IN THE COURT OF COMMON PLEAS FOR TRUMBULL COUNTY, OHIO

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JA MIRRA HEASLEY, a minor, :
By and through her mother :
And next friend, Melissa :
Heasley, ET AL :
Plaintiffs : CASE NO.
v. : OO CV 969
ST. JOSEPH HEALTH CENTER, ET AL :
Defendants :

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Arlington, Virginia

Tuesday, July 30, 2002

Telephone deposition of ROBERT GHERMAN, M.D., a witness herein, called for examination by counsel for Plaintiff in the above-entitled matter, taken at the Marriot Crystal Gateway, 1700 Jefferson Davis Highway, Arlington, Virginia, beginning at 6:10 p.m., before Edward R. Bullock, a stenotype reporter and Notary Public

in and for the Commonwealth of Virginia.

APPEARANCES:

On behalf of the Plaintiffs:
John W. Burnett, Esq.
Becker & Mishkind
Becker and Haynes Building
134 Middle Avenue
Elyria, Ohio 44035

On behalf of the Defendant Ronald P. Brennan, M.D.:
Thomas A. Treadon, Esq.
Roetzel & Andress
222 South Main Street, Suite 400
Akron, Ohio 44308

On behalf of the Defendants St. Joseph Health Center and Young K. Lee, M.D.:
David C. Comstock. Esq.
Comstock, Springer, & Wilson
100 Federal Plaza East, Suite 926
Youngstown, Ohio 44503-1811

C O N T E N T S

E X H I B I T S

P R O C E E D I N G S

(6:10 p.m.)

Whereupon,

ROBERT GHERMAN, M.D.,

a witness, was called for examination by counsel for Plaintiffs and, having been duly sworn, was examined and testified as follows:

EXAMINATION BY COUNSEL FOR PLAINTIFFS

BY MR. BURNETT:

Q. Doctor, I am going to be asking you a series of questions under oath, of course. If I ask you a question that is unclear to you, or somewhat confusing, if you will please tell me that, I will do my best to rephrase the question; is that fair?

A. Sure.

Q. Furthermore, if you answer the question, I am going to conclude that you understood it and that is your best answer; is that fair?

A. Yes.

Q. Finally, especially because of the speakerphone on your side, I hope you will wait a heartbeat after I have asked my question. This will actually serve two

purposes, it will allow the court reporter to conclude typing my question, it will also enable you to formulate an accurate response. It actually serves three purposes, with these speakerphones our voices may collide in air and I am not going to be able to hear your response, okay?

A. Sure.

Q. All right. Are you an active duty Naval officer?

A. I am.

Q. And what is your rank?

A. It is currently Lieutenant Commander, although I have been selected for Commander.

Q. Now, do they frock in the Navy? Is that where you get paid before you pick it up? Is that before you put the insignia on that you get paid at the higher rank?

A. No, I believe you get paid once you put it on itself.

Q. Okay, that is what I thought. I see you have the Navy and Marine Corp Achievement Medal. Why did you get that?

A. Actually, I believe--I don't know what CV you

are looking at, but actually there should be two Navy and Marine Corp Achievement Medals. Are you asking the reasons for them?

Q. Yes, please.

A. One essentially involved my performance in the establishment of an internal fetal medical service in Okinawa, Japan. That was several years ago. The other one would have involved in the cost savings from a research protocol that I had established and instituted.

Q. Any other--actually you have got things listed on here. Do you have a copy of the CV with you?

A. No, I do not.

MR. TREADON: I do. I have got a copy.

MR. BURNETT: If it is the same one I have, Tom, we don't need to make it part of the record.

MR. TREADON: All right. We'll I assume it is because we copied it from mine.

BY MR. BURNETT:

Q. Doctor, I see that you are a diplomat of the American Board of Obstetrics and Gynecology, and you passed the written test in June of '95; is that right?

A. I believe that is right. Well, yes, I passed

the written exams in June of '95.

Q. Did you pass that the first time?

A. I did.

Q. Why did you wait until November of '98 to take the oral examination?

A. Actually the way that the rules are established by the American Board, while you are in your fellowship, I am not able to collect cases while I am in my fellowship. At the first available opportunity after I completed the fellowship, I collected the cases. I sat for the exam and took the exam. It was merely a result of the fact that I proceeded directly into fellowship after my residency training.

Q. Okay. How did you end up in the Navy, by the way?

A. They offered us fellowship, and I took it.

Q. Was that for undergrad or medical school?

A. Medical school.

Q. It is your intent to be a career Navy officer, or do you just owe them a certain amount of time?

A. Actually, the end of my obligated service was up in July, and right now I am year to year.

Q. Do you intend to stay in the Navy?

A. I have not made up my mind yet.

Q. I notice you have been involved in a number of studies involving brachial plexus injuries. And without going into each study, my question to you is: Did you receive any additional compensation through any entity whatsoever for your role in these things?

A. No, I did not.

Q. Are these studies sanctioned by your superiors in the Navy?

A. I am sorry, are they what?

Q. Are they sanctioned? I mean do you get the go ahead to take part in these studies?

A. Well I am not quite certain what you mean by that. That is certainly not my primary, or secondary, or thirciary work job in the Navy.

Q. I didn't mean to imply that it was.

A. I mean, those studies are done, well several of the studies that you mentioned were actually done when I was a fellow. There would have been a research requirement when I was in the fellowship.

Q. Okay.

A. The studies that were done outside of fellowship, some of those were IRB approved. They would have been sanctioned by the IRB if they involved patient use or care.

Q. What is the IRB?

A. Investigational Review Board. But again, the ability to perform a research would be far at the bottom of things that I do on a routine basis.

Q. That is what I figured. How do you spend your time? Is over fifty percent of your time dedicated to clinical practice and/or instruction?

A. Absolutely. I think probably seventy-five percent or so right now of my time is spent on clinical care. Probably another fifteen to twenty percent, again depending on what we do, is spent on--I'm sorry, about ten or fifteen percent is administrative and another five percent is military related stuff.

Q. I see, okay. Tell me a little bit about--are there any publications that you're aware of that have been submitted that have not been published and that are not indicated on your curriculum vitae, Doctor?

A. I would have to look at the CV. I have

materials that are constantly in work that haven't been published.

Q. Is there anything in work right now that has not been published that deal with brachial plexus injuries?

A. Not that they deal with brachial plexus injuries, per se. I'm sorry, well, yes.

Q. So, you do?

A. I do, yes.

Q. Would you identify those for me, please?

A. They would have been--I believe one of them would deal with a letter to the editor, I mean, a guest editorial written for an OB-GYN survey that is not listed on here.

Q. Okay.

A. Actually, it looks like this CV is outdated by several years.

Q. Are there any articles listed on there?

A. There are. As far as I can remember now, I have thirty or thirty-five publications. Actually I recently wrote a chapter that was published in Clinics of OB-GYN. I also had something recently accepted to Green

Journal. The other thing is that this CV looks like it is from around 2001, or so. I would be glad to supply you with an updated CV.

Q. That's fine. Is there anything that's missing from this CV that deals with brachial plexus or the management of shoulder distortion?

A. Again, I think that there are, and those would be the publications that I had mentioned, some of which had been published, and some of which are in press.

Q. Have you come to any conclusions that are drastically different on these issues than what you have previously published?

A. In a general sense, no. I think each of the publications has kind of addressed a different issue. I think they have kind of developed more fully. The publications that I had really addressed one specific issue. Whereas, I think some of these later things have really addressed the issue as a whole.

Q. Okay. You currently instruct; is that right?

A. I am sorry?

Q. You are currently instructing students, right?

A. I mainly instruct student residents.

Q. Residents, okay.

A. There are some medical students that I teach as well.

Q. Do you have any course material that you hand out to these residents, or is this all with you watching them and them watching you?

A. No, for the most part, it is clinical teaching.

Q. Is there any course hand out involving ultrasounds or management of shoulder distortion when encountered?

A. No.

Q. Tell me how you utilize ultrasound in your practice. Do you read ultrasounds? Do you rely on the reports? Tell me about it.

A. Well that is a very general question. Part of what I would do as a maternal fetal specialist is the performance in generation of--I'm sorry, the performance in the interpretation of ultrasounds. Now that may run the range of performing a dating scan the first trimester to second trimester ultrasounds and prenatal diagnosis, as well the performance and detection of growth of abnormalities, either too little or too much growth of

the baby. Also, I would rely on reports generated from radiology and rely on the reports generated by another maternal fetal medicine specialist.

Q. Are you telling me that in your capacity you actually read the ultrasounds yourself and report on it?

A. Absolutely, yes.

Q. Are you board certified in radiology?

A. No. But I am board certified in maternal fetal medicine.

Q. Explain to me the relationship between the two?

A. One of the things we learn in the two-year period of time that we do in maternal fetal medicine is the performance and the interpretation of obstetrical ultrasounds. And so part of that, we have a basic understanding after completing an OB-GYN residency. But that the two, now three-year period of maternal fetal medicine, it involves the teaching and learning of ultrasounds. And for the most part, I don't have a need to refer a patient to a radiologist to do an obstetrical ultrasound. I can do them myself. I am certified to do that.

Q. Do you normally do that, or do you refer them

to a radiologist?

A. Well for the people that I would see, it would depend. Sometimes my clinical load is so great that I would ask a radiologist to help me. But if my clinical load is not so great, there would be no need for me to rely on a radiologist. I can do the ultrasound myself and interpret it.

Q. Okay.

A. In addition, although I transferred to a new hospital, the previous hospital I was at not only did I do the scans myself, but I would supervise and assist ultrasounds. At Portsmouth Naval Hospital, where I was until the end of last month, not only did I perform ultrasounds myself, by I was also involved in the--I directly oversaw four or five ultrasonographers as well, who would do scans under my supervision. I would interpret their scans as well. Again, in the hospital that I just came from, none of the patients were actually seen at radiology. At that hospital, our radiologists would not do the obstetrical ultrasounds.

Q. You mean by, ultrasonographers, the techs that actually do the scan, right?

A. Well the tech would do some and we would do some.

Q. When you say, ultrasonographers, do you mean an M.D.?

A. I'm sorry, a what?

Q. An M.D.

A. No, I mean a registered diagnostic medical sonographer.

Q. Okay, okay. I understand. How many per year do you read? Estimate for me how many are done for estimated fetal weight?

A. I would have no way of doing that. Clearly with every scan that we do, second or third trimester, there is going to be an estimation of weight. I think several years ago when I looked at it for my maternal fetal medicine boards, I had read about 4000 scans that year. We have done about 9000 between my partner and I. We did a huge number.

Q. Have you ever worked as a physician for a civilian institution?

A. I'm sorry?

Q. Have you ever worked as a physician for a

civilian institution?

A. I did some moonlighting during my fellowship at which point, again, I worked for the hospital. But essentially my higher clinical practices have been with the military.

Q. To your knowledge, has your conduct ever been called into question in a lawsuit against the military under the Federal Tort Claims Act for malpractice?

A. To the best of my knowledge, my own performance has not been. I was involved in a case when I was a second year resident where there was a shoulder dystocia that actually did go to trial. But again, I was just one of the residents involved in the care and treatment of the patient.

Q. What was your involvement in that case?

A. I believe I was a second year resident who was assisting in the delivery. I would have diagnosed the dystocia and called the third year resident in, and she would have resolved the shoulder dystocia.

Q. Would you have ever placed your hands on the child's head during that delivery?

A. I would have, yes.

Q. Would you have applied traction during that delivery?

A. Well traction is an inherent part of any delivery. I can only assume I would have.

Q. How many times did you apply traction in that delivery?

A. I don't recall.

Q. In that delivery, was there a turtle sign?

A. I don't recall.

Q. What was the result of that case?

A. I believe, again, that was a non-jury federal judge's trial. I believe it was found on behalf of the plaintiff.

Q. Was it alleged that the brachial plexus injury occurred when you had hands-on-care of the child?

A. I don't recall. I don't believe so.

Q. Do you know who the plaintiff's lawyer was?

A. No, I do not.

Q. Do you know what year it went to trial?

A. '95 or '96. I am not quite sure.

Q. In what state?

A. I believe it was in Maryland.

Q. Were you deposed in that case?

A. I would have been, yes.

Q. Did you keep that deposition?

A. No.

Q. Did you review anything in preparation for this deposition?

A. I would have reviewed the medical records in the depositions that were sent to me.

Q. Did you review any scholarly publications or anything like that?

A. Not in specific for this, no.

Q. Did you receive Dr. Benson's deposition?

A. I did, yes.

Q. Did you receive the videotape?

A. I did, yes.

Q. How long have you been doing medical legal work?

A. I believe I received the first case in November or December of '97.

Q. By the way, as of December of '98, were you reading ultrasounds?

A. Yes. I was reading and interpreting.

Q. Okay. How many cases do you on average review per year?

A. I have limited it to one or two cases a month. So I look at about twenty to thirty cases a year, somewhere in there.

Q. Give me a break down of plaintiffs versus defendants as to your reviews?

A. I think now it is maybe 70/30 defendant, plaintiffs maybe 60/40. It waxes and wanes as far as cases that are sent.

Q. Of these cases, give me an idea of how many you have reviewed in which the issue was brachial plexus injury following a shoulder dystocia.

A. Probably about seventy-five percent of all the cases that I get sent are about that. I think that when I started reviewing cases in general, most of the cases that I looked at we are shoulder dystocia cases.

Q. Have you ever reviewed a case for a plaintiff involving issues of shoulder dystocia and brachial plexus injuries?

A. I have.

Q. Have you ever found a case for a plaintiff

meritorious?

A. Yes.

Q. How many times?

A. I believe two or three.

Q. How many have you reviewed?

A. It would be somewhere between five and ten.

Q. In those two or three cases that you found them meritorious, did the cases proceed into litigation?

A. I am not sure what you mean by litigation.

Q. Were these presuit or postsuit; do you know?

A. I don't specifically know.

Q. In those two or three times that you found cases meritorious for the plaintiff, did you author a report?

A. Not that I am aware of.

Q. In those two or three cases that you found meritorious for the plaintiff, did you give a deposition?

A. I believe in one I did.

Q. In what state?

A. I think it was Maryland.

Q. Do you know who the plaintiff's lawyer was?

A. I believe his name is Andy Greenwold.

Q. Andy Greenwold?

A. I believe so, yes.

Q. When did you give the deposition in that case?

A. That was a while ago, several years ago.

Q. So we are talking maybe '99?

A. Yes, maybe '98 or '99.

Q. Did you keep that deposition transcript?

A. I believe I did. Although, I have moved recently and I don't know where it is. I can only hope that it didn't get thrown out.

Q. All right. We talked about one of the depositions you have given. What about the other two or three cases you found meritorious for the plaintiff? Did you give depositions in those cases?

A. I may have. Again, as you know some of these cases take a very long period of time from when they are initially filed until they reach the deposition state. So, I don't know. I would have to go back and take a look.

Q. When would you have likely given depositions in those cases? Would they have been since '98 or '99, or would they have been earlier?

A. Either way. It may have been earlier or it may have been after. I don't know.

Q. Have any of these cases that you reviewed for plaintiffs that were found meritorious involved the issues of estimated fetal weight and ultrasounds?

A. I would have to go back and take a look. To the best of my knowledge, no. I would have to go back and take a look at the specifics of the case.

Q. Of the cases you review for both plaintiffs and defense, can you give me an idea, if any, of those involved the issues of ultrasounds and estimated fetal weight?

A. I would have to go back and look at the specifics of the cases. They very well may have. I mean, I don't know which cases did and which cases didn't. This is something that I don't keep track of.

Q. Do you know if you ever gave a deposition for a plaintiff or defense pertaining to the issues of ultrasounds and estimated fetal weight?

A. I very well may have. I don't specifically recall. That is something that I may have been asked to comment on and I have given the expertise on maternal

fetal medicine. As well as this may have been something that fell into my clinical purvey. That is again, that most likely at some point I would have been asked to comment on.

Q. Do you keep a master list of all the cases that you have reviewed?

A. No, I do not.

Q. What about the issue of weight gain of the fetus in the third trimester, per week, has that ever been an issue that you have commented on in either your reviews for the plaintiffs or the defense?

A. I think I would have most likely been asked that question at some point in time in some case. Again, I don't recall every question I have been asked in every deposition.

Q. Okay, would you recall addressing that issue?

A. Here again, if it was asked, then I would have addressed it.

Q. My question to you is though, do you recall addressing that issue in any case?

A. Again, that is a very specific question. It presumes that I know the specifics of every case. So

again, I can't answer that question really as you have asked it. I am certain that I have been asked that at some point in time in some cases that I was ever deposed on.

Q. Do you have any idea where Andy Greenwold has his practice, which city in Maryland?

A. I don't specifically know where his practice is.

Q. How many depositions have you given in the past year?

A. I give about one or two a month, so maybe twenty-five or thirty. Again, the depositions kind of wax and wane as the cases do.

Q. In the last year, have you given any depositions for the plaintiff?

A. I don't believe so.

Q. What's that?

A. I don't believe so. I may have, but I don't recall.

Q. How about in the year before that, had you given any depositions for the plaintiff?

A. Not that I specifically recall.

Q. Not that you specifically recall?

A. Correct.

Q. When was the last time you gave a deposition--

A. I am sorry, I think I have given depositions for the plaintiffs in other obstetrical cases.

Q. In the last two years?

A. Correct.

Q. Okay.

A. I thought your were just talking about those last two or three cases.

Q. No, no. I am sorry, I am not. So you think you have given depositions for the plaintiffs in the last year, or two years, correct?

A. Correct. Again, for some reason in the last several years I have sent other plaintiff cases, so I would have given depositions in those cases.

Q. Have you ever given trial testimony for a patient?

A. I don't believe so.

Q. You have testified at trial before though, correct?

A. Yes.

Q. It is fair to say that all of your trial testimony has been for the defense, right?

A. Yes. Again, I think that the plaintiff cases that I've reviewed had already settled or were for some reason not continued. Although some of the cases that I had reviewed, I believe are going to trial this year.

Q. How many times have you testified at trial; do you know?

A. Maybe somewhere between five and ten.

Q. Again, as of today, none of those have been for the patient, correct?

A. Correct.

Q. Does the radiologist have a duty to review each ultrasound and ensure the proper placement of the caliper?

A. They have an obligation to make certain that the performance and the interpretation is done to the best that it can be done given the circumstances under which the ultrasound was being done.

Q. Let me ask the question in a slightly different way then. Does the maternal fetal medicine specialist have a duty to review each ultrasound and ensure the

proper placement of the caliper, as in your practice?

A. I would be held to the same standard as a radiologist in the interpretation of the performance of an obstetrical ultrasound.

Q. Okay. For the remainder of the deposition, I am just doing to refer to the physician or the doctor in that regard; is that fair?

A. That's fair.

Q. Does the doctor have a duty to ensure that the caliper is to be placed on the outside edge of the soft tissue of the baby's abdomen for an ultrasound of estimated fetal weight?

A. I think they have an obligation to do the best that they can under the situation. Again, it is not always possible to place the caliper on the outside edge. I mean, I think that is the ideal situation, but clinically, that is not always possible.

Q. That is certainly going to give you the most accurate fetal weight, isn't it?

A. No, not necessarily. There is clearly an inherent range of error that goes into it. The accuracy depends on many different variables.

Q. Certainly if the estimate of the abdomen in the context of estimated fetal weight, that is going to be more significant than the same degree of inaccuracy in the placement of the caliper, say, around the head, right? I mean, the abdomen carries more weight, doesn't it?

A. No, not necessarily. In fact, when you look at the thing that has the most variability it is actually the abdominal circumference because that is actually influenced by, for example, pressing down with the transducer creating distortion. That can be difficult to see due to maternal lack of amniotic fluid volume. That is actually one of the hardest things to measure. It is much easier to measure, for example, the head or the femur because those are bones and those show up as very bright structures.

Q. That is what I was getting at. The abdomen presents the most variability, doesn't it?

A. Well, it presents as the hardest thing to measure, and because that is the hardest thing to measure, it presents the most variability.

Q. Does the doctor have the duty to know the

effect of having the caliper placement on the inside as opposed to the outside edge of if baby's abdomen and its impact of the estimated fetal weight?

A. Again, I think they have the obligation to do the best that they can given the clinical situation. Again, it is not just simply placing a caliper on the inside or the outside. There are ways of measuring the abdominal circumference. It is not just simply placement of the caliper.

Q. Well then tell me what they are?

A. The most common ways that you would measure it with ellipse, which is not just simply placing a caliper. In addition, there may be clinical situations where you cannot see the outside of an edge. Again, you may have it within the realm of subcutaneous soft tissue, but not directly on the outside edge. I think the outside edge is the ideal situation, but again, he is well within the standard of care if you get it close.

Q. How was it done in this case? Was it done by ellipse, or was it done by circumference?

A. Well again, the ellipse creates a circumference. Again, it is my interpretation in

evaluating this case that they would have performed an ellipse, which then the computer would have read off as the circumference.

Q. And the circumference, well the ellipse is the cross here, right?

A. No.

Q. Well then tell me what the ellipse is?

A. The ellipse is actually a circle drawing, if you will. Again, the way that it is done, that ellipse does not completely rotate. So again, it is very difficult to get it on the outside edge at one point and not on the outside edge on the other. It is just not always possible that way.

Q. Tell me the relationship of the caliper placement and the ellipse. I am a little confused on that point?

A. Well if you were here I could draw it and show it to you. But in general, calipers are placed and then from that an ellipse is generated from the machine. And again, what the physician or the ultrasound technician will do is rotate that one to fit that onto the image. But again, you are not always going to get it right on.

There are several factors in the clinical situations, but you will get it close.

Q. The ellipse is based on the caliper placement, correct?

A. In a sense, yes, but then again, in a sense, no.

Q. Why in a sense, no?

A. Once the calipers are placed, you still have to rotate the ellipse to get it to where it needs to go.

Q. By the way, is there any text support for your position that you just try to do the best you can if the caliper is not on the outside edge of the baby's abdomen, that you are still within the standard of care?

A. Again, I think from the training as well as the ultrasound books, I mean, I think ideally, in an ideal situation, you would like to have it go completely around. But clinically, that is just not always feasible.

Q. Here's my question: Is there text support in the literature for the proposition that clinically that is not always possible?

A. Sure, I think there is.

Q. Cite me a text?

A. One of the common textbooks that we use is Cullen. That one will tell you how to do it. I am not certain it would say specifically in there dealing with the ellipse and the rotation of the ellipse and the many different factors that go into it.

Q. Would that be the third or fourth edition that you use?

A. I believe I have the third, although I think I have the fourth. I probably use them both.

Q. You would recognize Cullen's as authoritative?

A. I don't think that any textbook is necessarily authoritative. I mean, there are parts of it that I would not agree with, and then there are parts that I would agree with.

Q. Would you agree with Cullen's in regards with placement of the caliper?

A. Again, you would have to read something out of it and then I could tell you if I agree with it or not.

Q. Did you refer to Cullen's in reaching your conclusion in this case?

A. Not specifically, no.

Q. What text did you refer to in reaching your conclusion this case?

A. I didn't refer to any specific text with regards to my interpretation.

Q. Okay. When a pregnant woman is approaching the thirty-eighth, or thirty-ninth, or fortieth week of pregnancy, is it fair to say that the baby may gain about a half of a pound per week?

A. Well I think that in my evaluation, the baby would gain about 250 grams a week, whatever that correlates out to.

Q. In this case, the estimated fetal weight by ultrasound 12/16/98, was 3717 grams. Did you understand that?

A. I am sorry, three thousand what?

Q. 3717 grams; is that fair to say?

A. Correct.

Q. That is about 8.3 pounds, correct?

A. Correct.

Q. Hello?

A. Yes I am still here.

Q. Did you answer the question?

A. I was not aware that there was a question.

Q. That is about 8.3 pounds, right?

A. Approximately, yes.

Q. Did Dr. Lee have the right to rely on that estimated fetal weight?

A. I think he did. Again I think that he, for the most part, the OB-GYN is not going to be performing an ultrasound themselves. They may in some situations though. But he referred the patient to Dr. Brennan. Dr. Brennan appropriately performed and interpreted the ultrasound and would have sent that information back to Dr. Lee with a report. It is Dr. Lee's obligation to then make a clinical interpretation of that in conjunction with his patient.

Q. You have got a morbidly obese patient in this case, right?

A. I wouldn't say that she is morbidly obese, but she is obese, yes.

Q. Don't you see the description in the medical records as, morbidly obese?

A. Again, that may be another interpretation of it.

Q. How much did she way?

A. I believe she was in excess of 300 pounds.

Q. How tall was she?

A. I don't specifically recall.

Q. Don't you consider that morbidly obese?

A. No, I don't. Again, I think she is obese. I would actually have to go back and calculate her body mass index. I didn't specifically do that when I looked at the case. I wouldn't call her morbidly obese. I think she is obese.

Q. If she is obese, then it is more difficult to perform the Leopold Maneuver, right?

A. Well in general, I mean, it is more difficult to perform any kind of estimation of weight, whether it be Leopold's or ultrasounds.

Q. Certainly with an obese patient, Leopold's versus estimated fetal weight by ultrasound, you are more apt to rely on the estimated fetal weight by ultrasound, right?

A. Again, I think the error rates are about the same with Leopold's as it is with an ultrasound. Clearly, your error rates rise as maternal obesity rises.

One is not better than the other in that situation.

Q. Macrosomia in a non-diabetic mother, is an infant that ways more than 4500 grams; is that fair to say?

A. Again, I think that is a fair assessment, yes.

Q. Okay. At 3717 grams with regard to the estimated fetal weight on 12/16/98, assuming the baby gained about 250 grams a week, you have got an infant weighing about 4217 grams, right?

A. Well I think that your logic is faulty. You are actually mixing apples and oranges because what you are assuming is, A, you are taking estimation of weight and you are adding a certain rate of growth and presuming that that equals the birth weight. Really it is two separate entities and you can't really mix them like that.

Q. Okay.

A. I mean you can add 3717 and 500 and come up with that number. That is a correct mathematical addition. However, that is not an appropriate way to come up with that.

Q. Well then, what is the appropriate way to come

up with it.

A. Well again, you can't really even do that. Again, one is the estimation of weight and the other is a known rate of growth of the fetus.

Q. Okay. Is there anything about this fetus that causes you to conclude that its rate of growth was any different than 250 grams a week?

A. Again, every fetus would have its own rate of growth. This is just an average, the 250 grams.

Q. You don't have an opinion in this case as to the rate of growth of this fetus in utero, correct?

A. I would give you what is the commonly quoted growth rate of 250 grams a week. This baby could have been less. It could have been more. No one will ever know that.

Q. Do you have any opinion to the reasonable degree of medical probability as to the rate of growth of this baby from 12/16/98 until its birth on 12/29/98?

A. To a reasonable degree of medical probability it would have been 250 grams a week.

Q. Okay. You, of course, have looked at the ultrasounds, correct?

A. Correct.

Q. Okay. As of 12/16/98, do we agree that the likely actual weight of this baby was at 11 pounds, or 4990 grams?

A. No, I don't think that we can agree to that.

Q. Why?

A. The only way that you would know that was if the baby was born on that date and you could have weighed it. All we know is that on the day of December 16th, 1998, you had an estimation of weight only. You can't make a presumption of birth weight on that day one way or the other.

Q. Well did you, you know, looking at Dr. Benson and looking at her deposition, made an effort to calculate the estimated fetal weight had the caliper been placed around the outside edge of the soft tissue of the baby's abdomen, right?

A. Correct.

Q. Did you do that?

A. I actually did it a little bit differently. I did not do it in the way that she did it.

Q. Please tell me exactly how you did it?

A. Again, I would have actually just done the circumference. It is my interpretation of what she actually did was just recalculate the abdominal diameters.

Q. Okay.

A. Rather than as an elliptical method.

Q. I am sorry, I don't understand what you are saying. What do you mean by rather than an elliptical method?

A. Well again, what the machine does it calculates it out in the abdominal circumferences. What she did is actually calculated out the diameters, and from that did a mathematical equation to get the abdominal circumference.

Q. Is it more likely than not that her assessment is correct?

A. It is more likely that her assessment is incorrect.

Q. Why?

A. That is not the way that the machine is going to do it. Again, from a mathematical view with the circumference being, Pi r squared, in her calculation of

the abdominal diameter, I think that she would have overestimated the weight.

Q. How did you do it?

A. I would have calculated just simply the abdominal circumference.

Q. Then what did you do?

A. Then I would have plugged into a machine and come up with a number.

Q. Did you do that?

A. I did.

Q. What machine did you plug it into?

A. I would have plugged it into, I believe we have an HDI 3000.

Q. A what?

A. HDI 3000.

Q. HDI 3000?

A. Correct.

Q. Did that generate any documents?

A. If it did, I didn't save them.

Q. Okay. What number did you come up with by the way of calculating this?

A. I think I came up with about 3800, somewhere in

there.

Q. How do you think you came up with that?

A. Because that is what I recollect doing. I didn't write it down. I would have put in the abdominal circumference, the biparietal diameter, and the femur length.

Q. You didn't write this down in your file on this case?

A. Not specifically, no.

Q. When did you do it?

A. After I would have read Dr. Benson's deposition and watch the video.

Q. And that would have been some time earlier this year?

A. Correct, yes. I believe I looked at it, I want to say April, March or April, somewhere around in there.

Q. You are telling me by memory that you remember this to be about 3800 grams?

A. Correct.

Q. And it isn't written down anywhere in your notes?

A. Again, I didn't make a specific notation of it.

I was not aware that I had to.

Q. Do you hold that opinion to a reasonable degree of medical probability that that is the correct estimated fetal weight for those ultrasound petitions of the fetal abdomen?

A. Well again, it would have been on my calculation of the abdominal circumference. I think what I did was actually simply imputted the biparietal diameter and the occipital frontal diameter and the femoral length that they got into our machine that I had at Portsmouth, and that is how I came up with that 3800 grams.

Q. What machine was used by Dr. Brennan?

A. I don't specifically know.

Q. Is it important for you to know that in reaching your conclusions?

A. Actually I am looking at it here. She used some sort of ATL machine. Again, you know every machine is slightly different, but they would have the same formulation for the calculation of the estimated fetal weight. It is not going to be specific--it is not going to specifically change my evaluation.

Q. If you are telling me that the estimated fetal weight was 3800 by your calculations on 12/16/98, tell me what your conclusion was as to the grams this baby weighing on its birth date thirteen days later?

A. Again, you have asked me that question in a roundabout way before. I can't--I won't make any kind of evaluation from an estimation of weight in adding the rate of growth of a fetus and then predicting what the birth weight is. Nobody can to that. That is not an appropriate way. You are mixing apples and oranges . You are mixing an estimation of weight and a known rate of progression of birth.

Q. You've got a situation here in which the baby at birth weighed about 5500 grams, correct?

A. Correct.

Q. Okay. And thirteen days earlier the estimated fetal weight was 3800 grams by your calculations, correct?

A. Again, I took what I saw on the films here and would have made my own evaluation of it.

Q. Okay. So the answer to my question is, yes, correct?

A. Correct.

Q. Have you, in your career, seen a discrepancy that large for a thirteen day period of time? From the time of the estimated fetal weight until the birth of the child, have you ever seen that large of a discrepancy?

A. Yes. I mean I have had --

Q. Wait, wait. How many times?

A. I can't specifically tell you that. But again, as for myself on either side, I have predicted where the birth weight was going to be, say, ten or eleven pounds and it comes out to be a normal-sized kid. As well as the flip side, I have predicted a normal-sized child and it comes out to be excessively large. Those things happen with estimation of weight. It is part of the clinical situation.

Q. In this case you are 1700 grams off. Have you been 1700 grams off before?

A. I think I have been even more than that, yes. It is simply an estimation of weight only. There is a known inherent error rate with ultrasounds. And that rate increases based upon several different situations. So, yes, we are going to be off. We are not perfect.

That error rate encompasses a range and that range is affected by several different variables.

Q. In those cases where you were 1700 grams off or more, and I want to say on the low side. Let's talk about that only. In those cases, did you experience shoulder dystocia at birth?

A. Again, I don't recall the specifics of each and every case in which there was an error in the ultrasound.

Q. Okay. In those cases in which you were 1700 grams off, did you go back and look at your caliper placement?

A. I may have. I don't know. That is not something that I would routinely do.

Q. Okay. If you may have, it is likely that you may have had a caliper placed on the inside edge of the baby's fatty tissue on the abdomen?

A. Generally, I don't think it is something that I would ever go back and look at because I would make my measurements and I would make them in real time. I would then go with the best estimate that I have. So, I can't think of any situations that I would actually go back and take a look. On the other hand, there are times when

there is difficulty in placing the caliper or difficulty in seeing the structure, you may not be able to put that entirely on the outside edge. So, yes, I have done that, not being able to put it on the outside edge exactly.

Q. Well in those cases where you were 1700 grams or more low, don't you think that you had a duty and an obligation to troubleshoot your procedures to look and see if you had problems placing a caliper, or not?

A. No, because again, I am trained as far as proper placement of the calipers that I know, there again, that is not accurate. It is just simply an estimation of weight only.

Q. It is likely that in those cases when you were 1700 grams low in your estimated fetal weight that the caliper was misplaced around the abdominal circumference, that is, that it was on the inside edge rather than the outside edge of the baby's fatty tissue?

A. No, I don't think that that was related to it. I think that it is related to the fact that it can be very difficult to estimate a weight. There are many different factors, the size of the patient, the lateness of the gestation, the presence or absence of an adequate

amount of amniotic fluid, how the fetus is lying. You just go with the interpretation of that ultrasound. So again, when you perform an ultrasound, you are going to counsel the patient that there is an error rate.

Q. We have talked around this issue quite a bit. Let me ask you if you would explain your opinions regarding, if any, regarding the standard of care in the ultrasound in this case. We have probably talked about it, but I would like to hear you articulate them.

A. Are you talking on behalf of Dr. Brennan?

Q. Yes, I am.

A. Again, the standard of care on behalf of Dr. Brennan would have involved the performance, if he is supervising the attack. I would assume that these were not performed by Dr. Brennan himself. It was performed by someone else. So you would have had a duty and obligation to make sure these were done properly or to the best ability they can, given the clinical situation, as well as his interpretation of what he saw. No, I don't believe that he is under any obligation to make any clinical interpretations of the findings, those would fall back on the provider.

Q. Okay.

A. And the provider, I am speaking of Dr. Lee in this case, to act on the information that was supplied to him.

Q. You are telling me in a roundabout way, that in regards to the standard of care that there was no deviation by Dr. Brennan in this regard, correct?

A. Correct.

Q. Are you making that assuming that these techs did the best they could in placement of the caliper around the baby's abdomen?

A. Yes, I am. It is not just the caliper, it is the ellipse that they have.

Q. Okay.

A. And again, they do the best that they can and that's all that anybody can ask of any health care providers. You can't do any better than you possibly could, that just isn't possible.

Q. But you are making that by assuming that they did the best that they could in placing the ellipse around the calipers, right?

A. Correct.

Q. So you don't know one way or the other whether or not if Dr. Brennan had sent them back and said, I want that caliper placed around the outside edge of the fetal abdomen and that ellipse properly place, whether they would have been able to do that around the baby's abdomen, right?

A. I don't believe anybody knows that. Again, that is not going to be clinically the way you practice medicine. You do the best that you can given if clinical situation that you have. You are not going to continually keep calling the patient back, especially. I presume that Dr. Brennan would have read the ultrasound after the patient would have left.

Q. Do you know one way or the other?

A. I don't specifically know that, no.

Q. Okay. Let's assume that the patient is still there, and those ultrasound films came to you and you look at them. Would you have said you to your tech: Go back and try to get the caliper placed around the outside edge of the baby's abdomen, or to get the ellipse properly placed. Would you have done that or would you have left these film as they are?

A. Are you speaking of the films I have sitting in front of me?

Q. Yes, the ones involving the abdomen and the caliper?

A. Again, I would have to let these go. I would have said: You know that they have done the best that they can. In fact in looking at it, you know in several of the images the calipers or the ellipse actually looks like it is over, and on the others it looks like it is slightly under. So probably, correct.

Q. In which film does it look like it is over?

A. I am not quite certain that I can actually identify it by number.

Q. I think the ones involving the abdomen are in the middle of one of those sheets.

MR. TREADON: Excuse me. The Plaintiff's Exhibit Two, I believe.

MR. BURNETT: Okay. Thank you.

THE WITNESS: Actually, it would be the one on the far right-hand side.

BY MR. BURNETT:

Q. There is three of them, right?

A. Yes.

Q. As you are looking at the document, or the film, it is the one on the right-hand side?

A. Correct, the far right.

Q. That is the one that what, the one that the ellipse is placed on the outside edge of the baby's fatty tissue?

A. On one side, and then on the other it is slightly less than that.

Q. Where is the caliper placed on that?

A. Again, it looks like the calipers are actually pretty darn close to the outside edge. I mean, I think you are splitting hairs here. It is pretty a darn close, I mean like a half of a centimeter, or less, from the edge it is.

Q. Is that in the diameter or circumference --

A. It is on the edge --

MR. TREADON: Okay, you are talking over each other now.

MR. BURNETT: I am sorry.

MR. TREADON: He wasn't quite finished with his answer. He was giving you the measurement of a half a

centimeter.

MR. BURNETT: I understand. I am sorry. Go ahead, Doctor.

A. I am sorry, maybe it is a quarter of a centimeter, or so, right from the edge. I mean, it is pretty darn close.

(A short recess was taken)

BY MR. BURNETT:

Q. Shoulder dystocia, Doctor, how many have you encountered in your career?

A. That is not something that I specifically keep a track of.

Q. Okay. I mean, like, thirty or forty? Just give me an estimate, please?

A. Probably more than fifty I would suspect.

Q. In those cases, have you ever proceeded all the way to a wood screw maneuver?

A. I would have, yes.

Q. With regard to the shoulder dystocia that you have encountered, have any of the children gone on the state of brachial plexus treatment?

A. Other than the one that I mentioned to you

earlier that I was involved with about ten years ago, not that I am aware of. There may have been others, but I am not specifically aware of any others.

Q. We can agree that it is a deviation to the standard of care for the OB to exert excessive lateral traction on the infant's head; is that correct?

A. Not necessarily, no. I think in a life-threatening situation that it would be okay.

Q. Assuming that we are not concerned with asphyxiation, and if you just initially encountered the shoulder dystocia, it is a deviation to exert excessive lateral traction, right?

A. Yes.

Q. In the circumstances in which you have encountered shoulder dystocia, have you ever exerted lateral traction on the infant's head more than twice?

A. I am sorry. In the situation of?

Q. When you have encountered shoulder dystocia, have you ever exerted lateral traction of the infant's head more than two times in attempting to deliver the body?

A. I have not, no.

Q. Okay. Have you ever exerted lateral traction on the infant's head after recognizing shoulder dystocia by seeing a turtle sign?

A. I would not have, no.

Q. Okay, and you would not have because you realized that the shoulder is already impacted; is that right?

A. Again the management of shoulder dystocia would warrant that normal traction only be used.

Q. I am not talking about normal traction. I am talking about excess traction. I am just saying have you ever exerted lateral traction, normal traction, more than two times after you have encountered shoulder dystocia?

A. Yes. Traction is needed in order to deliver the child.

Q. Okay. After the maneuvers have been performed to correct the shoulder dystocia--let me back up just a little bit here. You see a turtle sign, that is virtually diagnostic of shoulder dystocia, right?

A. I would not say, virtually diagnostic, no. It is suggestive.

Q. It is more likely than not that you have a

shoulder dystocia when you see a turtle sign, right?

A. I think that that is a fair statement, yes.

Q. Okay. What I am asking you is: After you have recognized shoulder dystocia by the way of a turtle sign, for instance, have you exerted lateral traction on the infant's head more than two times after that?

A. Again, that is not how you are going to recognize shoulder dystocia.

Q. I am not asking you that. I am talking about managing shoulder dystocia?

A. Well I believe you just said, after you recognize shoulder dystocia with the turtle sign, and I am saying, that that doesn't make a diagnosis of shoulder dystocia.

Q. What is the diagnosis then? How do you do it?

A. Well the diagnosis of shoulder dystocia would be failure of delivery of one or both shoulders after initial attempts at traction have been performed, and that the maneuvers had been performed. So, yes, you would exert traction. And when those shoulder fail to deliver with that traction, it would be then at that point when you would diagnose shoulder dystocia.

Q. And then your next move would be to move into the McRoberts, right?

A. Right. And the standard of care would be that you move to some maneuver. It does not tell you what maneuver you have to take.

Q. Okay. You typically go right for the McRoberts; fair to say?

A. Yes, I think that is a fair statement, yes.

Q. Now when I say McRoberts, I guess I am including suprapubic pressure along with McRoberts, are you --

A. No, they are separate entities. Clinically though, I, like most people, will kind of do them simultaneously together.

Q. That is what I meant?

A. But technically they are not the same. Some people may go right to suprapubic first, and some may go to McRoberts first and add suprapubic to follow.

Q. Then neither is outside the standard of care?

A. No. In fact, you would still be within standard of care if you went directly to a Zavanelli. Technically you are within the standard of care, but

clinically would most people do that? Well, no. But, if that is what the provider did, you know the standard of care only warranted that a maneuver be done to alleviate the dystocia.

Q. Can we agree that excessive lateral traction is a deviation of the standard of care assuming, no, wait, we have already talked about that, didn't we?

A. Yes.

Q. Okay. I am sorry. Let me move on. In this case, you read Dr. Lee's transcript; is that correct?

A. I am not certain that I was actually sent that.

Q. Take a look, please.

A. I believe it is really my involvement in this case was really looking at the case on behalf of Dr. Brennan.

Q. Okay. Have you received Dr. Brennan's deposition?

MR. TREADON: He is looking. I don't remember if I sent it to him or not, frankly?

A. I don't believe I did.

MR. TREADON: He did, however, receive all the clinical records.

BY MR. BURNETT:

Q. Okay. Doctor, had the estimated fetal weight on the ultrasound of 12/16/98 been 4500 grams or more, the standard of care certainly required Dr. Lee to counsel the mother with regard to maternal risks and benefits of Caesarean section; is that correct?

A. I think that if it had an estimated weight of 4500 grams, he should have talked to her about the alternative benefits and risks and inherent error rate and all that goes along with an estimation of weight. But that again, as the hypothetical, assuming that his estimated fetal weight was as you stated.

Q. It is a likely cause of the brachial plexus injury in this case in the lateral traction on the fetus's head?

A. Again, I am not in a position to comment on that. I have not reviewed Dr. Lee's deposition. And I have not specifically evaluated the case on that behalf.

Q. You are not going to make or render any opinions regarding the cause of the brachial plexus injury, correct?

A. If I am asked to, I will. But part of that

would involve further review of the depositions of testimony, specifically, Dr. Lee.

MR. BURNETT: I take it, Tom, that you are not going to utilize him in that regard?

MR. TREADON: No, I am not. Only, he can answer questions about shoulder dystocia in the general sense. I intend to ask him about those issues.

BY MR. BURNETT:

Q. Well, Doctor, I am taking a look at some of your articles. Is it fair for me to conclude that you, in general, you opine that more likely than not that lateral traction is the cause of brachial plexus injuries?

A. No, I don't believe any of my writings have stated that. I don't believe that I have said that.

Q. What is the likely cause, Doctor, of most brachial plexus injuries?

A. Well when you look at brachial plexus injuries as a whole, the most likely cause is the labor process itself, because, again, on about fifty-five percent of all brachial plexus injuries are associated with normal spontaneous vaginal delivery. There are brachial plexus

injuries that are associated with and caused by the shoulder dystocia process itself as well.

Q. What is your authority for the proposition that fifty-five percent of all brachial plexus injuries are caused by spontaneous vaginal deliveries in the absence of shoulder dystocia?

A. It would mainly be based on an article I wrote several years ago.

Q. What is the name of that article?

A. I believe it is called, Brachial Plexus Palsy In Utero. In that study, it contained information that we had published a year or so previously in which we had looked at brachial plexus over, I believe, a two-year period at the University of Southern California. In that study we found about forty percent of the cases were associated with normal spontaneous vaginal delivery.

Q. What articles are you referring to there?

A. Let me finish, please. From there we actually constructed a table where we looked at many different, I believe it was fourteen or fifteen articles, dealing with brachial plexus injuries. Our numbers were right in line with everyone else's. In fact, the average of all of

those things was about fifty to fifty-five percent. That is where that information comes from.

Q. When you talk about in utero brachial plexus injuries, do you include the times of a stretch injury in utero?

A. I think, yes, you can. Clearly you can have in utero. I think generally when a lay person hears, or when we think of in utero, we think of a chronic longstanding, but clearly there can be a compression and/or stretch. And clearly there can be a compression and/or stretch associated with the shoulder dystocia process.

Q. But you have no opinions as to this case as to the cause of the brachial plexus injury in this baby?

A. Again, I haven't been specifically asked to do that. Again if that is asked of me, I will ask for a review of the deposition of Dr. Lee, and I will go back and look at that clinical information and make my own interpretation of that.

Q. No, no.

MR. BURNETT: We just asked if he does that, you give me an opportunity to question him about that.

MR. TREADON: I will.

MR. BURNETT: Okay.

MR. TREADON: I mean, I will give you the opportunity if I give him that material to review.

MR. BURNETT: Yes. That is what I mean.

MR. TREADON: And I do not anticipate that I will be giving him that material to review. That was not the reason he was retained.

MR. BURNETT: Okay. Thank you. Bear with me, Doctor. I am just reviewing some records. I am sorry to keep you waiting.

BY MR. BURNETT:

Q. You have been involved in delivering children with shoulder dystocia, and my question to you is: Is there a tendency, Doctor, after applying lateral traction and you realize that the shoulder is not disimpacted, that if the obstetrician uses lateral traction again, either during the McRoberts and suprapubic pressure, or those following one another, that the obstetrician tends to exert more lateral traction each time he pulls on the head because of the anxiety he feels because of the situation?

A. I don't think so. Again, they would not be exerting lateral traction. That traction should be maintained with the axis of the fetus. In general, traction needs to be generated in order to deliver a child after a maneuver is done. I mean, the child doesn't just fall out after a maneuver is done. Traction has to be done. Now, again, really the provider would be the one to make that assessment. It was my interpretation that, again, speaking in generalities, if they are trained to handle that situation and that they know the amount of force and traction, that would be considered excessive.

Q. And then again, of course, you are making that assuming that they know the difference between excessive and acceptable traction, correct?

A. Well again, there is no clearly defined absolute threshold above which it is excessive. It is not something that we ever measure. Again, that would fall under to realm of the clinical training and the education of the delivering provider.

Q. Okay. By the way, given the fact that we have a 5500 gram infant at birth on 12/29/98, is it more

likely than not that the infant was macrosomic as of 12/16/98?

A. Again, I think that you are trying to--again, the way I would define macrosomic would be the birth weight. Again, I don't think we can say one way or the other. Again, that is measuring apples and oranges. Again, most likely if it had been born then, it would have been--it would have most likely been above 4000 grams.

Q. No, no. Macrosomia, I thought we agreed was 4500 grams in a non-diabetic?

A. No. Again, the way that I would define it is birth weight above 4000 grams.

Q. Okay. Well then let me ask you this: More likely than not, as of 12/16/98, and taking into account the birth weight of 5500 grams on 12/29/98, it is more likely than not that that infant weighed more than 4500 grams on 12/16/98?

A. I don't think anybody would ever know that. I don't think there is a way of knowing the birth weight.

Q. It is more likely than not that the infant would have been more than 4000 grams on 12/16/98?

A. I think more likely than not it would have been about 4000 grams.

Q. Okay. Then how can you tell me that no one could ever know that it is not over 4500 grams?

A. Because again, you are really trying to make a really kind of leap backwards from the birth weight to what it should have weighed at some other point. Again, I don't think that we really know going back, you know, knowing the birth weight going back, that is kind of really subtracting almost 250 grams a week that I have said that it would have estimated to have been, or what his birth weight would have been. I think that if you are at the lower end of 4000 grams, then, yes, I think it would have most likely been above 4000 grams if it had been born.

Q. Did you generate any notes in review of this case?

A. I would have made some notes about Dr. Benson's deposition.

Q. Okay. Do you have those with you?

A. I do.

Q. How is your handwriting?

MR. TREADON: It is readable.
MR. BURNETT: It is readable?
MR. TREADON: Yes, it is readable.
MR. BURNETT: Any problem, Tom, with having those copies and making them an exhibit to the deposition?
MR. TREADON: No, not at all. It is just one page.
MR. BURNETT: One page of notes?
MR. TREADON: Yes. Would you like for us to mark it?
MR. BURNETT: Yes. Would you, please.
MR. TREADON: Plaintiff's, Gherman, Number One.
MR. BURNETT: Yes.
MR. TREADON: And what we will do--would it be okay if we let the stenographer keep that and send the original back with the transcript?
THE WITNESS: Sure.
MR. TREADON: Is that okay? He looks like a real trustworthy guy.
MR. BURNETT: I am glad to hear that.
MR. TREADON: Okay. We have marked it,

Deposition Exhibit, Gherman, Number One. And those are the notes, as I understand it, relative to Dr. Benson's testimony.

THE WITNESS: Correct.

MR. TREADON: Done.

(Marked for identification)

BY MR. BURNETT:

Q. Doctor, let me ask you another question that I touched on earlier with regard to the studies you have taken part in involving shoulder dystocia and brachial plexus injuries. Do you know what organizations, if any, fund those studies?

A. I think for the most part they have not received any funding.

Q. How was it that you got involved in these studies then?

A. Well they would have been research ideas that I generated sometimes by myself and sometimes in conjunction with my other authors. I then wrote and performed.

Q. What does a Lieutenant Commander, active duty guy, with off-base housing allowance, you know, VHA and

BAQ, I suppose it is still called that, what do you earn per year?

MR. TREADON: Objection. You don't need to answer that.

BY MR. BURNETT:

Q. How much income is generated by your medical legal work per year?

A. I think last year it was somewhere in the neighborhood of $90,000 to $100,000.

Q. Mr. Treadon just objected to what you earn. I am talking only your medical legal work, not your --

A. Correct.

Q. --not your wage as Lieutenant Commander in the Navy?

A. Correct.

Q. How much money did you make last year for medical legal work?

A. I think it was around $90,000 to $100,000.

Q. You made $90,000 to $100,000 doing medical legal work last year?

A. Correct.

MR. COMSTOCK: That sure is a lot of shoulder

dystocia.

MR. TREADON: So you know, John, and I know you are getting near the end, I do intend to ask him about Dr. Edelburg's, or some of Dr. Edelburg's theories. He is well acquainted with Dr. Edelburg's work.

MR. BURNETT: Right. Well then just let me touch on those then.

BY MR. BURNETT:

Q. I take it that you are critical of Dr. Edelburg's opinions in this case; is that correct?

A. Correct.

Q. Tell me what your criticisms are.

A. Well again, I think that in a nutshell, Edelburg believes that because there is an injury present, excessive traction must have been used.

Q. Okay. And you disagree with that?

A. Correct.

Q. Why?

A. Again, I think that there is plenty of evidence in privy literature that says the opposite. I guess I kind of have a problem with Dr. Edelburg in general because I don't believe that he is an expert in this. He

has not done any research specifically looking at causation. But that in general, over the last five to ten years, there has been really a wealth of information looking at shoulder dystocia and looking at brachial plexus injuries. And again, these studies have been performed by some other authors, and again, some of which have been performed by myself as well.

Q. What studies have you performed?

A. Again, I have performed many different research studies dealing with McRoberts Maneuver, dealing with obstetric maneuvers, dealing with brachial plexus injuries both with and without dystocia, dealings with the X-ray analyses of the McRoberts Maneuver, and things like that.

Q. Correct me if I am wrong, but my understanding by looking at some of your articles of that of the research you have done, you have researched other literature; is that correct?

A. No. Again, some studies have been chart reviews looking at shoulder dystocia cases.

Q. You are right, I saw that, with regards to chart reviews?

A. Other studies have involved direct patient evaluations. Again, some of it has been writing interpretation of literature. So I really guess my research has kind of one of the gamut research.

Q. Do you know from looking at Dr. Edelburg's deposition that Dr. Lee exerted lateral traction on the child's head? Or as he called it, gentle downward traction on four separate occasions; do you understand that?

A. Yes, but then again, it would depend on what point in time. Traction is an inherent part of the delivery process. Initially, traction is going to be used and applied, and when it is unsuccessful in delivering the shoulder, the shoulder dystocia will be diagnosed at that point in time. A maneuver would be done, and I believe in this situation a McRoberts was performed. You would try traction again and then try suprapubic pressure and try traction again. I would have to go back and specifically look at that. I am assuming that was the case. That was within the standard of care.

Q. In this case, Dr. Lee as you know from looking at the deposition taken of Dr. Edelburg, Dr. Lee

testified that fundal pressure was applied and was stopped when he realized that he was encountering shoulder dystocia; do you understand that?

MR. COMSTOCK: I am going to object to the recitation of Dr. Edelburg reporting on what Dr. Lee saw. I don't think that is fair to ask the witness the interpreting of secondhand hearsay.

MR. BURNETT: Okay. I understand what you are saying, Dave, and I am trying to find a way around that.

MR. COMSTOCK: You are giving him an assumption as to the facts.

BY MR. BURNETT:

Q. Assume that Dr. Lee orders fundal pressure and it was applied by the OB nurses and then claims to have ceased fundal pressure once you recognized that there was a shoulder dystocia, would you assume that to be true, Doctor?

A. As you present it, I would assume it to be true. Again, I would need to go back and look at Dr. Lee's deposition and reviewed Edelburg's deposition.

Q. More likely than not, by the time he realized that there was a should dystocia, the anterior shoulder

had been impacted long before; fair to say?

A. Again I would have to go back and specifically look at that. I have not looked at that in this case. So I am not going to comment one way or the other.

Q. What other criticism do you have of Dr. Edelburg's opinions?

A. I have to go back. It has been a while since I have read his deposition. Again, I wasn't specifically looking at that from the brachial plexus injury causation point of view.

Q. It seems that it is your role just to discuss brachial plexus injuries in general and critique Dr. Edelburg's theory; is that right?

A. Well, no. You asked in a general sense what I believe about Dr. Edelburg in trying to draw inferences in this case. I am simply stating that what I did was to evaluate the care and treatment that was rendered by Dr. Brennan. And then superficially looked at what Dr. Lee did. And again, before I comment fully on that, that would involve me in evaluating Dr. Lee's deposition and going over the specifics of what he did.

MR. BURNETT: I don't want to get into all of

that, Tom. If he is not going to comment as to standard of care or causation relative to Dr. Lee's actions.

MR. TREADON: No, but I think my point was, is that he disagrees with the underlying premise that Dr. Edelburg is exposed all over if country, and that is, if there is shoulder dystocia that there must have been excessive traction applied.

MR. BURNETT: Gotcha.

MR. TREADON: Excuse me, if there is a brachial plexus injury, not a shoulder dystocia, then there must have been excessive traction applied. He disagrees with that and believes that Dr. Edelburg has no basis to say that.

MR. BURNETT: Doctor, what I would like you to do is to get me a copy of your most current curriculum vitae.

MR. TREADON: I will provide you with one. I gave you the one I had. Only mine was out of date, too.

MR. BURNETT: Do I essentially have all this guy's opinion, Tom?

MR. TREADON: I think in a general sense, yes.

MR. BURNETT: We are right at an hour and

thirty minutes now. That is usually how long I take.

BY MR. COMSTOCK:

Q. Doctor, you indicated that the average weight gain is a quarter of a pound, and I think you meant a half of a pound?

A. Well I think I said 250 grams, and whatever that calculates out to, I don't recall as we sit here what the conversion factor is.

Q. It is 450 grams in a pound. Well when you said quarter of a pound, it made me wonder.

A. Yes, I would have been mistaken. Thank you.

Q. Now the other question I have to ask you is, you defined macrosomia as being above 4000 grams. And it is my understanding in the field of maternal fetal medicine and obstetrics, a diabetic mother with a baby above 4000 is considered macrosomia. But, ordinarily the baby would have to reach 4500 grams before becoming macrosomic, and I heard something different from you?

A. Well I think--well maybe I can reclarify that. In general, I would define macrosomia based upon birth weight of 4000 grams across the board. Now, based on ultrasound diagnosis with macrosomia, you know,

ultrasound derived, it would be 4500 grams in a non-diabetic, 4000 in a diabetic. That is based upon ultrasound.

Q. Okay. I don't think that I have anymore questions.

MR. TREADON: John?

MR. BURNETT: Hold on. I am just looking at a couple of more things here. I think I am almost done here, Tom.

BY MR. BURNETT:

Q. Doctor, you didn't generate a report in this case, did you?

A. Not that I am aware of.

Q. Okay. And your file consists of the notes that we have already made into an exhibit, and what else? Please identify them for me.

A. It would have involved the correspondence of Mr. Treadon's office, several bills that I had sent, the complaint, and I think that is it.

MR. TREADON: For the record. He has reviewed the original ultrasounds, both from October and September of 1998.

BY MR. BURNETT:

Q. By the way, how much do you charge to review a case by the hour?

A. It would be $300 an hour.

Q. Okay. That is all I have.

MR. TREADON: That is all I have.

MR. COMSTOCK: I don't have anything else.

MR. TREADON: Thank you, gentlemen.

(Whereupon, at 8:13 p.m. the taking of the deposition concluded.)

CERTIFICATE OF DEPONENT

I hereby certify that I have read the foregoing pages of my deposition testimony in this proceeding, and with the exception of changes and/or corrections, if any, find them to be a true and correct transcription thereof.

_____

Deponent

_____

Date

NOTARY PUBLIC

Subscribed and sworn to before me this _____ day of _____, 20___.

UNITED STATES OF AMERICA)
COMMONWEALTH OF VIRGINIA)

I, Edward R. Bullock, the reporter before whom the foregoing deposition was taken, do hereby certify that the witness whose testimony appears in said deposition was sworn by me; that the testimony of the witness was taken by me in machine shorthand and thereafter transcribed at my direction; that said deposition is a true record of the testimony given by said witness; that I am neither counsel for, related to, nor employed by any party to the action in which this deposition was taken; and, further, that I am not a relative or employee of any attorney or counsel employed by any party hereto, or financially or otherwise interested in the outcome of this action.

Edward R. Bullock

Edward R. Bullock,
Notary Public in and for the
Commonwealth of Virginia

My Commission expires October 31, 2006.

These are not the same!! (review literature on this).

Review of Benson deposition

① she recalculated AD, not AC, in her revised EFW - they do not the same!! (are there differences in calculat EFW when using AD vs AC) ↑ she said they were the same.

② she implied AC not measured right (calipers were inside abd contour) - what does Cullen text say about this?

this would have been a very, very small ↑ in EFW only

Benson has very distort Attitude!!

- get Chairman involved → MFM who was written on EFW (UTZ; Blank) CLINICAL

DEPOSITION EXHIBIT GHERMAN 41 7-30-02

$C = \pi r^2 = \pi \left(\frac{1}{2} \text{ diameter}\right)$

he said this in his deposition that he reads them not in real time

does radiologist (Dr Benson) read scans as they are immediately done or some time later - does he read staff films??

(Benson implied that they should have gotten better images, but it may already have left!)

→ Need to review maneuvers used to alleviate SD by Dr Lee (? Bandal pressure used)