guess
[5] 12:17 13:19 23:16 24:14 70:16
Guided
[1] 39:19
Guidelines
[2] 23:20 35:16
Gun
[4] 24:19 24:24 24:25 25:13
Guy
[9] 62:20 62:21 68:25 69:2 70:25 71:4 71:21 73:25 74:18
Guys
[2] 14:18 47:18

H

Half
[1] 73:23
Handing
[1] 9:19
Handle
[1] 39:20
Handled
[1] 46:1
Hands
[2] 13:20 73:14
Happy
[4] 9:7 21:25 38:14 59:1
Hard
[7] 3:22 48:7 49:21 54:9 58:24 64:4 74:20
Harden
[2] 49:3 50:2
Hardens
[1] 48:16
Hate
[1] 38:23
Heard
[2] 21:16 21:19
Heart
[6] 20:20 21:3 31:5 55:17 69:20 69:22
Height
[1] 18:6
Hell
[3] 23:4 44:8 54:2
Help
[5] 40:9 47:19 51:12 55:18 61:2
Helps
[1] 25:8
Hematoma
[1] 44:17
Hennessy
[1] 1:9
Hereby
[1] 76:4
Hereinabove
[1] 76:7
Hereto
[1] 76:16
Herniated
[1] 44:16
Herniation
[1] 74:11
Herself
[2] 43:21 64:25
Hesitate
[1] 12:17
High
[3] 1:20 40:13 42:8
Highly
[1] 57:6
Historical
[1] 12:5
Historically
[1] 19:10
History
[1] 61:18
Hit
[3] 34:9 43:6 52:23
Hits
[2] 34:15 50:9
Hold
[7] 25:12 26:6 35:7 51:22 64:10 69:25 72:18
Hole
[1] 34:16
Holiest
[2] 29:9 29:9
Honest
[2] 62:21 69:2
Hooked
[1] 73:10
Hope
[2] 25:8 75:5
Hospital
[4] 1:7 42:14 42:16 72:12
Hour
[1] 74:25
Hours
[1] 59:3
Housing
[1] 50:14
Hu-huh
[1] 3:20
Hundred
[1] 62:6
Hurt
[8] 24:25 25:14 28:11 33:7 51:23 53:6 56:16 63:17
Hurts
[2] 51:22 74:19
Hydrogenic
[1] 64:22
Hypothalamus
[1] 17:15
Hypothetical
[1] 43:25

I

Idea
[6] 4:3 5:13 21:13 32:4 34:25 46:23
Ideal
[2] 26:7 37:20
Ideas
[2] 12:16 55:24
Identify
[3] 8:25 10:19 20:3
Iliac
[1] 18:10
Imagine
[2] 18:20 18:24
Immediate
[2] 45:5 57:25
Immediately
[2] 43:23 65:10
Impact
[1] 11:21
Impinged
[1] 46:21
Important
[2] 34:2 44:6
Include
[1] 13:14
Independent
[1] 6:20
Independently
[1] 7:14
Indicate
[2] 45:4 57:4
Indicated
[2] 32:21 35:5
Indicates
[1] 62:24
Individual
[1] 36:24
Inflatable
[1] 39:1
Inflate
[3] 39:20 40:6 40:12
Inflated
[1] 39:19
Inflating
[1] 40:16
Information
[1] 72:13
Informed
[4] 20:18 61:6 61:25 62:23
Initial
[1] 10:22
Inject
[1] 49:2
Injected
[1] 36:24
Injecting
[3] 37:25 38:6 40:19
Injuries
[5] 4:9 8:1 10:23 56:17 56:20
Injury
[4] 44:1 54:18 54:19 56:12
Insert
[1] 39:14
Inserted
[2] 16:13 22:1
Inside
[8] 18:13 19:5 19:15 28:25 40:15 46:13 57:3 67:3
Instance
[5] 15:14 26:21 35:16 38:22 40:5
Institute
[1] 11:18
Instrumentation
[3] 14:13 72:21 73:4
Intents
[1] 49:6
Interest
[1] 15:16
Interested
[1] 76:17
Interesting
[1] 70:12
Interfaces
[1] 32:17
Intestinal
[1] 33:10
Intraoperative
[2] 16:3 67:8
Intraoperatively
[3] 16:7 19:23 37:4
Investigation
[1] 45:24
Involve
[2] 54:24 64:19
Involved
[7] 5:24 7:9 7:16 7:21 42:5 42:12 52:4
Issue
[2] 12:11 41:16
Issues
[1] 64:24
Items
[1] 9:1
Itself
[2] 16:19 67:10

J

JACQUELINE
[1] 1:15
January
[2] 10:19 55:7
Job
[2] 59:13 74:20
Journal
[5] 11:14 11:14 11:16 11:16 11:18
Journals
[1] 11:12
Judgment
[2] 37:3 68:7
June
[1] 75:2

K

Karen
[2] 1:19 3:7
Keep
[4] 11:5 11:8 11:12 11:22
Key
[1] 22:14
Kid
[3] 34:18 50:18 51:20
Kill
[1] 62:8
Kind
[26] 11:8 12:4 12:15 16:21 17:11 20:4 20:16 21:14 22:18 23:6 26:11 26:19 27:2 34:5 36:13 42:6 43:11 44:2 44:25 46:7 46:21 50:18 56:15 63:12 67:9 70:16
Knowing
[1] 42:22
Knowledge
[4] 29:3 30:5 50:19 63:24
Knows
[2] 55:1 60:18
Kosher
[1] 58:11
Kyphon
[10] 12:25 13:2 38:8 38:10 38:14 38:18 39:1 39:7 41:4 41:5
Kyphoplasties
[1] 15:1
Kyphoplasty
[23] 13:3 13:4 14:23 14:24 16:13 16:25 25:6 41:8 63:1 63:7 70:4 70:6 70:11 70:13 70:18 70:21 71:11 71:15 71:19 71:20 71:25 72:5 72:8
Kyphosis
[4] 27:21 28:3 71:20 71:25

L

L2
[1] 27:11
Ladies
[2] 18:8 60:20
Lady
[9] 20:20 21:2 21:3 59:9 60:12 64:6 67:15 71:8 73:18
Lady's
[1] 73:20
Laid
[1] 13:20
Land
[1] 31:19
Landmark
[1] 31:17
Landreneau
[5] 1:9 2:14 3:1 3:7 6:22
Landreneau's
[1] 2:12
Lands
[1] 18:10
Last
[2] 58:21 73:18
Lateral
[2] 23:19 32:11
Laterally
[1] 17:23
Laugh
[1] 23:9
Law

[1] 29:11
Lawsuit
[1] 3:9
Lead
[1] 59:17
Leading
[1] 43:12
Leak
[15] 17:2 17:22 18:12 21:11 25:22 28:17 28:20 28:23 30:4 32:19 32:23 33:2 56:20 56:22 56:24
Leaked
[1] 21:12
Leaking
[2] 19:23 20:1
Leaks
[7] 17:8 17:21 19:18 19:21 28:25 33:4 33:5
Learn
[2] 14:20 73:11
Learned
[1] 39:2
Learning
[1] 22:9
Least
[3] 17:19 55:3 70:22
Leave
[5] 25:20 26:7 26:18 30:17 58:5
Leaving
[2] 27:10 27:12
Left
[7] 20:12 25:18 27:16 42:8 52:24 53:5 53:14
Leg
[5] 52:19 53:5 53:6 53:14 62:10
Legal
[1] 9:12
Less
[3] 22:14 26:7 51:4
Letter
[1] 10:10
Level
[1] 69:24
Leveling
[1] 69:24
Library
[2] 12:4 12:17
Life
[1] 73:23
Lift
[1] 47:11
Likely
[3] 52:16 57:6 57:20
Line
[1] 18:3
Lines
[1] 53:23
Liquid
[5] 33:25 34:10 34:13 49:16 50:11
Listed
[1] 7:4
Listening
[1] 45:12
Literature
[3] 11:3 36:23 38:21
Live
[2] 60:13 60:19
Living
[1] 60:12
Look
[29] 16:6 17:6 22:6 23:2 23:5 34:20 35:25 36:10 37:21 39:10 40:15 41:3 47:23 48:12 50:19 50:20 52:2 52:18 54:4 59:4 62:5 66:24 68:5 68:15 69:25 70:6 70:12 73:2 73:3
Looked
[10] 5:22 6:2 10:25 34:21 36:12 41:25 64:6 65:16 65:17 66:17
Looking
[7] 10:18 23:1 36:5 39:20 44:19 52:14 59:7
Looks
[3] 35:1 35:1 36:1
Loosing
[1] 55:17
Lose
[3] 29:4 29:19 74:24
Lost
[1] 73:18
Louisiana
[2] 1:10 1:11
Lower
[1] 64:23
LPA
[2] 1:14 1:19
Luck
[1] 30:8
Lucky
[1] 39:22
Lumbar
[2] 31:1 31:4
Lung
[2] 15:17 33:10

M

M.D.
[2] 1:6 1:22
Ma'am
[4] 27:22 31:9 35:15 36:21
Machine
[1] 20:3
Main
[3] 16:11 22:14 73:8
Major
[1] 60:6
Majority
[1] 69:8
Malpractice
[2] 5:24 73:16
Man
[3] 29:14 70:21 74:18
Man's
[2] 31:19 56:2
Manipulate
[1] 20:3
Manipulated
[1] 23:19
Manner
[2] 11:4 34:3
Marietta
[2] 1:7 75:3
Marilyn
[2] 1:4 3:9
Mark
[1] 60:23
Marked
[1] 8:11
Material
[1] 39:15
Materials
[2] 8:19 9:3
Matter
[7] 24:6 27:10 27:12 32:14 37:8 37:25 76:18
Maximum
[1] 38:5
Mean
[42] 17:25 18:20 20:6 20:11 25:23 28:8 29:9 31:14 32:14 33:12 33:18 33:18 34:18 35:23 37:12 38:13 42:8 43:12 43:15 43:23 45:22 51:3 51:19 54:21 55:4 55:16 55:19 58:8 58:16 59:3 60:16 60:19 63:12 64:20 64:24 65:4 67:12 68:6 68:11 68:22 73:1 73:15
Meaning
[4] 26:25 50:13 53:5 58:2
Means
[6] 51:16 52:9 68:8 68:10 71:21 72:15
Meant
[1] 13:4
Mechanism
[1] 21:12
Medial
[7] 31:9 31:15 32:5 32:6 32:10 32:12 32:12
Medical
[7] 11:3 11:14 12:5 28:14 30:9 36:22 50:7
Medicine
[7] 11:16 14:21 29:11 30:25 59:15 73:22 73:24
Medtronic/Danek
[1] 72:22
Melts
[1] 72:24
MEMORIAL
[1] 1:7
Memory
[1] 60:3
Mention
[3] 70:4 70:14 70:23
Mentioned
[1] 6:13
Mess
[2] 23:12 23:14
Messed
[1] 69:3
Met
[1] 72:11
Methylmethacrylate
[2] 50:12 56:13
Middle
[2] 74:7 74:13
Midline
[1] 59:22
Miely
[1] 10:8
Might
[1] 66:3
Milk
[4] 34:17 49:7 49:9 58:24
Mind
[4] 41:16 50:5 52:2 62:13
Mine
[1] 41:24
Minimize
[1] 22:13
Mint
[1] 12:4
Minute
[4] 3:25 30:13 32:18 61:5
Minutes
[1] 29:13
Misdiagnosis
[1] 43:18
MISHKIND
[1] 1:14
Mixes
[1] 48:7
Mixing
[1] 46:4
Mixture
[7] 5:10 5:12 5:14 19:17 48:18 48:25 54:8
Modeled
[1] 48:14
Mom
[1] 60:16
Monitor
[2] 40:25 41:2
Months
[4] 14:8 43:22 73:21 73:22
Most
[3] 9:20 38:8 65:3
Move
[5] 45:25 49:22 49:23 53:17 62:9
Moved
[1] 41:23
Movements
[1] 23:15
Movie
[1] 62:11
MRI
[1] 74:11
Muscles
[2] 53:8 53:8
Must
[1] 65:15

N

Name
[3] 3:7 6:19 42:19
Named
[1] 12:8
Narrow
[1] 9:25
Nature
[2] 21:17 48:15
Necessary
[1] 25:20
Need
[6] 21:20 22:2 24:2 44:13 45:1 60:21
Needed
[1] 30:16
Needle
[20] 22:1 22:3 24:3 24:6 24:12 24:14 25:15 25:19 25:20 27:7 27:13 27:14 30:14 30:15 30:16 30:17 30:21 31:22 43:6 44:1
Needs
[3] 64:5 64:25 65:1
Negligence
[7] 28:18 28:22 29:1 32:20 32:24 33:5 33:19
Nerve
[20] 17:17 19:1 43:5 44:1 46:18 46:20 46:21 47:8 47:9 47:10 47:13 51:3 51:5 51:11 51:22 53:17 54:18 54:19 54:24 55:5
Nerves
[10] 46:12 47:6 48:8 52:3 52:24 53:9 53:20 53:20 56:5 58:15
Neurologic
[4] 18:11 19:19 58:9 72:15
Neurological
[4] 11:18 44:12 57:6 57:21
Neuropathic
[1] 64:3
Neurosurgeon
[3] 29:23 30:1 64:25
Neurosurgery
[3] 11:15 11:15 11:25
Neurosurgical
[1] 44:11
Never
[11] 7:19 19:20 24:22 30:6 45:16 46:6 46:14 53:24 54:23 61:1 62:1
New
[8] 9:9 11:16 44:12 44:14 44:15 45:24 47:25 63:3
Next
[1] 22:24
Nice
[2] 40:22 59:9
Night
[1] 52:5
Nightmare
[2] 31:13 62:13
None
[3] 7:10 17:10 44:17
Nonetheless
[1] 30:2
Norm
[1] 69:6
Normal
[1] 46:1
Normally
[1] 48:16
North
[1] 11:17
Note
[3] 67:17 67:20 73:19
Notes
[5] 9:11 10:4 10:5 10:13 65:13
Nothing
[6] 32:5 42:10 42:10 46:16 50:10 55:10
Noticed
[1] 38:25
Nuances
[2] 14:14 68:12
Numbered
[1] 9:1
Nurse
[5] 60:14 60:16 60:17 64:7 68:20
Nurses
[2] 42:4 72:11

O

Object
[3] 53:24 53:25 54:1
Objects
[1] 50:9
Obvious
[1] 54:21
Obviously
[12] 7:19 19:11 31:22 40:13 43:12 46:16 48:12 52:2 55:21 61:14 68:21 71:4
Occasion
[1] 21:24
Occasions
[4] 4:4 4:19 4:25 24:1
Occur
[10] 17:4 17:22 18:19 19:1 22:5 29:1 29:21 30:3 32:19 32:23
Occurrence
[1] 28:23
Occurs
[2] 28:17 33:3
Octopus
[1] 34:8
Office
[2] 11:23 28:10
Offices
[1] 1:10
Often
[2] 17:4 22:5
Ohio
[3] 1:2 1:17 1:20
Old
[3] 12:4 34:18 59:9
Once
[7] 7:23 14:3 20:4 36:4 45:25 49:1 56:9
Oncologists
[2] 72:14 72:20
One
[53] 1:10 5:3 5:17 6:1 7:8 11:25 12:15 14:18 15:10 18:22 20:19 21:1 21:3 26:14 26:19 26:20 26:22 26:25 27:3 29:7 29:14 32:1 34:17 35:18 40:25 41:2 41:23 46:19 47:6 47:8 48:9 51:3 51:7 51:11 51:25 52:6 53:6 54:2 58:15 60:2 60:20 60:21 62:7 62:8 63:14 63:18 70:15 71:16 72:11 73:21 73:25 74:6 74:21
Ones
[1] 12:8
Op
[1] 71:13
Open
[1] 23:5
Opened
[1] 21:20
Opens
[2] 49:5 58:23
Operate
[1] 47:19
Operating
[4] 28:19 29:2 32:20 32:25
Operation
[4] 12:24 42:18 55:4 67:3
Operative
[3] 67:17 70:11 70:20
Opinion

[10] 25:18 44:10 45:14 47:18 53:15 55:6 55:13 55:22 56:19 57:8
Opinions
[4] 3:11 3:14 11:2 64:9
Opportunity
[3] 36:7 54:13 55:9
Opposed
[2] 8:22 51:1
Opposite
[1] 26:9
Optic
[1] 17:16
Optimal
[1] 22:14
Options
[4] 62:25 63:4 63:5 63:10
Orchestra
[1] 42:24
Order
[2] 16:16 30:17
Orthopedic
[1] 73:11
Orthopedist
[1] 73:10
Osteo
[1] 14:15
Osteoporosis
[1] 27:24
Outcome
[5] 26:10 37:23 68:18 69:4 76:17
Outlier
[1] 47:6
Outline
[1] 9:15
Outside
[6] 19:14 24:16 33:6 35:22 46:18 55:8
Overdue
[1] 37:15
Own
[3] 39:4 53:15 70:19

P

P.m.
[1] 1:12
Pad
[1] 9:12
Page
[2] 2:5 32:17
Pain
[6] 27:21 59:13 59:14 64:3 64:14 74:9
Paint
[3] 22:20 22:22 23:6
Paper
[1] 3:21
Paragraph
[2] 57:13 62:22
Paralysis
[1] 54:18
Paralytic
[1] 64:22
Paralyzed
[2] 53:7 67:15
Park
[2] 22:23 22:25
Parking
[1] 22:18
Part
[8] 6:25 17:10 28:18 29:1 32:20 32:24 55:21 73:9
Partake
[1] 46:4
Particular
[6] 12:10 33:18 35:16 41:2 73:7 74:2
Parties
[1] 76:16
Partner
[2] 6:19 12:1
Partners
[1] 12:14
Partway
[1] 24:7
Past
[1] 4:12
Pathologic
[1] 72:18
Pathologist
[1] 21:22
Pathology
[1] 19:16
Patient
[8] 8:7 12:11 16:1 16:2 16:9 29:20 63:10 68:18
Patient's
[1] 7:21
Patients
[2] 19:22 63:11
Peace
[1] 28:15
Peanut
[1] 34:16
Pedicle
[7] 29:12 31:9 31:12 31:15 31:23 32:6 67:1
Pen
[2] 32:15 32:16
People
[8] 21:2 28:10 28:15 29:10 41:10 54:17 54:20 72:16
People's
[1] 55:13
Percent
[2] 16:24 73:19
Perception
[1] 55:20
Percutaneous
[1] 14:12
Perfect
[2] 29:17 47:5
Perform
[1] 15:23
Performed
[7] 12:21 17:1 45:5 55:8 57:5 57:20 58:19
Performing
[4] 12:20 21:23 29:24 30:2
Perhaps
[2] 41:1 42:2
Peripheral
[1] 54:19
Periphery
[3] 48:9 52:1 53:3
Person
[2] 69:7 69:9
Person's
[1] 7:17
Personal
[1] 76:11
Perspectively
[1] 28:5
Physical
[4] 50:15 51:17 51:18 61:18
Physician
[3] 4:8 5:10 68:16
Physician's
[1] 6:3
Picture
[1] 29:17
Piece
[1] 37:20
Pilant
[1] 1:10
Pink
[3] 9:16 9:18 10:2
Pistol
[1] 56:16
Place
[6] 25:19 26:8 30:17 39:18 58:3 68:10
Placed
[3] 33:20 50:11 50:12
Placement
[4] 24:1 27:8 30:14 68:12
Plain
[1] 41:22
Plaintiff
[5] 1:4 1:18 5:9 5:15 5:18
Plaintiffs'
[2] 5:21 6:13
Plan
[1] 70:22
Planes
[2] 22:12 22:17
Planned
[1] 65:8
Plate
[1] 6:21
Play
[1] 34:5
Play-do
[1] 34:5
PLEAS
[1] 1:1
Plenty
[3] 32:13 47:16 54:17
Plug
[2] 30:17 64:25
Point
[9] 15:11 36:6 39:12 48:3 55:12 55:18 63:21 65:6 65:7
Pointing
[2] 24:21 67:7
Points
[4] 27:6 35:24 48:2 65:5
Poor
[2] 42:11 73:13
Porous
[1] 21:17
Position
[1] 22:7
Positioning
[3] 67:18 68:9 68:24
Possibility
[2] 19:9 54:5
Possible
[4] 18:11 18:15 18:23 63:15
Post
[1] 57:2
Posterior
[2] 59:5 59:20
Postoperative
[1] 57:25
Postoperatively
[1] 43:1
Postulating
[1] 32:2
Potential
[3] 4:17 48:3 54:1
Potentially
[5] 35:19 49:8 51:25 53:3 65:7
Practice
[8] 11:21 13:13 13:15 13:21 14:3 35:10 36:2 39:4
Precautions
[1] 29:25
Prefer
[1] 15:18
Premixed
[1] 35:13
Preop
[1] 10:21
Present
[2] 15:7 57:2
Presentation
[1] 72:10
Presentations
[1] 72:7
Presented
[1] 63:9
Preserved
[1] 58:1
Preserving
[1] 72:15
Pressure
[15] 20:9 37:5 37:16 37:18 37:24 38:5 38:21 39:10 39:21 40:9 40:13 40:15 40:18 40:24 40:24
Pressures
[1] 38:9
Pretend
[2] 45:18 50:16
Prettier
[1] 63:18
Pretty
[1] 66:17
Prevent
[1] 59:20
Price
[1] 58:15
Private
[2] 13:13 13:15
Problem
[10] 15:17 19:12 19:14 19:14 25:1 33:22 42:17 64:20 66:19 68:3
Problems
[8] 19:13 47:16 60:4 64:16 64:23 65:9 69:21 69:22
Procedure
[13] 12:10 13:8 13:25 14:23 15:10 15:16 16:8 16:8 17:11 23:21 27:3 31:1 71:22
Procedures
[8] 14:9 15:8 15:12 15:22 16:1 16:25 32:9 40:4
Process
[4] 14:8 20:7 36:6 40:1
Proctorship
[1] 14:1
Product
[1] 14:15
Progress
[2] 6:5 28:4
Progressed
[2] 5:4 7:9
Properties
[1] 50:16
Prophylactic
[1] 41:15
Prove
[3] 56:4 62:1 62:2
Provided
[1] 3:12
Prudent
[2] 29:23 30:1
Psychiatric
[1] 60:10
Psychiatrist
[1] 67:14
Publications
[1] 72:7
Pull
[2] 25:15 66:23
Pulling
[1] 24:6
Pulmonary
[1] 33:8
Puncture
[2] 31:1 31:4
Punctured
[2] 33:9 33:10
Purpose
[1] 18:7
Purposes
[1] 49:6
Pushes
[1] 51:24
Put
[42] 17:18 20:7 20:8 20:23 20:23 21:8 21:14 24:15 24:19 24:20 24:23 25:1 26:5 26:9 26:14 27:14 29:14 31:11 31:12 34:5 34:16 35:19 37:16 39:16 39:24 40:7 46:11 47:9 47:10 48:24 49:9 49:22 58:10 58:13 58:19 58:20 60:11 63:17 70:8 72:4 72:5 72:24
Putting
[2] 32:7 32:7

Q

Qualified
[1] 33:2
Quality
[1] 38:12
Questionable
[1] 74:11
Questioning
[1] 41:13
Questions
[8] 41:14 41:19 49:24 50:4 65:13 65:24 66:7 66:8
Quickly
[3] 48:16 49:3 50:2
Quite
[1] 23:3
Quote
[1] 67:17

R

Radiographic
[2] 37:6 37:22
Radiologist
[1] 36:9
Radiology
[1] 35:21
Radiopaque
[1] 39:15
Random
[1] 69:7
Rather
[1] 41:8
Rating
[1] 60:8
Ray
[2] 30:23 39:21
Rays
[1] 66:15
Re-operation
[1] 68:17
Reach
[1] 20:15
React
[1] 50:11
Reacts
[1] 50:9
Read
[10] 10:11 12:6 30:6 57:19 61:7 61:7 65:5 67:12 68:19 71:12
Reading
[3] 35:24 36:8 49:11
Ready
[1] 75:4
Real
[4] 34:5 38:10 63:2 63:6
Really
[24] 11:5 11:10 11:19 12:3 14:14 17:25 18:22 23:7 23:11 35:18 38:15 41:18 42:6 46:7 54:24 56:24 58:3 59:1 62:1 62:4 64:4 64:5 68:6 74:8
Reason
[4] 9:18 21:17 26:3 57:8
Reasonable
[4] 50:6 61:23 65:8 69:9
Reasonably
[3] 29:23 30:1 43:7
Reasons
[3] 40:25 41:3 54:9
Recant
[1] 58:13
Receive
[1] 10:7
Recess
[2] 4:22 36:15
Recognize
[1] 19:22
Recognized
[1] 20:1
Recommended
[1] 15:13

Record
[1] 58:12
Records
[8] 4:16 4:25 5:8 7:16 9:11 10:5 27:19 36:19
Recurrent
[1] 74:10
Red
[1] 11:15
Reduce
[1] 39:13
Refer
[1] 12:9
Reference
[1] 12:1
Referred
[1] 41:10
Referring
[2] 10:12 10:13
Refrain
[1] 3:19
Regain
[1] 18:6
Regardless
[2] 58:13 74:24
Regret
[1] 9:16
Regular
[1] 11:13
Rehearsal
[1] 42:24
Related
[6] 4:9 15:6 56:21 56:23 60:5 76:16
Relationship
[1] 47:20
Relay
[1] 72:13
Religious
[1] 11:19
Remember
[3] 3:18 9:23 9:25
Remove
[1] 53:4
Removed
[2] 16:20 36:4
Rephrase
[1] 3:16
Report
[18] 2:12 8:12 8:17 8:22 8:25 10:8 10:18 25:17 35:5 35:21 35:25 36:9 45:3 57:4 62:23 70:11 70:20 71:13
Reported
[2] 1:23 76:9
Reporter
[4] 1:24 3:3 76:4 76:24
REPORTER'S
[1] 76:1
Reporting
[1] 1:10
Reposition
[3] 22:3 24:2 25:16
Repositioning
[2] 24:7 30:15
Represent
[1] 3:8
Representing
[1] 5:9
Reroute
[1] 32:14
Rerouting
[1] 48:4
Residency
[3] 7:24 13:14 13:17
Resolve
[3] 61:14 61:15 62:15
Responsibility
[1] 42:21
Result
[1] 13:8
Results
[1] 33:22
Retain
[1] 37:17
Retained
[3] 3:10 4:11 7:14
Retired
[1] 60:15
Retrospective
[1] 73:4
Reverse
[2] 22:19 23:8
Reversing
[1] 23:10
Review
[11] 4:16 7:10 8:19 9:10 10:17 10:21 11:3 13:9 27:18 36:18 74:22
Reviewed
[9] 4:25 5:8 6:7 6:24 7:15 9:2 9:3 9:5 20:14
Reviewing
[2] 10:19 11:8
Rib
[1] 18:9
Ripe
[1] 39:24
Risk
[2] 28:8 62:17
Risky
[2] 20:22 21:6
RN
[1] 1:15
Room
[2] 58:5 70:23
Root
[1] 19:1
Rouge
[4] 1:9 1:11 6:17 36:13
Rough
[1] 10:10
Route
[2] 21:11 32:8
Routinely
[2] 35:6 38:20
Run
[2] 34:17 42:15
Running
[1] 35:4

S

Sacred
[1] 17:10
Safely
[1] 26:24
Safety
[1] 41:1
Salvageable
[1] 57:23
Save
[3] 54:1 54:11 54:14
Saved
[1] 8:10
Saw
[6] 20:2 49:14 58:22 62:18 67:15 71:17
Scalpel
[1] 49:13
Scan
[4] 44:7 45:6 52:3 54:23
Scheduled
[1] 75:1
Science
[1] 14:21
Scoliotic
[1] 64:22
Screw
[3] 29:12 29:14 32:7
Sculpting
[1] 40:2
Second
[6] 1:16 14:17 27:14 45:10 58:21 59:17
See
[22] 6:21 9:24 10:7 11:20 14:15 18:7 30:22 31:12 32:11 34:4 34:22 48:1 51:10 54:13 55:15 57:11 58:2 62:11 64:4 66:20 67:3 75:4
Seem
[1] 57:15
Segments
[1] 25:8
Seizure
[2] 44:5 73:21
Self
[2] 66:12 69:16
Self-explanatory
[2] 66:12 69:16
Seminar
[2] 13:22 14:4
Sense
[8] 43:25 50:25 51:15 52:11 53:13 53:16 56:8 71:24
Sensory
[1] 74:5
Sentence
[2] 57:19 58:8
Sequence
[1] 69:25
Series
[1] 9:1
Seriously
[1] 47:4
Served
[1] 4:11
Services
[2] 7:2 7:5
Set
[4] 16:22 48:20 48:22 76:7
Seven
[4] 17:7 19:21 33:6 69:11
Several
[5] 12:25 13:5 18:21 22:12 22:17
SEYED
[2] 1:6 1:21
Shaft
[1] 24:15
Shame
[2] 20:5 20:5
Shape
[8] 46:10 47:3 50:4 50:13 52:15 52:16 52:17 61:4
Shared
[1] 55:13
Shoe
[1] 44:13
Shoot
[4] 24:22 24:23 24:24 62:6
Shorter
[3] 18:8 18:9 18:9
Shorthand
[1] 76:10
Shot
[3] 56:15 62:5 62:9
Shoulda
[1] 57:1
Show
[1] 44:18
Showed
[1] 54:23
Showing
[1] 32:15
Shows
[1] 67:8
Side
[16] 22:22 24:12 24:19 24:20 26:9 26:15 26:22 26:25 27:3 27:11 27:13 27:14 27:16 39:17 39:17 59:21
Sides
[1] 53:2
Significance
[1] 66:16
Signing
[1] 8:23
Similar
[1] 29:16
Single
[1] 41:22
Singularly
[1] 12:23
Situation
[1] 21:9
Situations
[1] 15:14
Sketch
[1] 2:14
Skull
[1] 73:8
Slam
[2] 23:13 23:14
Slant
[2] 63:13 73:11
Sleep
[2] 29:5 29:20
Slot
[1] 22:20
Slow
[2] 22:10 23:4
Snowflake
[9] 46:18 46:20 47:4 48:8 50:3 50:24 51:2 52:16 53:19
Snowflakes
[1] 50:19
Society
[1] 11:17
Soft
[4] 46:5 46:8 46:22 54:10
Somatization
[1] 67:16
Someone
[8] 11:7 15:17 20:18 20:25 35:2 58:7 65:4 68:23
Sometime
[2] 13:6 14:23
Sometimes
[3] 3:22 24:6 62:3
Somewhere
[6] 22:21 35:19 36:1 53:7 53:8 60:9
Soon
[3] 49:14 56:10 59:4
Sort
[11] 9:12 14:1 14:9 16:6 18:25 37:8 38:1 40:21 47:24 50:23 63:8
Sounded
[1] 42:13
Sounds
[4] 42:4 42:5 42:6 48:10
Space
[6] 16:17 30:10 30:11 37:13 55:5 68:4
Spade
[2] 45:1 45:2
Speaks
[1] 67:9
Specific
[2] 11:4 65:23
Spinal
[11] 17:9 17:16 17:20 19:3 19:10 19:12 25:7 25:25 45:7 54:18 73:11
Spine
[3] 11:15 11:17 64:22
Spot
[1] 56:9
Stab
[1] 33:9
Stabilization
[1] 72:24
Standard
[3] 28:13 64:11 69:5
Star
[1] 34:8
Stars
[3] 9:25 47:1 47:2
Start
[1] 44:18
Starting
[1] 14:2
Starts
[2] 69:20 69:21
State
[3] 44:3 45:18 58:12
Stays
[1] 72:25
Steps
[3] 19:25 23:15 29:25
Sterilized
[1] 42:20
Still
[6] 15:7 26:9 40:21 42:19 56:16 59:15
Stimulator
[1] 63:23
Stop
[9] 20:9 20:23 26:14 32:10 32:12 33:24 35:20 51:11 60:1
Stopped
[2] 21:5 26:1
Stopping
[1] 65:6
Stories
[1] 61:11
Straight
[2] 40:7 63:15
Straw
[1] 39:16
Street
[2] 1:16 1:20
Studied
[1] 46:24
Studies
[1] 10:21
Study
[2] 46:4 72:21
Stuff
[4] 38:19 48:20 49:7 71:1
STUHR
[1] 1:19
Subpar
[1] 66:18
Subset
[1] 19:13
Subtract
[1] 38:11
Sue
[1] 73:20
Sued
[3] 73:16 73:25 74:6
Suggestion
[1] 32:1
Suggests
[1] 34:23
Suicide
[1] 60:11
Suit
[1] 73:17
Suite
[4] 1:9 1:11 1:16 1:20
Summary
[3] 10:14 10:16 65:14
Summer
[1] 75:5
Supervision
[1] 76:11
Supposed
[1] 25:6
Supposition
[2] 6:25 7:1
Surgeon
[7] 28:19 29:2 32:21 32:25 41:5 47:17 57:20
Surgeries
[1] 14:5
Surgery
[26] 15:20 15:22 17:12 19:11 27:2 29:24 30:2 43:23 45:4 45:10 45:14 50:22 50:23 54:13 55:7 57:5 58:18 59:2 61:19 62:19 63:9 67:2 71:15 73:8 73:11 74:

10
Surgical
[2] 28:3 72:4
Sweat
[1] 29:6
Swell
[1] 27:4
Sworn
[2] 3:2 76:6
Syndrome
[2] 43:17 43:19
Syringe
[1] 35:13
System
[1] 36:4

T

Tamp
[1] 39:1
Taught
[8] 13:19 14:19 22:10 27:4 30:6 34:3 47:18 54:20
Team
[3] 42:4 42:6 59:7
Tech
[2] 42:3 59:4
Technique
[1] 39:2
Techniques
[2] 13:7 25:3
Technology
[1] 39:1
Terms
[1] 56:17
Testified
[2] 7:20 8:5
Testify
[4] 3:3 75:3 76:6 76:7
Testimony
[1] 76:9
Text
[1] 11:22
Textbooks
[3] 12:3 12:12 12:18
Texts
[1] 12:8
Thecal
[1] 55:5
Theoretical
[1] 24:9
Theories
[1] 21:16
Theory
[1] 47:5
Therapy
[1] 28:14
Thermal
[1] 56:12
Thick
[1] 35:3
Thinking
[2] 49:6 56:3
Thinks
[1] 43:5
Thoughts
[1] 70:9
Thousand
[1] 74:25
Three
[10] 5:15 5:15 5:21 6:12 14:8 19:15 19:17 20:21 27:6 36:4
Time-to-time
[1] 12:9
Timing
[3] 46:2 48:6 50:21
Toast
[1] 31:10
Today
[2] 9:6 46:1
Tomorrow
[1] 54:16
Tonight
[3] 3:13 4:13 7:13
Took
[3] 14:8 45:17 67:25
Top
[1] 24:13
Touch
[2] 17:14 17:14
Touching
[1] 53:25
Tract
[3] 25:21 26:2 26:7
Trail
[1] 7:20
Trained
[1] 13:17
Training
[2] 29:8 39:6
Trajectory
[1] 22:13
Transcribed
[2] 62:20 76:10
Transcript
[1] 76:12
Translate
[2] 3:21 38:15
Transmitted
[1] 32:8
Transported
[1] 74:12
Treat
[1] 27:20
Treated
[1] 8:8
Treating
[1] 4:8
Treatment
[3] 28:3 62:25 63:20
Tres
[1] 36:14
Tresl
[6] 1:15 6:8 8:22 24:21 65:21 66:5
Trial
[2] 63:23 75:2
Tricks
[1] 33:23
Tried
[4] 9:23 55:14 72:19 73:10
Tries
[1] 68:17
True
[1] 76:12
Truth
[1] 76:6
Try
[20] 3:19 7:25 11:5 11:8 11:12 11:20 14:20 16:22 25:24 26:16 37:14 37:22 44:7 50:23 51:12 54:4 55:24 56:7 63:13 72:12
Trying
[15] 3:23 24:14 25:5 27:13 32:3 36:11 37:14 47:3 50:16 52:8 54:5 54:6 55:18 57:11 73:3
Tube
[5] 25:12 30:24 38:19 39:5 40:4
Tubes
[1] 35:6
Tuesday
[1] 1:11
Tumor
[5] 72:12 72:17 72:18 74:2 74:4
Tumors
[1] 72:16
Turns
[1] 58:24
Twice
[3] 20:5 36:4 43:21
Two
[12] 5:11 5:15 5:16 6:11 6:12 15:22 26:13 46:19 49:8 51:3 54:8 58:15
Type
[6] 13:22 17:18 34:8 41:20 51:13 54:7

U

Uncomfortable
[1] 26:4
Uncontrollable
[1] 34:14
Under
[1] 76:10
Understood
[1] 23:24
Unfortunate
[1] 29:16
Unfortunately
[3] 10:2 33:20 42:11
Unique
[1] 15:14
Universe
[1] 46:24
Unknown
[2] 30:9 58:1
Unless
[2] 44:18 44:21
Unsafe
[1] 35:1
Unsure
[1] 49:19
Unusual
[1] 70:16
Up
[14] 11:7 11:12 23:12 23:14 30:18 30:23 43:2 44:12 44:15 49:5 58:23 69:3 70:10 73:10

V

Various
[3] 7:2 10:13 56:17
Vein
[1] 21:18
Verbally
[1] 3:19
Versus
[3] 1:5 34:16 38:8
Vertebra
[1] 27:12
Vertebral
[7] 25:4 27:25 33:4 33:16 35:22 36:25 72:19
Vertebrally
[1] 33:21
Vertebroplasty
[38] 12:20 12:23 13:6 13:9 13:11 13:16 14:11 14:24 15:13 15:18 16:25 21:24 22:1 25:5 27:20 28:17 31:3 38:8 38:16 38:18 38:20 40:4 40:8 40:10 40:22 40:23 41:3 41:8 41:10 41:11 43:9 63:7 70:5 70:19 71:11 71:19 72:4 72:8
View
[3] 23:19 23:22 67:8
Viscus
[1] 33:11
Visible
[2] 17:18 31:7
Visual
[1] 37:19
Visualization
[2] 20:6 26:25
Visualize
[2] 14:17 22:16
Visualized
[2] 22:11 67:1
Vitae
[1] 2:11
Volume
[5] 9:19 37:5 37:13 37:15 39:21
Vomit
[1] 17:17
Vomiting
[1] 73:24

W

Wait
[7] 15:21 33:24 39:24 45:9 48:19 53:14 55:2
Waiting
[2] 48:22 54:22
Wakes
[1] 43:2
Waking
[2] 44:12 44:15
Walk
[3] 28:10 59:10 59:11
Walking
[1] 12:13
Walks
[1] 43:4
Wall
[4] 31:10 31:16 31:23 32:6
Wants
[3] 6:22 62:11 68:21
WASHINGTON
[1] 1:2
Watch
[1] 60:11
Ways
[1] 18:21
Week
[1] 22:24
West
[1] 1:16
Wheel
[1] 23:12
Whipped
[1] 56:16
Whole
[4] 18:7 56:25 56:25 65:25
Wife
[2] 23:7 68:20
Wilkinson
[1] 11:24
William
[1] 11:24
Win
[1] 74:24
Window
[2] 54:12 55:8
Wire
[1] 39:19
Witness
[5] 5:2 7:14 7:20 66:9 76:5
Woman
[1] 7:24
Women
[1] 27:24
Wonder
[1] 46:8
Word
[5] 61:25 67:19 67:21 67:23 67:25
Words
[1] 73:13
Workman's
[1] 74:14
Works
[1] 53:14
Workup
[1] 44:21
Worried
[1] 26:12
Worth
[2] 51:7 52:1
Worthington
[1] 1:20
Woulda
[1] 57:1
Wrapped
[1] 56:5
Write
[6] 9:18 9:21 10:1 44:19 67:20 71:14
Writing
[4] 8:22 66:25 67:20 71:7
Written
[4] 8:18 57:12 65:14 72:9
Wrongs
[1] 49:8
Wrote
[10] 8:21 57:22 62:18 65:19 66:4 67:17 68:25 70:8 70:10 70:24

X

X-ray
[6] 30:23 36:5 39:21 40:16 44:7 59:4
X-rays
[6] 10:19 10:25 39:17 39:25 66:15 66:16

Y

Ya'll
[3] 60:20 62:6 62:7
Year
[1] 63:4
Years
[2] 12:15 34:18
Yoman's
[1] 12:1
Yourself
[4] 14:10 36:11 58:16 62:11