

IN THE CIRCUIT COURT OF THE CITY OF ST. LOUIS

STATE OF MISSOURI

MARIAM MOSTAFAVIFAR, a }
 disabled individual, by }
 SUZUANNE MOSTAFAVIFAR, her }
 duly appointed Next Friend, }
 }
 Plaintiff, }
 }
 vs. } No. 012-09612
 }
 WASHINGTON UNIVERSITY, }
 }
 Defendants. }
 _____ }

Expert
Acute OMC &
ACA Intervts

DEPOSITION OF MARVIN D. NELSON, JR., M.D.

Los Angeles, California

Thursday, July 10, 2003

Reported by:
 ELIZABETH PADILLA
 CSR No. 9048
 JOB No. 885837A

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vs.)	No. 012-09612
)	Division 1
WASHINGTON UNIVERSITY,)	
)	
Defendants.)	
)	

Deposition of MARVIN D. NELSON, JR.,

M.D., taken on behalf of Plaintiff at

4650 Sunset Boulevard, Los Angeles, California,

beginning at 9:47 a.m. and ending at 11:09 a.m.

on Thursday, July 10, 2003, before ELIZABETH

PADILLA, Certified Shorthand Reporter No. 9048.

1 APPEARANCES:

2

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1 Los Angeles, California, Thursday, July 10, 2003

2 9:47 a.m. - 11:09 a.m.

3

4 MARVIN D. NELSON, JR., M.D.,

5 having been first duly sworn, was examined and

6 testified as follows:

7

8 EXAMINATION

9 BY MR. ZWIBELMAN:

10 Q. Tell me your name, please.

11 A. Marvin D. Nelson, Jr.

12 Q. Where do you live, sir?

13 A. Los Angeles, California.

14 Q. You're aware that you've been endorsed as

15 an expert by the defendants in this case?

16 A. Yes.

17 Q. When were you first contacted?

18 A. Last spring, February, March.

19 Q. Of this year?

20 A. Yes.

21 Q. Who contacted you?

22 A. I don't remember.

23 Q. Have you ever dealt with them before?

24 A. I've dealt with several law firms in

25 St. Louis. I don't recall if this was one I've dealt

1 with in the past.

2 Q. May I see your file or your
3 correspondence or whatever you've got there.

4 It appears, chronologically that the
5 first correspondence that you got was -- I don't know
6 when it was. In any event, you were supplied with the
7 deposition of a Dr. Edwards-Brown; is that correct?

8 A. Yes.

9 Q. And you were supplied with an MRI and the
10 report of an MRI; is that right?

11 A. Yes.

12 Q. And some reports of radiology studies
13 that were done in 1983; is that correct?

14 A. Yes.

15 Q. You were sent the report of an EEG. Did
16 you see the EEG itself --

17 A. No.

18 Q. -- or just the report?

19 As a curiosity, why was that of
20 significance to you?

21 A. It wasn't.

22 Q. They just sent it to you?

23 A. Yes.

24 Q. Did you ask for it?

25 A. No.

1 Q. And then you were sent a letter on
2 May 8th about an MRI, and you were sent the petition,
3 and then, on July the 2nd, you were sent a letter
4 confirming this deposition; is that correct?

5 A. Correct.

6 Q. And you've actually seen what films?
7 Tell me what films that you've seen.

8 A. The CT scan that was done on
9 November 15th, 1983. One film of a cranial ultrasound
10 done on 21 November, 1983, the MRI done on
11 January 14th, 2003.

12 Q. And the reports of those -- were you sent
13 the reports of the initial ultrasound?

14 A. Yes.

15 Q. Did you ask for any additional records?

16 A. I briefly looked at the medical records
17 as well.

18 Q. When was that, sir?

19 A. This morning.

20 Q. And what medical records did you look at?
21 And if you could tell me what page, that would be
22 great.

23 A. This is the initial Barnes-Jewish
24 Hospital medical records.

25 Q. Of the child?

1 A. Of the child.

2 Q. Was there anything in there that you
3 looked at or that were you looking for that was of any
4 significance to you?

5 A. Well, at the time, I was looking over the
6 discharge summaries of the child's initial
7 hospitalization and was looking, specifically, for the
8 time that the initial ultrasound was performed, as it
9 wasn't on the report.

10 Q. Did you find that, sir?

11 A. Yes.

12 Q. And what time did you think -- do you
13 think it was performed?

14 A. 12:40 hours on the 13th.

15 Q. And so that would be how many hours of
16 life?

17 A. 32.

18 Q. Anything else you were looking for in
19 those records?

20 A. That was, principally, what I was looking
21 for.

22 Q. Did you make any notes either of your
23 review or the records or your discussions with
24 Mr. Rosenthal or anyone else?

25 A. No. All I have are a listing of the

1 exams and their timing.

2 Q. Telling me what the timing is that you
3 believe from the date of birth, the time that they
4 were done and how many hours or days they were from
5 date of birth, you say the first ultrasound was done
6 at 32 hours of life; correct?

7 A. Correct.

8 Q. What about the CT scan?

9 A. Three days and 13 hours.

10 Q. So that's 85 hours of life?

11 A. Roughly.

12 Q. If, in fact, there was testimony that it
13 was done at two days of life, that would just be
14 wrong; is that correct?

15 A. Well, that would suggest that they
16 mis-marked the film. I mean, the films state when it
17 was done, with a date and time on the actual CT. And
18 I would believe that before --

19 Q. In other words, if someone testified that
20 the CT scan was done at two days of life, that would
21 just be, by your calculations, wrong; is that correct?

22 A. Well, I have to go by what the evidence
23 states.

24 Q. And the evidence states 85 hours; is that
25 right?

1 A. That's what the films indicate.
2 Q. And then, the last ultrasound was done
3 when?
4 A. On the 21st of November.
5 Q. So that would be, roughly, nine days of
6 life?
7 A. Yes.
8 Q. Okay. Any other notes that you made?
9 A. No.
10 Q. Were you told anything -- I mean, you've
11 read the deposition of Dr. Edwards-Brown. Are you
12 aware that a deposition of a Dr. Gotto has been taken?
13 A. I know that he read the first CT scan.
14 I'm not aware that his deposition has been taken yet.
15 Q. And has Mr. Rosenthal or anyone told you
16 what he will testify to?
17 A. Not directly, no.
18 Q. Did he say something indirectly?
19 A. Well, he just said that -- that
20 Dr. Gotto's opinion is different than what his initial
21 report stated.
22 Q. Did he tell you how it was different,
23 sir?
24 A. Yes. That he, basically, believed that
25 it's an infarct, as is my opinion, and was before I

1 was made aware of that.

2 Q. Are you aware of any other experts other
3 than yourself and Dr. Edwards-Brown that either side
4 is going to be using in this case?

5 A. No.

6 Q. Do you know Dr. Edwards-Brown?

7 A. Yes.

8 Q. How do you know him?

9 A. Professional association.

10 Q. Do you know Dr. Gotto?

11 A. Yes.

12 Q. How do you know him?

13 A. Same way.

14 Q. Is he a neuroradiologist?

15 A. Dr. Gotto?

16 Q. Yes, sir.

17 A. Well, he comes from an era when -- before
18 there really was formal training programs. But he's
19 been a practicing neuroradiologist for -- oh, since
20 the late '60s, early '70s.

21 Q. Do you know if he does work on a regular
22 basis in pediatric neuroradiology?

23 A. I know that he has written in the
24 subject. I know he's been in St. Louis for many, many
25 years.

1 Q. Can you tell me what topics in the area
2 of pediatric neuroradiology he's written in?

3 A. I'd have to go and look at his C.V. to be
4 specific. I'm aware of some of the papers that he's
5 written on topographical localization using CT scans.

6 Q. That's on adults, though, isn't it?

7 A. Well, you can use it on children as well.

8 Q. But the studies are on adults?

9 A. No matter.

10 Q. I'm sorry?

11 A. I said that doesn't matter.

12 Q. I'm not arguing. It's just the studies
13 that he was doing in those articles were on adults; is
14 that correct?

15 A. It may well be. I'd have to see the
16 specific articles to see what patient population was
17 involved.

18 Q. Other than Mr. Rosenthal, have you talked
19 to anyone else about this case?

20 A. No.

21 Q. Have you done any independent research on
22 this case?

23 A. No.

24 Q. Are there any books that you consider to
25 be authoritative in pediatric neuroradiology?

1 A. No.

2 Q. Are there any standard textbooks that are
3 used by pediatric neuroradiologists to keep them
4 abreast of modern techniques or diagnoses or
5 treatments?

6 A. No.

7 Q. You believe, do you not, that standard
8 textbooks in this area are Ann Osborne's book; is that
9 correct?

10 A. Well, she's an adult neuroradiologist.

11 Q. What about Barkovitch's book? Do you
12 believe that's that a standard text?

13 A. These are texts that are used, but I
14 don't understand them to be authoritative. They're
15 the opinions of the authors and editors.

16 Q. Do you have one in your library?

17 A. I have one available for our teaching
18 program.

19 Q. What about Newton and Follow? Is that a
20 standard textbook used in pediatric neuroradiology?

21 A. Newton and Potts.

22 Q. Potts. I'm sorry.

23 A. Yes.

24 Q. Do you use that in your teaching program?

25 A. Yes. It's kind of the gold standard for

1 cerebral angiography.

2 Q. You don't use any of the textbooks by
3 Zimmerman, do you, sir?

4 A. I don't have any of those textbooks.

5 Q. Do you ever look at them? Have you ever
6 looked at them?

7 A. Only briefly, at shows where the vendors
8 are showing the books.

9 Q. I notice -- we are in your office; is
10 that correct?

11 A. Yes.

12 Q. I notice that you have a book by Volpe,
13 "Neurology of the Newborn." Is that, as far as you
14 know, a standard text in pediatric neurology?

15 A. It's a standard text.

16 Q. Other than the notes that you have in
17 front of you that are -- we talked about the timing of
18 them, you have no other notes; is that correct?

19 A. That's correct.

20 Q. No reports of any -- nothing in writing?

21 A. That's correct.

22 Q. We talked about Dr. Edwards-Brown and
23 Dr. Gotto. Do you know a Dr. Shackelford?

24 A. Gary Shackelford?

25 Q. Yes.

1 A. Yes.

2 Q. How do you know him?

3 A. Professional association.

4 Q. Do you know where he is these days?

5 A. No, I don't know, specifically, where he

6 is these days.

7 Q. Is he a pediatric neuroradiologist?

8 A. I believe he's a pediatric radiologist.

9 I'm not sure if he claims to be a pediatric

10 neuroradiologist or not.

11 Q. Do you know a D. Belding, B-e-l-d-i-n-g?

12 A. No, I don't know a D. Belding.

13 Q. I believe her current husband is a

14 Mr. Rosenthal. Do you know --

15 A. Yes.

16 Q. What about an A. Claybourne?

17 A. No.

18 Q. What about Marilyn Siegel?

19 A. Yes.

20 Q. How do you know her?

21 A. Professional association.

22 Q. Do you know a Dr. Benjamin C.P. Lee?

23 A. Yes.

24 Q. He's at Washington U., isn't he?

25 A. Yes.

1 Q. And Dr. Lee is a pediatric
2 neuroradiologist, is he not?

3 A. I believe that's what he does at that
4 institution.

5 Q. And he has written on neonatal cerebral
6 infarcts, has he not?

7 A. I believe so.

8 Q. Have you read any of those articles, sir?

9 A. Yes.

10 Q. When was the last time you read any of
11 those articles?

12 A. I have no idea.

13 Q. Okay. Now, in terms of your involvement
14 in this case, you are going to testify about your
15 interpretation of the films; is that correct?

16 A. Yes.

17 Q. You are not going to testify about
18 standard of care of any of the physicians?

19 A. That is correct.

20 Q. Are you going to testify about -- you
21 indicated, I think, when we talked about Dr. Gotto's
22 deposition -- I think your words were Mr. Rosenthal
23 said that he is going to -- that Dr. Gotto believes
24 this was an infarct, as you do. Are you going to
25 testify about the cause of the infarct?

1 A. Yes.

2 Q. Are you going to testify about any future
3 costs that the child might incur?

4 A. No.

5 Q. Are you going to testify about life
6 expectancy?

7 A. No.

8 Q. Are you going to testify about the kinds
9 of limitations you would expect to see with the head
10 films?

11 A. I don't understand your question.

12 Q. That was a bad question. Let me rephrase
13 it.

14 We'll ask you in some detail about what
15 you see on the films; okay? Are you prepared to
16 answer questions about what kind of physical
17 limitations, if any, that those findings on the films
18 would produce?

19 A. Physical limitations of --

20 Q. Or mental limitations.

21 A. Of the child?

22 Q. Yes, sir.

23 A. No.

24 Q. So, for example -- and this is just a
25 hypothetical. If you're going to say that there's an

1 infarct in a certain territory of the brain, would you
2 be in a position to say what kind of physical
3 limitations the child will have as a result of what
4 you see on the films?

5 A. No. And I think that that is out of the
6 scope of a neuroradiologist to do so.

7 Q. Okay.

8 A. You could give a general idea, but when
9 infarcts occur in young children like this, in
10 infants, it's completely impossible to predict what
11 they're, ultimately, going to end up like.

12 Q. Okay. And I appreciate it.

13 Let's put it another way. If I were to
14 tell you -- if I were to describe for you what the
15 child's present condition is, would you, as a
16 neuroradiologist, be in a position to tell me what
17 kind of damages you would expect to see on the films?

18 A. No. And that's impossible to do in
19 reverse as well.

20 Q. Okay. And I guess -- and this isn't the
21 situation, but for example, a child who's born at 26
22 weeks might have a condition of spastic diplegia,
23 clinically. Could you, as a pediatric radiologist,
24 say, "Well, based on the physical findings of this
25 child, I would expect to see on the films A and B and

1 C"? Could you do that?
2 A. No.
3 Q. How many depositions have you given in
4 your career?
5 A. Well over a hundred.
6 Q. You know, basically, that I'm going to
7 ask you some questions, and if you have any -- if you
8 don't understand my question, you're going to stop
9 me. Do you understand that? You'll do that?
10 A. I already have.
11 Q. This incident, as you know, occurred in
12 1983. That's what the films show; is that right?
13 A. Correct.
14 Q. I'm going to be asking you some questions
15 about your interpretation of the films and the
16 causation and things like that. If, for whatever
17 reason -- my questions are going to be about 1983.
18 If, for some reason, the technology has changed or the
19 measure of interpretation has changed, will you be
20 sure to tell me that so that the deposition is clear
21 as to what you're referring to?
22 A. Of course.
23 Q. Before we start, let me ask you if you'll
24 define some terms for me. What is your definition of
25 "perinatal asphyxia"?

1 A. Well, the term "asphyxia" means "without
2 respiration." The term "perinatal" refers to the
3 time period from, approximately, 20 weeks
4 post-ovulation/fertilization up until, depending on
5 who you want to read, four to eight weeks after
6 birth. That's the perinatal period. So that term
7 would mean -- literally, it means a problem with
8 respiration in the time period from 20 weeks'
9 gestation to one to two months after birth.

10 Q. If there is a reference to birth
11 asphyxia, how would you define that?

12 A. Well, as you probably realized, I don't
13 like the term "perinatal asphyxia" and don't use it,
14 and likewise, the term "birth asphyxia" is, kind of, a
15 wastebasket term that most people would imply that it
16 means a problem acquired during parturition.

17 Q. And what does "parturition" mean?

18 A. Labor and delivery, the birth of the
19 child.

20 Q. What is your definition of the "term
21 infant"?

22 A. "Term infant" is a child that's 36 to 40
23 weeks -- at least 36 to 40 weeks post-ovulatory age.

24 Q. Have you ever heard the term -- the
25 phrase "near-term infant"?

1 A. Well, people use it, but what does it
2 mean?

3 Q. That's my -- if you see in a book the
4 phrase "near-term infant," what do you think it means?

5 A. That means that somebody hasn't done
6 their homework and they're implying that the kid is
7 around 40 weeks, plus or minus a few weeks, is my
8 guess.

9 Q. And your definition of the phrase
10 "hypoxic ischemic encephalopathy"?

11 A. Well, "hypoxic" means a decrease in
12 oxygen. "Ischemic" means a decrease in blood flow.
13 And "encephalopathy" means injured brain.

14 Q. Okay. And when the term "hypoxic
15 ischemic encephalopathy" is used, do they break it
16 down like that? Or is it something other than the sum
17 of those parts?

18 A. It's a general term that people use to
19 describe -- usually describe an infant that has an
20 injured brain following labor and delivery.

21 Q. And your definition of the word
22 "infarction"?

23 A. "Infarct," sure, means necrosis in the
24 vascular distribution.

25 Q. Would that be caused by an interruption

1 in the blood supply to an area of the brain that,
2 subsequently, causes cell death and then necrosis

3 A. Yes.

4 Q. What is a stroke?

5 A. "Stroke" is a layman's term for an acute
6 neurologic event. You have an acute loss of some
7 neurologic function, and it could be from any number
8 of causes.

9 Q. "Acute," what does the word "acute" mean?

10 A. New, recent.

11 Q. And "chronic"?

12 A. Old.

13 Q. What about "low perfusion injury to the
14 brain"? What is a low perfusion injury to the brain?

15 A. Low perfusion injury to the brain is when
16 the cardiac output drops and the blood supply to the
17 brain -- the blood pressure for perfusing the brain
18 tissue drops so that you end up with necrosis in
19 vascular border zone territories. Some people call it
20 "watershed." Again, that's another poorly used term.

21 Q. And could a low perfusion injury to the
22 brain cause an infarct?

23 A. Infarct in the vascular border zone
24 material.

25 Q. Is that what happened in this case?

1 A. No.

2 Q. Have any of the definitions that you've
3 given changed since 1983?

4 A. To who? To the way I've used them?

5 Q. Yeah.

6 A. Or the way anybody's used them?

7 Q. First of all, to the way you've used
8 them.

9 A. Well, in 1983, I would have used
10 "watershed" because I didn't know any better. But now
11 I use "border zone."

12 Q. Anything else?

13 A. No.

14 Q. What about any of the other terms? Have
15 they -- in general parlance, have they taken on a
16 different meaning than they did in 1983?

17 A. People, in general, use the HIE, hypoxic
18 ischemic encephalopathy, term. That came in vogue in
19 the early 1990s. That wasn't used before. Before,
20 people just used the term "perinatal asphyxia."

21 Q. And, again, I know you haven't seen the
22 records -- or did you see, in some of the records that
23 Mr. Rosenthal showed you prior to the deposition,
24 that, in these children's records that happened in
25 1983, there was a mention of hypoxic ischemic

1 encephalopathy? Did you see that?

2 A. I think it's written in the records in
3 several places.

4 Q. What did you think, when you saw it, it
5 meant, if it didn't come into vogue in the 1990s?

6 A. I'm just saying that there was a lot of
7 controversy of using these terms in the late '80s and
8 early '90s, and there were some consensus conferences
9 at the NIR that generally stated that the term
10 "perinatal asphyxia" was not a good one and should not
11 be used.

12 Q. Was that one of the ones you were in?

13 A. I was at one of those. There were
14 multiple ones.

15 Q. At the one that you were at, was there a
16 discussion of the term "perinatal asphyxia"?

17 A. Yes.

18 Q. And it's your testimony that, at that
19 meeting, one or more of the individuals who were there
20 said you should not use the term "perinatal asphyxia"?

21 A. Yes.

22 Q. Were the proceedings of that meeting
23 transcribed?

24 A. Yes.

25 Q. Put in a book?

1 A. Yes.

2 Q. And if I were to look at the book -- have
3 you ever looked at the book?

4 A. Yes.

5 Q. And in that book, did you see in there
6 any physicians that said the term "perinatal asphyxia"
7 should not be used?

8 A. Well, there were references to better
9 ways of describing what was happening.

10 Q. And that's in the book too?

11 A. Yeah, I believe so.

12 Q. Did Dr. Nelson, in any of his
13 discussions, say that the term "perinatal asphyxia"
14 should not be used?

15 A. You mean Dr. Nelson, me?

16 Q. Yes.

17 A. No.

18 Q. Were you in any of the discussion groups
19 at the end of the meeting that were transcribed?

20 A. Yes.

21 Q. In terms of asphyxial events, following
22 an acute asphyxial event, when will you first see
23 swelling of the brain on ultrasound?

24 A. Well, when do you start to see
25 parenchymal changes of injury?

1 Q. Yeah. What are parenchymal changes of
2 injury?
3 A. Echogenicity on an ultrasound.
4 Q. When do you first start to see that?
5 A. You start to see them between 24 and 48
6 hours and usually more towards 48 hours.
7 Q. Okay. And when will you have the period
8 of peak or maximum swelling or edema?
9 A. Around 72 hours after the injury.
10 Q. And when will the swelling disappear, the
11 edema disappear?
12 A. Over the next week.
13 Q. In the next week after the 72 hours or
14 after the incident?
15 A. After the 72 hours.
16 Q. So that, roughly, ten days after the
17 insult, it will go away; is that correct?
18 A. The swelling goes away?
19 Q. Yes, sir.
20 A. Yes.
21 Q. The ultrasound of 11/13 was done at,
22 approximately, 36 hours of age; is that right?
23 A. 32.
24 Q. 32 hours of age. And you have in front
25 of you, the report of that?

1 A. Yes.

2 Q. Do you have any reason to believe that
3 Dr. Shackelford interpreted that first ultrasound
4 incorrectly?

5 A. No.

6 Q. Okay. Now, can you tell -- Why don't
7 you put up the 11/15 scan.

8 MR. ROSENTHAL: CT scan?

9 MR. ZWIBELMAN: Yes, sir.

10 MR. ROSENTHAL: We were talking about the
11 ultrasounds. I don't want any confusion.

12 THE WITNESS: Okay.

13 BY MR. ZWIBELMAN:

14 Q. If you would have been there in 1983 and
15 you would -- I suppose what you do is look at films
16 and then you get on your dictating machine or whatever
17 you did and you dictate a report; is that correct?

18 A. Correct.

19 Q. If you were there in 1983 and they had
20 dictating machines back then, would you dictate aloud?
21 How you would interpret those films?

22 A. I would say that there's a large zone of
23 low attenuation in the left middle and partially
24 anterior cerebral artery territories with swelling of
25 the left hemisphere compressing the left lateral

1 ventricle and causing a mild left-to-right midline
2 shift. And I would say there's no hemorrhage
3 present. And my impression would be that this
4 represents an acute left middle and partial anterior
5 cerebral artery territory infarct.

6 Q. Left middle -- I'm sorry.

7 A. And partial anterior cerebral artery
8 territory infarct.

9 Q. Would you put anything else in your
10 report?

11 A. Probably not.

12 Q. Had you been there in 1983, would you
13 have reviewed the ultrasound of 11/13?

14 A. Yes.

15 Q. As I understand, here at Children's
16 Hospital in Los Angeles, you review ultrasounds, do
17 you not?

18 A. Yes. I review all the cranial
19 ultrasounds.

20 Q. Do you dictate reports on them?

21 A. Yes, I do.

22 Q. That's kind of unusual. I think
23 Dr. Gotto said he doesn't review ultrasounds. Is the
24 typical thing for a pediatric neuroradiologist to
25 review neonatal ultrasounds or not to?

1 A. Depends from institution to institution.

2 Q. But certainly, here, you do?

3 A. That's correct. And have for 15 years.

4 Q. Did you see on that film, the CT scans --

5 first of all, which of the frames are most

6 representative?

7 A. Well, there are a lot of frames involved

8 here.

9 Q. I notice you're looking at two of the

10 films.

11 A. I picked two of the films out. And if I

12 could just see how the frames are numbered here. I

13 would say -- well, those are all labeled the same.

14 Okay. So I suppose the best way is, down in the

15 bottom left-hand corner, there's a symbol that says,

16 "P," and then there's a number, and then it lists a

17 number going on the frame. So the one that says P0,

18 P minus 8, and P minus 16, those are probably the best

19 ones.

20 Q. Did you see, in the films that you looked

21 at, bilateral infarctions much worse on the left than

22 on the right?

23 A. No.

24 Q. Did you see massive swelling of the left

25 cerebral hemisphere?

1 A. Well, I don't know if I would use
2 "massive," but there is considerable swelling.

3 Q. Did you see any disease or infarction or
4 anything in the right cerebral hemisphere?

5 A. No.

6 Q. Did you see a massive lucency involving
7 gray and white matter?

8 A. Yes.

9 Q. And you did say there was a mass
10 effect --

11 A. Mass effect, yes. That refers to the
12 swelling that we already talked about. Midline shift,
13 yes. I already mentioned that in my report. The term
14 "lucency" is not one that really is a legitimate CT
15 term. And "density" is really not a legitimate term.
16 He's referring to the low attenuation of the
17 hemisphere. I understand what he means but --

18 Q. If you look at page 129 of the records,
19 which are the report of Drs. Belding and Gotto, they
20 say there's a massive swelling of the left cerebral
21 hemisphere which shows, also, massive lucency
22 involving the gray and white matter as well. You say
23 "lucency" is not a term that's used in description of
24 CT scans?

25 A. It was never a term that I was taught to

1 use. I understand what he means.

2 Q. No, I understand. But was that something
3 that was used in 1983 and is not used now, or in your
4 thought, it was never used?

5 A. I know some people used it back then.
6 I'm sure that no one would be taught to use that term
7 today.

8 Q. It says, "The right cerebral hemisphere
9 is, likewise, involved but to a much less degree, and
10 the swelling is not obvious." Do you see that in the
11 report, sir?

12 A. Yes.

13 Q. You disagree with that?

14 A. Yes. This is a premature infant,
15 roughly, about 34 weeks of gestational age, and that's
16 what the normal premature appearance is like.

17 Q. The normal premature appearance of the
18 right?

19 A. Yes.

20 Q. Was that known in 1983 that the normal
21 premature appearance looks this way?

22 A. Well, there were not very many babies of
23 that age that were scanned at that time period. So I
24 don't know. I don't know the answer to that.

25 Q. You say there were not very many babies.

1 Where were you in 1983?

2 A. 1983?

3 Q. Uh-huh.

4 A. I was in Spain, doing military duty.

5 Q. In the Air Force, as I recall?

6 A. In the Air Force.

7 Q. Did you do any scans of babies in Spain
8 in 1983?

9 A. They would be transferred into Madrid.

10 We didn't have a scanner at our hospital, but I would
11 refer those to there. But generally, babies that
12 require this kind of care, even today, don't get scans
13 like we would do on older children. Because they
14 require so much support from being, like, in an
15 incubator or whatever, to bring them to the radiology
16 department is a major undertaking. So that's why
17 ultrasound has always been the principal diagnostic
18 method.

19 Q. Why would they do them in 1983 if it was
20 so difficult and required so much support?

21 A. I can't, specifically, state why they
22 would choose to do that. Apparently, they felt it was
23 necessary at the time.

24 Q. And then we talked about the right
25 cerebral hemisphere is, likewise, involved, and you

1 said that that is just what a premature baby looks
2 like; is that right?

3 A. By and large, yes.

4 Q. Is there some book that I could go to
5 that it would say that?

6 A. Sure.

7 Q. What book would that be, sir?

8 A. There are some atlases that have had
9 pictures, and principally, they're of MR these days.
10 I'm trying to think of CT that would have pictures of
11 that age. I would have to look through my books to
12 find some, but I know they exist.

13 Q. I mean, is that something that today is
14 common knowledge that the -- a CT scan of a 34-week or
15 a premature baby would show some lucency involving
16 gray and white matter?

17 A. Yes.

18 Q. That's something that was known in '83;
19 is that right?

20 A. Probably.

21 Q. And then it says, "The infratentorial
22 structures seem to be normal, although one cannot
23 exclude a similar type of change, but to a lesser
24 degree, in the brain stem and cerebellum." Do you
25 agree with that?

1 A. Well, what does that mean?

2 Q. I'm asking you. I don't know. That's

3 kind of nonsensical.

4 A. I don't really know what that means so --

5 Q. Okay. And then it says, "The findings

6 are most probably those of extensive damage due to

7 asphyxia." You disagree with that; is that correct?

8 A. That's correct.

9 Q. And here we are. You're a pediatric

10 neuroradiologist, and you're the chairman of the

11 department, and you're looking at this report, and I'm

12 sure you're thinking to yourself, "I wonder what they

13 were basing that on?" Do you have any idea? Can you,

14 kind of -- do you have any opinion as to what they saw

15 on the film that would have led them to believe that

16 this is extensive damage due to asphyxia?

17 A. Well, you're asking me to speculate

18 about --

19 Q. No. What I'm saying is you're looking at

20 the film. Can you say, by looking at the film, "Gee,

21 I see what they were thinking about. They may have

22 been wrong, but I can sure see what they were thinking

23 about," or is it just dead wrong?

24 A. Well, if you go back and look at the

25 literature from that time period, there were many

1 articles that virtually every abnormality in the brain
2 that occurred in a newborn was attributed to asphyxia.

3 Q. And tell me some of the articles, some of
4 the authors back then that would say that?

5 A. I'd have to do a literature review to go
6 back and dig them all up. But they're there.

7 Q. Are there any authors that come to mind?

8 A. No one in particular.

9 Q. And you're saying that everything back
10 then was attributed to asphyxia and now it's
11 attributed to infarction or what?

12 A. No. I'm saying that a lot of the
13 literature published in that time period was research
14 that did not include control groups, that did not --
15 that were just anecdotal listings of findings that
16 occurred in these children without any real proper
17 investigations into what happened. I mean, it was bad
18 stuff.

19 Q. Okay. Turning to the 11/21 ultrasound,
20 would you read that for me, sir.

21 MR. ROSENTHAL: One page from that ultrasound?

22 MR. ZWIBELMAN: I thought there were two?

23 THE WITNESS: There's only one.

24 MR. ZWIBELMAN: I thought Dr. Gotto had it in
25 his records.

1 MR. ROSENTHAL: No. And you told me you were
2 given just one page. Because you initially indicated
3 you had two pages in the initial one, and then, when
4 we recontacted your office --

5 MR. ZWIBELMAN: That's fine. I could have
6 sworn there were two.

7 MR. ROSENTHAL: If you have another page, I'd
8 like to see it.

9 MR. ZWIBELMAN: I don't. I thought that -- my
10 recollection of Dr. Gotto's deposition is there was
11 two. But that's okay.

12 MR. ROSENTHAL: To my knowledge, there were two
13 at one point, but we don't know where the other one
14 is.

15 MR. ZWIBELMAN: That's fine.

16 THE WITNESS: So this is a limited ultrasound
17 including six coronal views of the brain that shows
18 that there's an abnormality in the left cerebral
19 hemisphere, in the middle cerebral artery territory,
20 which includes a rim of echogenicity along the border
21 of the abnormality with a zone of lower echogenicity
22 beyond it. The ventricles appear to be fairly
23 symmetric at this time. So the left lateral ventricle
24 has increased in size since that previous CT. And I
25 don't see any abnormalities on the right -- on the

1 right hemisphere. So I would say that this appears to
2 be consistent with an evolving left middle cerebral
3 artery territory infarct.

4 BY MR. ZWIBELMAN:

5 Q. I appreciate your answer. It was a bad
6 question. What I wanted you to do is the same as with
7 the CAT scan. Could you dictate the report?

8 A. Oh, I thought I just did.

9 Q. Oh, okay. If you look, sir, at page 131
10 of the records, which is the interpretation of the
11 head ultrasound, do you agree with the findings on
12 that?

13 A. Well, since I never had the first one to
14 look at, I can't comment about how it's changed from
15 the first one.

16 Q. Okay.

17 A. However, apparently, by report, the first
18 one showed the brain parenchyma to be echogenic. And
19 now this report indicates that the parenchyma is no
20 longer echogenic, as it was before. Again, there is a
21 comment that there's been an increase in the size of
22 the ventricles and no evidence of hemorrhage.

23 Q. Now, there's no mention in this report
24 about infarction, like you said that you would have
25 interpreted; is that right?

1 A. That's right. It's clearly there,
2 though.

3 Q. I appreciate that. But I guess my
4 question is, again, it's your opinion that the report
5 of the head ultrasound is wrong also; is that correct?

6 A. Well, I would have worded it differently.

7 Q. I understand. You would have worded it
8 differently, but you saw, in the head ultrasound of
9 11/21, an evolving infarct; is that right?

10 A. Correct.

11 Q. The physicians there didn't see an
12 evolving infarct, did they?

13 A. Well, they didn't mention it.

14 Q. Well, if they saw it -- I mean, is that a
15 significant finding?

16 A. I would think so.

17 Q. So you would say that their
18 interpretation is wrong by not including the infarct;
19 is that right?

20 A. Yes.

21 Q. Okay. We talked about timing before.
22 Can you time an infarct in the same way you time an
23 asphyxial incident? And by that, I mean there's
24 edema; there's echogenicity; the echogenicity reaches
25 a peak. Could we use the same thing, this timing an

1 infarct, as we can timing an asphyxial incident?

2 A. What we're timing is a reaction of the
3 injury to the brain cells no matter what the cause
4 is. So when brain cells die, it sets up a certain
5 pattern that we see in combination on CT, MRI,
6 ultrasound.

7 Q. Would the reaction of the brain cells to
8 an infarct be the same as the reaction of brain cells
9 to an asphyxial incident, in terms of timing?

10 A. Yes.

11 Q. So here you have an infarct, and you
12 described it as an acute left middle and partial
13 anterior cerebral artery infarct. That's what you
14 said was there; is that correct?

15 A. Correct.

16 Q. I notice, in your description of the --
17 your dictation, you didn't mention cause, did you?

18 A. No.

19 Q. As part of your job here as a clinician,
20 pediatric neuroradiology clinician, is part of your
21 job to ascertain cause, or is that just something you
22 do in medical-legal matters?

23 A. Generally, that would be something that I
24 would talk about in referring directly with the
25 clinicians, but I would -- I don't usually include

1 that as part of my official report.

2 Q. Here at Children's Hospital, do they come
3 to you for interpretation, or do you go to them?

4 A. They come to me.

5 Q. Okay. Is there any indication in this
6 case that any of the treating physicians went to
7 Dr. Shackelford or Dr. Belding or Dr. Gotto or
8 Dr. Claybourne or Dr. Siegel?

9 A. I have no idea of that.

10 Q. Certainly, it would be your impression
11 that they should have; is that correct?

12 A. And probably did.

13 Q. I appreciate it, but it's your impression
14 that they should have gone to these neuroradiologists
15 for their interpretations; is that correct?

16 A. Yes. To discuss the findings of the film
17 and what they mean.

18 Q. This facility that we're at, is this a
19 teaching institution with residents?

20 A. Yes.

21 Q. And when you, as a -- attending? Is that
22 the right phrase, "an attending"?

23 A. Yes.

24 Q. When you, as an attending, interpret
25 films, do the neonatologists and the neurologists come

1 to you, or do they come to the resident?

2 A. They come to me on a daily basis.

3 Usually at 8:30 in the morning.

4 Q. Okay. And so the internists, you say,

5 probably did go to the attendings, which would have

6 been Dr. Shackelford, Dr. Gotto and Dr. Siegel.

7 That's what your testimony was; is that right?

8 A. Well, again, this is pure speculation,

9 but that's what generally happens in practice.

10 Q. And that's good medical practice; is that

11 correct?

12 A. Yes.

13 Q. Now, if, in fact, one of the physicians

14 came -- one of these physicians in 1983, not the

15 neuroradiologists but the neonatologists or the

16 neurologist or whoever it was came to you, would you

17 have rendered an opinion as to your differential as to

18 the cause of the infarct?

19 A. Yes.

20 Q. And what would you have said would be the

21 differential?

22 A. I would have said, "This looks like an

23 embolus. Go find the source of the emboli."

24 Q. Could it have been a thrombus? Would

25 that have been in your differential?

1 A. Yes. But thrombus just implies that the
2 occlusion developed at the site of the occlusion. For
3 instance, the occlusion formed right where the
4 occlusion occurred, like an arterial sclerotic
5 vascular disease thing. An embolus implies it formed
6 someplace else and --

7 Q. Could the cause of this infarct have been
8 ischemic?

9 A. Well, ultimately, every infarct is
10 ischemic in that vascular territory that causes the
11 necrosis of the brain. So, in effect, it -- in a
12 focal aspect, yes, it's ischemic. In a general aspect
13 of dropping the blood pressure, as occurs in babies
14 that get in trouble during labor and delivery, no,
15 because that would produce the low perfusion pattern
16 of injury, also known as the watershed pattern of
17 injury, which is not present in this child.

18 Q. You said, with some resoluteness, that it
19 was an embolus, "Go find it." What is it -- or what
20 can you tell me about your findings on the film that
21 cause you to believe it was an embolus, relatively
22 certain it was an embolus?

23 A. Because of discrete vascular territory
24 that died.

25 Q. Now, can an embolus be caused by trauma?

1 A. Yes.

2 Q. Let's go back a minute. When you say,
3 "It's an embolus. Go find it" --

4 A. The source.

5 Q. -- "Go find the source," can you, based
6 upon what you see on the film, what you see on the
7 reports -- well, scratch that.

8 If reports were available to you -- as a
9 neuroradiologist talking to the clinicians about the
10 case, you'd have the reports in front of you, would
11 you not?

12 A. Reports of what?

13 Q. The films.

14 A. Generally.

15 Q. And you'd have prior films, if they were
16 there; is that right?

17 A. Yes.

18 Q. Would you ask to see the medical records
19 other than the reports or the films?

20 A. Well, I'd expect them to know the medical
21 history of the child and tell it to me.

22 Q. Based upon your experience and as an
23 expert witness today, are you in a position to tell us
24 anything other than it was an embolus, go find the
25 source?

1 A. No.

2 Q. Can you tell me, as you sit right here,
3 what the source was?

4 A. No. There is no way to know from the
5 imaging studies what the source was.

6 Q. Emboli can be caused by trauma; is that
7 correct?

8 A. They can be.

9 Q. Emboli can be cautioned by asphyxia,
10 can't they?

11 A. I don't know how that would work.

12 Q. Have you ever read in any of these books,
13 including Volpe, that perinatal asphyxia can cause
14 emboli in this very territory?

15 A. I've never seen controlled research that
16 verifies that.

17 Q. So, basically, your testimony today and
18 your testimony at trial will be that you see an acute
19 left middle and partial anterior cerebral artery
20 infarct and that's your opinion in reading the films.
21 Your opinion is that this was caused by an emboli, but
22 you're not in a position to say where the emboli came
23 from. You would leave that to the clinician; is that
24 correct?

25 A. That's correct.

1 Q. Is perinatal asphyxia with attendant
2 hypoxia the most common cause of focal cerebral
3 ischemic lesions in the distribution of the middle
4 cerebral artery?

5 A. Again, those are a lot of terms that I
6 don't like to use because they're too general.

7 Q. Okay.

8 A. And would I agree with that statement?

9 Q. Yeah.

10 A. No.

11 Q. What is the most common cause of focal
12 cerebral ischemic lesions in the distribution of the
13 middle cerebral artery?

14 A. Emboli.

15 Q. When do you think it was that this --
16 scratch that.

17 What was the process that caused this
18 infarct? There was an emboli?

19 A. Yes.

20 Q. And then what happened?

21 A. Plugged the vessel. Stopped the blood
22 flow to that region of the brain. Brain cells died,
23 resulting in swelling and an influx of the normal crew
24 of cells that come in to remove damage and dead brain
25 tissue. And then it was removed over the next month.

1 Q. Can you render any opinions as to when
2 the emboli plugged the vessel?

3 A. I can give you a general time frame.

4 Q. Why don't you do that. Let me -- go
5 ahead. Let me just see if my analysis is right and
6 you agree with me or disagree with me.

7 There was an ultrasound that was done at
8 32 hours; is that correct?

9 A. Correct.

10 Q. Okay. And there was this echogenicity,
11 and it would have been more than 24 hours before that;
12 is that correct?

13 A. Yes. More like 48.

14 Q. Okay. And probably less than ten days?

15 A. Oh, yes. Absolutely.

16 Q. So based upon the findings on the
17 ultrasound -- the first ultrasound, that's all -- tell
18 me what your conclusions would be as to when it was.
19 Just that first ultrasound.

20 A. I think the earliest it could have
21 occurred is around 48 hours before that ultrasound.
22 So sometime during the last day during -- before
23 delivery.

24 Q. And so, if, in fact -- if, in fact, we
25 see -- if, in fact, it was taken at 32 hours of life,

1 then your timing would have been more than 48 hours
2 before that or within 48 hours?

3 A. If I were just basing it on the
4 ultrasound that showed the echogenicity, then it would
5 be anywhere from 48 hours to, without showing any dead
6 cavitated tissue, 48 hours, two days, up to five, six
7 days.

8 Q. So that would be -- based upon the
9 ultrasound, that would be 13:00 on 11/11 to, roughly,
10 13:00 on 11/6; is that right?

11 A. Yes.

12 Q. Now, the CAT scan -- can you tell, sir,
13 whether the echogenicity, the edema on the CAT scan at
14 84 hours of life was at the maximum?

15 A. No. There's no way to know if you're
16 actually at the maximum.

17 Q. Would you think, sir, that a physician
18 who said that what he sees on the CAT scan was the
19 maximum, that would just be wrong?

20 A. Well, I think that that's a very hard
21 determination to make. There's certainly a lot of
22 swelling there. It may be at the maximum.

23 Q. I understand. But if the doctor says,
24 "That's the maximum," you're --

25 A. I would not be so absolute.

1 Q. Based upon what you see on the CAT scan,
2 when do you think it was -- putting the CAT scan
3 together and the ultrasound together, give me some
4 parameters.

5 A. The CAT scan looks like that infarct --
6 just looking at the CAT scan alone, I would say that
7 infarct was anywhere from three to five or six days
8 old.

9 Q. And why do you say that?

10 A. Because of the degree of the low
11 attenuation, the amount of swelling that's present.

12 Q. Okay. So based upon that, the CAT scan,
13 you say it could have been three days, which would
14 have been 11/12, at 17:00, and five or six days before
15 that would be the earliest, which would be 11/9 at
16 17:00; is that correct?

17 A. Yes.

18 Q. Okay. And when you put -- do you put the
19 two together, or do you just depend on the CAT scan?

20 A. Put the two together.

21 Q. So if you put the two together, it would
22 then be somewhere between 13:00 on 11/10 and 13:00 on
23 11/11; is that right?

24 A. Thereabouts, yes.

25 Q. Okay. And then, does the last ultrasound

1 help at all?

2 A. No.

3 Q. So is that what your opinion is, it's
4 between 13:00 on 11/10 and 13:00 on 11/11?

5 A. Yes. That would be my best guess.

6 Q. Okay. In terms of the five or six -- you
7 said three to five or six days. Is there some book
8 that I could go to that would say -- that would tell
9 me those figures?

10 A. I can't pick out a particular source. A
11 lot of books have talked about it.

12 Q. But you can't tell me --

13 A. Could I pick one out?

14 Q. -- Barkovitch?

15 A. Some of that stuff is in Barkovitch's
16 book. Some of that stuff about ultrasound is in
17 Barkovitch's book.

18 Q. Based on what you see on the CAT scan,
19 that it would have been 11/9 at 17:00 to 11/12 at
20 17:00; is that correct?

21 A. That's, roughly, the time frame. That's
22 where I would have focused my attention.

23 Q. And I suppose, if we had the ultrasound
24 of 11/12, you could be even more specific than you are
25 today; is that right?

1 A. Possibly.

2 Q. In 1983, you were in the Air Force; is
3 that right?

4 A. That's correct.

5 Q. Up through 1983, how many -- how much
6 pediatric neuroradiology had you done?

7 A. Just during my residency.

8 Q. Okay. And --

9 A. But I was doing cranial ultrasounds
10 during my residency.

11 Q. Okay. Your residency, was it in general
12 radiology, or is it pediatric radiology?

13 A. Diagnostic radiology.

14 Q. How much of the time in diagnostic
15 radiology? Was it a three-year program?

16 A. Four years plus an internship.

17 Q. So it's five years total?

18 A. It didn't turn out to be completely
19 five. Six months internship.

20 Q. How much of that four years six months
21 post-medical-school training was in neonatal
22 neuroradiology? What percentage of the time?

23 A. Well, there were -- it got scattered
24 throughout the whole time. There were four months of
25 pediatric radiology of which you were doing everything

1 in pediatrics. There were four -- as I recall,
2 somewhere between four and six months of
3 neuroradiology. And I already knew at that time that
4 I liked pediatric radiology and that's what I wanted
5 to do. So I, kind of, focused on that when I was
6 there.

7 Q. You were in the Air Force at the time
8 this baby was born; is that right? November of 1983?

9 A. Yes.

10 Q. And that was, roughly, a three-year
11 period?

12 A. Yes.

13 Q. Were you doing any neuroradiology then?

14 A. I was doing general radiology then.

15 Q. Were you doing any neuroradiology?

16 A. Some. Not much.

17 Q. Were you doing any pediatric

18 neuroradiology?

19 A. Some. Not much.

20 Q. The overall -- would you agree that the
21 overall state of CT imaging of the neonate was fairly
22 well developed in 1983 and institutions were pretty
23 close to their third or fourth generation of CT
24 scanners? This is 1983.

25 A. Yes.

1 Q. Can you look at the CT scan that was
2 taken on 11/15 of '83 and tell me what kind of scanner
3 it was?

4 A. Yes.

5 Q. What kind was it?

6 A. Looked like an EMI scanner.

7 Q. Is that a fairly sophisticated scanner?

8 A. For 1983, no. It was already an outdated
9 scanner.

10 Q. At the institution of Washington
11 University, they were using outdated scanners?

12 A. Well, like in a lot of places with budget
13 crises, you use the instruments until they wear out.

14 Q. In 1983, there was an extensive body of
15 writings, literature about cerebral infarcts of the
16 neonatal family; is that so?

17 A. Probably.

18 Q. Now, you and I talked about this, and I
19 just want to make sure. Are you going to render any
20 opinions about what long-term injuries you would
21 expect to see based upon what you see on all of those
22 films?

23 A. The only opinion I will render is that
24 it's impossible to predict from the imaging studies.

25 Q. If the child was described as having --

1 let me describe cerebral palsy, which is primarily
2 spastic, all four extremities involved, although the
3 function in the left upper extremity is very good. If
4 a clinician came to you and said, "Doctor, I have a
5 patient," and that is the description of the physical
6 problems that the child has, can you, as a pediatric
7 neuroradiologist, give me any idea what you would
8 expect to see on the films?

9 A. No. In fact, I've even seen cases that
10 were completely normal with MRI in those situations.

11 Q. I guess, as a lay person, if I told you
12 that all four extremities are involved, wouldn't you
13 expect that both hemispheres of the brain were
14 involved?

15 A. They may be. They may not be. It may be
16 spinal cord. It may be any number of different things
17 are possible.

18 Q. What about if I were to go through and --
19 or a clinician were to go through and say, "Doctor, my
20 patient has a number of mental -- not physical but
21 mental limitations, such as mental retardation" or
22 whatever it might be. Could you see manifestations of
23 those on head films?

24 A. Well, we usually scan those patients to
25 see if we can find the cause. And sometimes we do,

1 and many times, we don't.

2 Q. Could you, on the CAT scan -- on the MRI
3 that was recently taken of this child, could you see
4 any lesions -- I guess that's the word -- which would
5 cause all four extremities to be involved?

6 A. No. I can't point to any particular
7 place that it would cause all four.

8 Q. Is that because they're there and the
9 MRIs aren't just sophisticated enough to pick up on
10 them, or it's just not there?

11 A. I can only describe what I can see as
12 abnormal.

13 Q. No, I appreciate that. What I'm trying
14 to figure out is, arguably, if the resolution was
15 greater or it was more sensitive, would it pick these
16 things up?

17 A. I don't know the answer to that question.

18 Q. How much time did you spend -- have you
19 spent on this case?

20 A. Two or three hours.

21 Q. How much time did you spend reviewing
22 Dr. Edwards-Brown deposition?

23 A. About 40 minutes.

24 Q. Obviously, your interpretations of the
25 films are different, and you disagree with her on

1 that. Is there anything else that you disagree with
2 in terms of what she said?

3 A. Well, that's a very broad question. Can
4 you be more specific?

5 Q. Well, in going through the deposition,
6 did you mark anything as just being -- that you
7 disagree with or whatever it is?

8 A. Well, I disagree with the way that she
9 speculates that things have to be there or how she
10 speculates that this has to be perinatal asphyxia
11 because of the clinical symptoms. She's going out of
12 her realm as an imaging specialist when she makes
13 those statements.

14 Q. When you say it's out of her realm, you
15 believe that an imaging specialist, a
16 neuroradiologist, should look at the films and base
17 her findings on what's on the films and her opinions
18 on what's on the films and not go beyond that?

19 A. Correct.

20 Q. Can you render -- I want you to assume
21 that mom was a diabetic and that, in the delivery
22 room, the child had a blood glucose of 300. Does that
23 mean anything to you, as a neuroradiologist, in
24 putting the cause of the thrombus or the cause of the
25 embolus in any clearer view?

1 A. No.

2 Q. Okay. The C.V. that you've supplied us,
3 do you have a copy of it? Is that the one that Lisa
4 sent me?

5 MR. ROSENTHAL: This is through January of
6 2003. So I don't know.

7 MR. ZWIBELMAN: I think that is. Let me see.

8 Q. Can we mark that? Is that an extra copy
9 sir?

10 A. Yes.

11 Q. Can we mark that as --

12 A. Exhibit 1.

13 Q. We're almost done.

14 Doctor, Plaintiff's Deposition Exhibit 1
15 is your C.V.; is that correct?

16 A. Yes.

17 Q. Is that current and up to date?

18 A. Pretty much so.

19 Q. Are there any articles or book chapters
20 or anything that you have written that deal with acute
21 left middle and partial anterior cerebral artery
22 infarcts or cerebral artery infarcts?

23 A. Well, nothing directly. There are some
24 indirect things.

25 Q. Tell me what, indirectly.

1 A. Well, I already see a mistake that my
2 secretary made in duplicating one of my articles here.

3 Q. I've got one that's dated 6/3/03. Is
4 that the one you have sir?

5 A. That's probably more up-to-date.

6 Q. Well, why don't we mark this.

7 MR. ROSENTHAL: Mark it as 1?

8 MR. ZWIBELMAN: Yeah, I think so.

9 (Plaintiff's Exhibit 1 was marked for
10 identification by the court reporter.)

11 THE WITNESS: Probably the one that would be
12 most relevant would be a book chapter that was listed
13 in here as No. 12.

14 BY MR. ZWIBELMAN:

15 Q. What's the title of that, sir?

16 A. "Neuroimaging of Perinatal Asphyxia in
17 Term Infants." This is the Report of the Workshop on
18 Acute Perinatal Asphyxia -- and I hated that title,
19 but I was forced to use that title for them.

20 Q. Is that book -- is it a book?

21 A. Well, it's a paperback book that they
22 issue.

23 Q. Was their mention in your discussion of
24 cerebral infarcts?

25 A. Well, there was about timing. The

1 business about timing the injuries was what I was
2 asked to talk about.

3 Q. And in that, did you not say it was 72
4 hours was the maximum --

5 A. Yeah.

6 Q. -- as opposed to --

7 A. No. 72.

8 Q. The maximum is 72?

9 A. Yes.

10 Q. Any other articles that deal with
11 infarcts or embolus?

12 A. Not that I can recall.

13 Q. Okay. Do you have a specific research or
14 writing interest?

15 A. It's been all over the board, but my
16 primary area of interest is how the blood vessels
17 develop in the brain.

18 Q. Okay. Does that have anything to do with
19 here?

20 A. No.

21 Q. At present, are you the chairman of the
22 Department of Radiology?

23 A. At Children's Hospital Los Angeles.

24 Q. And as such, it's my understanding that
25 approximately 35 percent of your time is spent

1 administratively?
2 A. Yes.
3 Q. And 20 percent of your time is research?
4 A. I wish. That's what I'm scheduled for,
5 but I don't hardly ever get it.
6 Q. How much of your time is research?
7 A. Maybe 5 percent.
8 Q. And how much of your time is spent on
9 medical-legal?
10 A. Less than 5 percent.
11 Q. So, roughly, 60 percent is clinical?
12 A. Yes.
13 Q. Of the clinical, how much of it deals
14 with neonates. How much of your of 60 percent of your
15 time is dealing with neonates?
16 A. 20 to 30 percent.
17 Q. So, roughly, 12 to 18 percent of your
18 time deals with neuroradiology of the neonates; is
19 that correct?
20 A. Absolutely.
21 Q. And what is your definition of "neonate"?
22 A. "Neonate" is the first 30 days of life.
23 Q. Before you became chairman, was it the
24 same breakdown or --
25 A. No. I didn't have as much administrative

1 stuff before this.

2 Q. You've been doing malpractice since 1987,
3 1988; is that right?

4 A. '88.

5 Q. Since you became chairman, has your work
6 in medical-legal come down?

7 A. Considerably.

8 Q. You're limiting your testifying; is that
9 right?

10 A. Yes.

11 Q. Before you became chairman, you were
12 doing what? 50 cases a year? Reviewing about 50
13 cases a year?

14 A. You've done your homework. You've read
15 my previous depositions. About 50 cases a year, about
16 ten depositions a year, about three trials a year.

17 Q. And now what is it?

18 A. Maybe 20 cases. Ten, 15 cases a year,
19 two or three depositions, and maybe one trial a year.

20 Q. Before you became chairman, you indicated
21 in previous testimony that, of the reviews, 75 percent
22 of them were for the defendant?

23 A. Yes.

24 Q. And 90 percent of the depositions were
25 for the defendant, and 97 percent of the trials were

1 for the defendant; is that right?

2 A. Yeah. That still holds.

3 Q. Have you ever been retained in the state
4 of Missouri to testify on behalf of a plaintiff?

5 That's a bad question.

6 Have you ever been retained to testify in
7 a Missouri case for a plaintiff?

8 A. Yes. For a plaintiff?

9 Q. Yes, sir. Plaintiff's counsel.

10 A. Not that I recall.

11 Q. Do you advertise your services?

12 A. No, I do not.

13 Q. Have you ever been connected with an
14 expert witness service?

15 A. No.

16 Q. You said less than 5 percent of your time
17 presently is spent on medical-legal; is that right?

18 A. Yes.

19 Q. What percentage of your income presently
20 comes from medical-legal?

21 A. Way less than 5 percent.

22 Q. How many lawsuits have you been
23 personally involved in where either you, personally,
24 have been sued or your institution has been sued based
25 upon something that you allegedly did?

1 A. One that went to trial. And I think,
2 because I read a film in a case, there's one that's
3 pending, but it's not related to the case. They just
4 named everybody that had their name on the chart.

5 Q. The one that went to trial, what was that
6 all about? Do you remember?

7 A. Yes. Very specifically. I ended up
8 spending six weeks in a courtroom downtown. And it
9 had to do with giving a sidewalk consult to the
10 neurosurgeon on some films that came from Long Beach
11 that had to do with a child that had a vascular
12 malformation.

13 Q. Not a neonate?

14 A. Not a neonate.

15 Q. You put on a seminar for a group of
16 defense lawyers about ten years ago?

17 A. Oh, at last. I was invited to come and
18 just talk about imaging of brain injuries and timing.

19 Q. Any notes on that or any --

20 A. No.

21 Q. -- hand-outs?

22 A. No.

23 Q. And basically, we've talked about your
24 opinions about timing. We've talked about your
25 opinions about the interpretation. Your opinion is

1 that it was caused by an embolus. You don't know the
2 source of those emboli. And those are all your
3 opinions; is that right?

4 A. That's right.

5 Q. Thanks.

6 MR. ROSENTHAL: Just so the doctor -- you
7 mentioned the MRI but --

8 MR. ZWIBELMAN: Oh, yeah, yeah, yeah.

9 MR. ROSENTHAL: He reviewed the MRI and has
10 opinions about what the MRI shows as well.

11 BY MR. ZWIBELMAN:

12 Q. Tell me what your opinions are on what
13 the MRI shows.

14 A. This shows the end result of the injury
15 that occurred at the end of the time period where all
16 the brain tissue damage has been removed. It shows
17 the area of necrosis has been removed.

18 Q. Anything else?

19 A. In the left middle cerebral and partly in
20 the anterior cerebral artery territory.

21 Q. And basically, the MRI is the end product
22 of what was going on; right?

23 A. Yes.

24 Q. Any other opinions?

25 A. No.

1 MR. ZWIBELMAN: Mr. Rosenthal, maybe you can
2 help us.

3 MR. ROSENTHAL: He's going to testify about his
4 interpretation of the films and that sort of thing and
5 his opinions on cause and the timing.

6 BY MR. ZWIBELMAN:

7 Q. As we've discussed today; right? Have we
8 covered all your opinions in this incisive questioning
9 today?

10 A. I believe so.

11 Q. Okay. Thank you, sir.

12 Oh, do you want to waive -- what do you
13 want to do about your signature?

14 MR. ROSENTHAL: Read the depositions.

15 THE WITNESS: Yeah.

16 MR. ZWIBELMAN: Okay. Why don't you send me
17 the original but send him the original signature page,
18 and he'll see that it gets to the doctor to sign it so
19 we'll get you out of the loop.

20 THE REPORTER: Okay.

21 MR. ROSENTHAL: I'd like a mini and an ASCII.

22 MR. ZWIBELMAN: Let's go back on the record.

23 I'm sorry.

24 Q. How much do you charge for this?

25 A. \$500 an hour.

1 Q. And deposition, the same?

2 A. Same.

3 Q. And if, perchance, it's possible to leave
4 Los Angeles in the morning and you can be back at
5 night, to testify at this trial, how much would you
6 charge for that?

7 A. I charge for the number of hours that I
8 am not available for work, my normal hours at work,
9 which I usually work about ten hours a day.

10 Q. And if you had to come back the next day,
11 it would be \$5,000 a day, roughly?

12 A. Yes.

13 Q. Have you been asked to come to St. Louis
14 for this trial?

15 A. Not yet.

16 Q. Thank you.

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I, MARVIN D. NELSON, JR., M.D., do hereby declare
under penalty of perjury that I have read the
foregoing transcript; that I have made any corrections
as appear noted, in ink, initialed by me; that my
testimony as contained herein, as corrected, is true
and correct.

EXECUTED this _____ day of _____,
_____, at _____, _____.
(City) (State)

MARVIN D. NELSON, JR., M.D.

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4

5 I, the undersigned, a Certified Shorthand
6 Reporter, do hereby certify:

7 That the foregoing proceedings were taken
8 before me at the time and place herein set forth; that
9 any witnesses in the foregoing proceedings, prior to
10 testifying, were placed under oath; that a verbatim
11 record of the proceedings was made by me using machine
12 shorthand which was thereafter transcribed under my
13 direction; further, that the foregoing is an accurate
14 transcription thereof.

15 I further certify that I am neither
16 financially interested in the action nor a relative or
17 employee of any attorney of any of the parties.

18 IN WITNESS WHEREOF, I have this date
19 subscribed my name.

20

21 DATED: _____

22

23

24

25

ELIZABETH PADILLA
CSR No. 9048