

IN THE COURT OF COMMON PLEAS  
CUYAHOGA COUNTY, OHIO

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KEVIN KISS a Minor, etc., et.al.,

Plaintiffs,

vs.

Case No. 402393

CLEVELAND CLINIC FOUNDATION,

Defendant.

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THE DEPOSITION OF DR. FREDERICK A. BOOP

January 14, 2002

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CONDENSED  
TRANSCRIPT

H & N COURT REPORTING  
3610 Philwood Avenue  
P.O. Box 41971  
Memphis, Tennessee 38174

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<div> <div>Page 2</div> <div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>10</div> <div>11</div> <div>12</div> <div>13</div> <div>14</div> <div>15</div> <div>16</div> <div>17</div> <div>18</div> <div>19</div> <div>20</div> <div>21</div> <div>22</div> <div>23</div> <div>24</div> <div>25</div> </div> <div> <p>The deposition of DR. FREDERICK A. BOOP, taken on behalf of the Plaintiffs, pursuant to Notice, on January 14, 2002, beginning at approximately 3:00 p.m. in the offices of Semmes-Murphey Clinic, 220 S. Claybrook, #600, Memphis, Tennessee.</p> <p>This deposition is taken in accordance with the terms and provisions of the Ohio Rules of Civil Procedure.</p> <p>All forms and formalities are waived, and objections as to relevancy, materiality and competency are reserved, to be presented at or before the hearing. Objections as to the form of the question must be made at the times of the taking of the deposition. The signature of the witness is waived.</p> </div> </div>	<div> <div>Page 4</div> <div> <div>1</div> <div>2</div> <div>3</div> <div>4</div> <div>5</div> <div>6</div> <div>7</div> <div>8</div> <div>9</div> <div>10</div> <div>11</div> <div>12</div> <div>13</div> <div>14</div> <div>15</div> <div>16</div> <div>17</div> <div>18</div> <div>19</div> <div>20</div> <div>21</div> <div>22</div> <div>23</div> <div>24</div> <div>25</div> </div> <div> <p>- INDEX -</p> <p>WITNESS: PAGE NUMBER</p> <p>DR. FREDERICK A. BOOP Direct Examination By Ms. Tosti ..... 5</p> <p>EXHIBITS</p> <p>Exhibit 1 ..... 21 Exhibit 2 ..... 53</p> </div> </div>

<div> <div>Page 5</div> <div> <p>1 MS. TOSTI: Let the record reflect</p> <p>2 this is a deposition being taken pursuant to Ohio</p> <p>3 Civil Rules and that this is a discovery</p> <p>4 deposition being taken under Civil Rule 126 for</p> <p>5 discovery purposes only and under</p> <p>6 cross-examination to elicit the opinions held by</p> <p>7 Dr. Boop relative to the case; that this</p> <p>8 deposition is being taken by agreement with</p> <p>9 defense counsel and plaintiffs' counsel.</p> <p>10 May I have a stipulation from defense</p> <p>11 counsel that there is no problem in using a</p> <p>12 Tennessee court reporter and that will be</p> <p>13 waived?</p> <p>14 MS. CARULAS: Correct.</p> <p>15 DR. FREDERICK A. BOOP,</p> <p>16 having been first duly sworn, was examined and</p> <p>17 testified as follows:</p> <p>18 DIRECT EXAMINATION</p> <p>19 BY MS. TOSTI:</p> <p>20 Q. Doctor, this deposition is being conducted</p> <p>21 a little bit later than we had planned due to</p> <p>22 some problems. Hopefully we'll be able to finish</p> <p>23 this deposition but in order for defense counsel</p> <p>24 and myself to catch our plane, which is the last</p> <p>25 flight, we may not be able to complete it today.</p> </div> </div>	<div> <div>Page 7</div> <div> <p>1 question. Otherwise, I'm going to assume you</p> <p>2 understood my question and you're able to answer</p> <p>3 it.</p> <p>4 At some point defense counsel may choose to</p> <p>5 enter an objection. You're still required to</p> <p>6 answer my question unless she has grounds to</p> <p>7 specifically instruct you not to do so.</p> <p>8 If at any point in time it's helpful for</p> <p>9 you to refer to your medical records that you</p> <p>10 have in your file, please feel free to do so.</p> <p>11 This isn't a memory test whatsoever.</p> <p>12 I would also ask that you give all of your</p> <p>13 answers verbally because our court reporter can't</p> <p>14 take down head nods or other motions.</p> <p>15 A. I understand.</p> <p>16 Q. Has anything been removed from your file</p> <p>17 that I have just had an opportunity to take a</p> <p>18 look at?</p> <p>19 MS. CARULAS: I did remove the</p> <p>20 correspondence that he had from experts, but</p> <p>21 other than that nothing from my standpoint.</p> <p>22 Q. (BY MS. TOSTI) Does the file, aside from</p> <p>23 the correspondence that defense counsel has just</p> <p>24 mentioned, contain all the materials you have</p> <p>25 reviewed on the case?</p> </div> </div>
<div> <div>Page 6</div> <div> <p>1 In which case we'll make arrangements to finish</p> <p>2 it at a later date.</p> <p>3 A. All right.</p> <p>4 Q. Would you please state your full name for</p> <p>5 us.</p> <p>6 A. Frederick Allen Boop, B-O-O-P.</p> <p>7 Q. And your business address?</p> <p>8 A. It's Seinmes-Murphey Clinic, that's</p> <p>9 S-E-M-M-E-S dash M-U-R-P-H-E-Y, 220 South</p> <p>0 Claybrook, Suite 600 Memphis, Tennessee, 38104.</p> <p>1 Q. Have you ever had your deposition taken</p> <p>2 before?</p> <p>3 A. I have.</p> <p>4 Q. How many times?</p> <p>5 A. Oh, I would say an average maybe once a</p> <p>6 year over the last ten years, something like</p> <p>7 that, maybe twice a year.</p> <p>8 Q. Now I'm sure that counsel has had an</p> <p>9 opportunity to speak with you but I'm going to go</p> <p>10 over a few ground rules. This is a question and</p> <p>11 answer session under oath.</p> <p>12 It's important that you understand the</p> <p>13 questions that I ask you. If you do not</p> <p>14 understand a question, let me know and I will be</p> <p>15 happy to repeat the question or rephrase the</p> </div> </div>	<div> <div>Page 8</div> <div> <p>1 A. It contains all that I've been able to find</p> <p>2 in this last week. I believe that I've been sent</p> <p>3 depositions by Dr. Savino and I may have a</p> <p>4 deposition by the child's mother's, but I</p> <p>5 couldn't find it in my review so I'm not sure</p> <p>6 whether or not I've seen it.</p> <p>7 Q. You don't recall reading either of those'?</p> <p>8 A. I don't recall specifically reading either</p> <p>9 of those, that's correct.</p> <p>10 Q. Anything else that is not currently sitting</p> <p>11 on the desk in front of you that you've reviewed'?</p> <p>12 A. Not that I'm aware.</p> <p>13 Q. I believe -- have you had that report of</p> <p>14 plaintiff's experts?</p> <p>15 A. Yes.</p> <p>16 Q. And is there a reason why those aren't in</p> <p>17 your file?</p> <p>18 A. I have Dr. Neff's deposition. Is that what</p> <p>19 you're talking about?</p> <p>20 Q. Dr. Neff's report and Dr. Savino's report?</p> <p>21 A. I've seen those. I don't know that I have</p> <p>22 a copy of those.</p> <p>23 Q. How is it that you've seen those and don't</p> <p>24 have a copy; where they sent to you?</p> <p>25 A. I believe so.</p> </div> </div>

<p style="text-align: right;">Page 9</p> <p>1 MS. CARULAS: They were sent  2 initially and they're referenced in his report.  3 They must be at his home or whatever.  4 Q. (BY MS. TOSTI) Is there anything else that  5 you didn't bring with you today that you've  6 reviewed on this case other than those items that  7 we've just talked about?  8 A. Not specifically for this case, no. I  9 mean, I have literature on arachnoid cysts and  10 textbooks but nothing specific to this case.  11 Q. Did you review any of those testimonies  12 specifically for this case for your report or  13 your testimony today or anything else that you  14 referenced to this case?  15 A. I did read portions of a book on pediatric  16 neuroophthalmology by Brodski.  17 Q. Do you know the title of that book?  18 A. I believe it's Pediatric  19 neuroophthalmology.  20 Q. What portions did you refer to?  21 A. I think they have a chapter on optic disk  22 swelling in children.  23 Q. Why is it that you consulted that  24 particular text?  25 A. I consulted it because in reading through</p>	<p style="text-align: right;">Page 11</p> <p>1 business office so I wouldn't know.  2 Q. Now I'd like you to tell me about your  3 experience in medical legal matters. When was  4 the first time that you offered your services as  5 a medical legal consultant?  6 A. As a rough guess I would say probably I  7 finished my training in '89, finished my  8 fellowship in 1990 and entered practice that  9 year. So probably thereabouts is when I would  10 have begun.  11 Q. 1990 approximately?  12 A. I would say so.  13 Q. Approximately how many medical legal  14 matters do you consult on per year?  15 A. Maybe a handful, not a lot.  16 Q. Can you quantify that a little bit as to  17 what you mean by handful?  18 A. Maybe five or six per year.  19 Q. How many do you have right now that you are  20 currently consulting on?  21 A. Probably about that many, five or six.  22 Q. And what proportion of the medical legal  23 matters on which you've consulted have been for  24 the plaintiff and what proportion have been for  25 the defendant?</p>
<p style="text-align: right;">Page 10</p> <p>1 Dr. Neff's deposition he seemed to emphasize the  2 need for Dr. Luciano to have followed the child's  3 visual acuity and my understanding, my education  4 was that when we're concerned about papilledema  5 we follow visual fields because visual acuity is  6 something that goes at the last minute and that  7 visual fields are the much better test to follow  8 so I referred to this textbook which confirmed  9 what I thought to be true.  10 Q. Were you provided with any fact summaries  11 or timelines regarding this case?  12 A. No, I don't believe so.  13 Q. And were you given or asked to review any  14 medical literature?  15 A. No.  16 Q. Did you receive any deposition summaries?  17 A. Just I have the depositions here. No  18 summaries, no.  19 Q. Approximately how many hours of expert  20 services have you spent on this case to date?  21 A. Probably eight or ten. I don't know  22 exactly.  23 Q. Have you provided any bills for your time  24 to Ms. Carulas on this file?  25 A. Not to my knowledge. That's handled by my</p>	<p style="text-align: right;">Page 12</p> <p>1 A. Well, I don't discriminate one way or the  2 other. It's a matter a merit. I would say the  3 cases where I rendered an opinion the majority  4 have been defense cases but I've also given  5 opinions in plaintiff cases.  6 Q. Can you give me an approximate percentage  7 of what percent defendant and what percent  8 plaintiff?  9 A. Maybe 80/20 defense plaintiff, something  10 like that.  11 Q. Of the cases where you consulted for the  12 plaintiff how many times did you find that there  13 was substandard care?  14 A. I couldn't give you an answer. There were  15 more than one but I couldn't tell you a  16 percentage.  17 Q. Many more than one or closer to one or two?  18 A. I couldn't tell you. Probably -- I mean if  19 I reviewed a half dozen plaintiff cases, I found  20 fault in half of those I would say.  21 The reason it's difficult is sometimes I'll  22 get called by someone saying, let me run this by  23 you; I think we have a case and I may say it  24 sounds like you do or it doesn't sound like you  25 do, but it's not a formal opinion.</p>

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1 Q. You previously mentioned that you've had  
 2 your deposition taken once or twice a year over  
 3 the course of the last ten years.  
 4 How many times have you had your deposition  
 5 taken as an expert in a medical legal matter?  
 6 A. Maybe once a year or so -- no, I'm *sorry*  
 7 deposition taken, not testified in court?  
 8 Q. Right, deposition.  
 9 A. Probably two or three times a year.  
 0 Q. When is the last time that you had your  
 1 deposition taken?  
 2 A. As an expert in a medical defense?  
 3 Q. Yes, as an expert in a medical legal  
 4 matter.  
 5 A. Within the last six months I believe, but  
 6 it was probably close to six weeks ago.  
 7 Q. Have you ever testified at trial?  
 8 A. I have.  
 9 Q. How many times?  
 0 A. In the medical legal setting not as a fact  
 1 witness?  
 2 Q. Well, let's just say how many times have  
 3 you testified as a medical person at trial?  
 4 A. Three that I can recall.  
 5 Q. Then how many times have you testified as a

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1 medical legal expert?  
 2 A. Two that I can recall.  
 3 Q. Were either of those times for plaintiffs?  
 4 A. No, both of those were defense.  
 5 Q. What is your charge for consultation on a  
 6 medical legal matter?  
 7 A. My office has the fee schedule. They can  
 8 provide you that information. I don't know what  
 9 the charge is to be honest.  
 0 Q. Is that something that's readily available?  
 1 A. I would think so. I would think my  
 2 secretary could get you one.  
 3 MS. TOSTI: Well, I would like to  
 4 know what the doctor is charging us for this. Do  
 5 you know?  
 6 MS. CARULAS: I have no idea but we  
 7 can get that.  
 8 Q. (BY MS. TOSTI) Well, I'm making a request  
 9 for your fee schedule, Doctor.  
 0 A. Okay.  
 1 Q. Do you charge the same for a consultation  
 2 as you do for deposition testimony?  
 3 A. I believe there's a difference in the  
 4 charge.  
 5 Q. You don't know what that is?

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1 A. I honestly don't.  
 2 Q. Do you know what your charge is for trial  
 3 testimony?  
 4 A. No.  
 5 Q. Approximately how much money did you make  
 6 last year consulting on medical legal matters?  
 7 MS. CARULAS: Note my objection.  
 8 A. It was less than one percent of my income.  
 9 Q. (BY MS. TOSTI) Have you ever provided your  
 0 name for a professional service or medical legal  
 1 consulting firm indicating that you're available  
 2 to do medical legal consultations?  
 3 A. No.  
 4 Q. Have you ever been named as a defendant in  
 5 a medical negligence case?  
 6 MS. CARULAS: Objection, you can  
 7 answer.  
 8 A. Yes.  
 9 Q. (BY MS. TOSTI) How many times?  
 0 MS. CARULAS: I have a continuing  
 1 objection to this line of questioning, but go  
 2 ahead.  
 3 A. I only have one case that is currently  
 4 outstanding. That's it.  
 5 Q. (BY MS. TOSTI) Well, my --

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1 A. There were three times when I was a  
 2 resident in training where everybody in the  
 3 department was named. I was named in that part  
 4 of those. Those all fell by the wayside, but  
 5 where I've been named specifically there is one  
 6 case.  
 7 Q. And where is that case filed; is that here  
 8 in Memphis?  
 9 A. It's in Arkansas.  
 0 Q. That case is currently pending?  
 1 A. Um-hmm, yes.  
 2 Q. Who is the plaintiff in that case?  
 3 A. Leslie is the last name. The patient's  
 4 name was John Paul Leslie. It's his wife and  
 5 children that have filed the case.  
 6 Q. What was the alleged negligence made by the  
 7 plaintiffs?  
 8 A. There was a portion of a cotton ball that  
 9 remained in the patient's head following surgery  
 0 and it formed some scar tissue and led to his  
 1 being reoperated on to see what it was and he  
 2 subsequently expired a few days after surgery,  
 3 Q. Is that case set for trial?  
 4 A. Not yet.  
 5 Q. Has your deposition been taken in that

<p style="text-align: right;">Page 17</p> <p>1 case'?</p> <p>2 A. No.</p> <p>3 Q. Has your medical license ever been</p> <p>4 suspended or revoked or called into question'?</p> <p>5 A. No.</p> <p>6 Q. Have you ever been subject to any state</p> <p>7 disciplinary action in regard to your medical</p> <p>8 license?</p> <p>9 A. No.</p> <p>0 Q. Have you ever been asked to review a</p> <p>1 medical legal matter involving issues of vision</p> <p>2 loss and increased intracranial pressure'?</p> <p>3 A. Probably. I've had cases I've reviewed</p> <p>4 that dealt with issues of shunt malfunction. I</p> <p>5 remember one case specifically that I reviewed.</p> <p>6 I don't think I gave a deposition in that case</p> <p>7 but it involved a child who went blind from a</p> <p>8 shunt malfunction.</p> <p>9 Q. How old was that child?</p> <p>0 A. I want to say 12 or 14, somewhere in that</p> <p>1 ball park. That's been several years ago. I</p> <p>2 don't remember much of the details.</p> <p>3 Q. What was your opinion in regard to the</p> <p>4 cause for that child's blindness?</p> <p>5 A. The child's blindness was related to</p>	<p style="text-align: right;">Page 19</p> <p>1 deposition taken in that case?</p> <p>2 A. I don't even remember.</p> <p>3 Q. Did you render a written report in that</p> <p>4 case'?</p> <p>5 A. I don't recall.</p> <p>6 Q. Is that something that you keep in your</p> <p>7 records when you render a report as an expert?</p> <p>8 A. No.</p> <p>9 Q. Other than this case have you ever worked</p> <p>10 with Ms. Carulas?</p> <p>11 A. No.</p> <p>12 Q. Other than in this case have you ever been</p> <p>13 consulted in a medical legal matter by</p> <p>14 Ms. Canrlas' law firm'?</p> <p>15 A. Not to my knowledge.</p> <p>16 Q. Do you know how it is that you came to be</p> <p>17 contacted regarding this case?</p> <p>18 A. No .</p> <p>9 Q. When were you first contacted'?</p> <p>20 A. I don't have the date. It's probably been</p> <p>21 a year, year and a half ago.</p> <p>22 Q. Is that on one of those letters that</p> <p>23 Ms. Carulas has removed from your file'?</p> <p>24 A. Could be.</p> <p>25 Q. Were you contacted by letter or by phone;</p>
<p style="text-align: right;">Page 18</p> <p>1 increase in intracranial pressure.</p> <p>2 Q. Did you render an opinion in that case that</p> <p>3 there was a shift in pressures that caused the</p> <p>4 blindness'?</p> <p>5 A. No.</p> <p>6 Q. Did your opinion in that case rest upon the</p> <p>7 fact that the child had increased intracranial</p> <p>8 pressure papilledema that led to the blindness?</p> <p>9 A. I don't remember the nature of the case.</p> <p>0 It was a child that -- that -- state your</p> <p>1 question again.</p> <p>2 Q. Yes. I said in that case did you render an</p> <p>3 opinion that the child's vision loss was related</p> <p>4 to increased intracranial pressure and</p> <p>5 papilledema'?</p> <p>6 A. I don't remember.</p> <p>7 Q. Do you recall who the plaintiff's attorney</p> <p>8 was on the other side of that case?</p> <p>9 A. No, I wouldn't.</p> <p>0 Q. Aside from that case do you recall any</p> <p>1 other cases in which you acted as a medical legal</p> <p>2 expert that involved issues of increased</p> <p>3 intracranial pressure and vision loss?</p> <p>4 A. And vision loss, not that I can recall.</p> <p>5 Q. The case that you just mentioned was your</p>	<p style="text-align: right;">Page 20</p> <p>1 do you know'?</p> <p>2 A. I don't even recall.</p> <p>3 Q. Do you recall who contacted you initially'?</p> <p>4 A. I believe she did but I can't recall</p> <p>5 whether it was a phone call or letter that came</p> <p>6 first.</p> <p>7 Q. Did Dr. Luciano ever contact you and ask</p> <p>8 you to review the case?</p> <p>9 A. No.</p> <p>0 Q. Do you know if Dr. Luciano was the one that</p> <p>1 may have suggested you to review the case'?</p> <p>2 A. I have no knowledge of that.</p> <p>3 Q. Do you know when the case is set for trial?</p> <p>4 A. I was told today it was set for trial in</p> <p>5 February.</p> <p>6 Q. Have you been asked to come to Cleveland in</p> <p>7 February to testify in trial on this matter?</p> <p>8 MS. CARULAS: I've been bugging his</p> <p>9 secretary to get a schedule.</p> <p>0 Q. (BY MS. TOSTI) I'm sorry, I didn't hear</p> <p>1 your answer.</p> <p>2 A. To my knowledge I have not formally set a</p> <p>3 date to go to Cleveland in February.</p> <p>4 Q. Do you intend to be there for trial in</p> <p>5 February'?</p>

<p>Page 2</p> <p>1 A. If asked I'll be there.</p> <p>2 Q. Doctor, I have what's been marked as</p> <p>3 Plaintiff's Exhibit 1 which I believe is your CV</p> <p>4 and I'm going to ask you if you would just take a</p> <p>5 look at it and if you would identify it for our</p> <p>6 court reporter as to what that document is.</p> <p>7 (Whereupon, the above-mentioned</p> <p>8 document was marked as Exhibit 1.)</p> <p>9 (Document passed to the witness.)</p> <p>10 A. That is a copy of my curriculum vitae last</p> <p>11 updated April 2001.</p> <p>12 Q. (BYMS. TOSTI) Is it current and</p> <p>13 up-to-date?</p> <p>14 A. As of April 2001.</p> <p>15 Q. Well, are there any additions or</p> <p>16 corrections that you would like to make to it'?</p> <p>17 A. I think there is a more current version but</p> <p>18 I don't think there is anything that's been added</p> <p>19 that would be relevant to this case.</p> <p>20 Q. What additions would be in the more current</p> <p>21 version that are not on this one?</p> <p>22 A. Any publications that may have come out in</p> <p>23 the last year, any lectures I may have been</p> <p>24 invited to give over the last year, any new</p> <p>25 committee responsibilities I may have been given</p>	<p>Page 23</p> <p>1 Q. What proportion of your responsibilities</p> <p>2 were research'?</p> <p>3 A. I believe at that time a third of --</p> <p>4 between January and July of 1990 I believe a</p> <p>5 third of my time was research time.</p> <p>6 Q. Now you have several board certifications</p> <p>7 listed on your curriculum vitae. Did you pass</p> <p>8 all of those on your first attempt?</p> <p>9 A. Yes, ma'am.</p> <p>10 Q. One certification that I see listed here</p> <p>11 Gamma Knife certification; is that correct?</p> <p>12 A. That's a course, that's correct.</p> <p>13 Q. Would you explain briefly what Gamma Knife</p> <p>14 certification is?</p> <p>15 A. Gamma Knife is a technology that involves</p> <p>16 using highly focused radiation beams targeted at</p> <p>17 areas inside the brain. Primarily used for</p> <p>18 treating brain tumors and vascular malformations.</p> <p>19 And being relatively new technology you</p> <p>20 have to take a course and the course I took I</p> <p>21 believe was a week long. It was at Pittsburg and</p> <p>22 it was about a year ago.</p> <p>23 Then with their certification we perform a</p> <p>24 number of cases with a local mentor before we can</p> <p>25 start treating patients with that technology on</p>
<p>Page 22</p> <p>1 over the last year, things like that.</p> <p>2 Q. Your recollection is that any additional</p> <p>3 publications would have no direct bearing on the</p> <p>4 issues of this case; is that correct?</p> <p>5 A. That's correct.</p> <p>6 Q. Just keep that copy because we're going to</p> <p>7 have some questions that we're going to go</p> <p>8 through and you may want to refer to that.</p> <p>9 I note on your curriculum vitae that you</p> <p>10 have a fellowship in pediatric neurosurgery that</p> <p>11 I believe you've got dated on here from December</p> <p>12 through June of 1990?</p> <p>13 A. That's correct.</p> <p>14 Q. Would you describe that pediatric</p> <p>15 fellowship for me as to what that --just in</p> <p>16 general terms what that entailed?</p> <p>17 A. Certainly. That was performed at Arkansas</p> <p>18 Children's Hospital and my mentor was William</p> <p>19 Chaddick and basically I served as a clinical</p> <p>20 instructor for the University of Arkansas. My</p> <p>21 role was clinical and the daily care of</p> <p>22 patients. It also involved some research at that</p> <p>23 time.</p> <p>24 Q. I'm sorry, you said research?</p> <p>25 A. Correct.</p>	<p>Page 24</p> <p>1 our own.</p> <p>2 Q. Do any of your opinions in this case</p> <p>3 involve the Gamma Knife?</p> <p>4 A. No.</p> <p>5 Q. Who is your present employer'?</p> <p>6 A. Semmes-Murphey Clinic.</p> <p>7 Q. And do you provide professional services</p> <p>8 for any other entity besides Semmes-Murphey</p> <p>9 Clinic?</p> <p>10 A. You mean like am I on an advisory board,</p> <p>11 anything like that?</p> <p>12 Q. Well, professional services where you're</p> <p>13 paid.</p> <p>14 A. I'm paid as a consultant to Medtronics PS</p> <p>15 Medical. It's a company that makes shunt</p> <p>16 products.</p> <p>17 Q. And what type of consulting services do you</p> <p>18 provide to them?</p> <p>19 A. I serve on their professional advisory</p> <p>20 board.</p> <p>21 Q. And as an advisor what do you do; what type</p> <p>22 of issues are brought to your attention that you</p> <p>23 have an opportunity to give input into'?</p> <p>24 A. The development of new technologies.</p> <p>25 Q. Any other entities that you provide</p>

<p>Page 25</p> <p>1 professional services for besides Semmes Clinic 2 and the Medtronics Medical for shunt products? 3 A. I have an appointment at the University of 4 Tennessee Medical School as an associate 5 professor but I'm not paid for that appointment. 6 But I do some university work based on this, like 7 training residents and I sit on committees, that 8 sort of thing. 9 Q. Is the training that you provide to 10 residents, is that the clinical, mostly, 11 supervision of residents'? 12 A. Primarily. It may involve research as 13 well. 14 Q. Do you do any formal classroom instruction 15 for the residents'? 16 A. Yes. 17 Q. How often do you do that? 18 A. We have teaching conferences several times 19 per week. 20 Q. Is that in the hospital situation? 21 A. It's usually in the conference room type 22 setting. 23 Q. How long have you been employed with the, 24 I'm going to call it, the Semmes Clinic? 25 A. Two and a half years.</p>	<p>Page 26</p> <p>1 Q. Now your appointment with the University of 2 Tennessee you supervise residents in the clinical 3 area -- 4 A. That's correct. 5 Q. -- as one of your portions of 6 responsibilities and you sit on some committees 7 and you also teach at some conferences. 8 Do you have any other responsibilities? 9 A. We have didactic sessions with medical 10 students. 11 Q. Is the Semmes-Murphey Clinic owned or 12 operated by the University of Tennessee? 13 A. No. 14 Q. It's an independent -- 15 A. That's correct. 16 Q. -- institutional organization? 17 A. That's correct. 18 Q. Are you a part owner of Semmes Clinic? 19 A. A shareholder I think is the way they term 20 it. 21 Q. And how many other shareholders are there 22 in the clinic? 23 A. I don't have the exact number but between 24 20 and 30 I would think. 25 Q. Are these all physicians practicing in the</p>
<p>Page 27</p> <p>1 area of neurosurgery'.) 2 A. Yes, I believe so or neurology. 3 Q. Do you maintain any medical offices outside 4 of your office here at the Semmes Clinic'? 5 A. No, the group does but -- or I should say 6 the group has offices outside of this office but 7 I'm not part of those. 8 Q. How many other places do they maintain 9 offices besides this institution'? 10 A. There is another office in east Memphis; 11 there is an office in Jackson, Tennessee and one 12 in Florence, Alabama and I believe one in Muscle 13 Shoals, Alabama. 14 Q. Now, Doctor, you have quite a few 15 publications on your curriculum vitae. Are there 16 any that you feel have particular relevance to 17 the issues in this case as you understand them'? 18 A. I have publications that relate to 19 arachnoid cysts. Those may be relevant. 20 Q. Okay. The Plaintiff's Exhibit Number 1 I 21 would appreciate it if you would look through 22 your publications, and if there are any that you 23 feel have particular relevance, if you would mark 24 those with a circle around the items and then 25 indicate for the court reporter what the items</p>	<p>Page 28</p> <p>1 you're circling are under. 2 A. Okay. On page twenty item number one a 3 book chapter entitled, Arachnoid Cysts of the 4 Middle Cranial Fossa and Convexity and then item 5 number 13 a book chapter entitled Congenital 6 Intracranial Cysts and on page 12 item number 15 7 is a presentation at the American Society of 8 Pediatric Neurosurgeons meeting entitled, 9 Behavior Abnormalities Associated with Middle 10 Fossa Arachnoid Cysts. I believe that's all. 11 Q. The last presentation that you mentioned, 12 is that something that has been put down on 13 paper, taped, videotaped, audio taped? 14 A. No. There was an abstract in the program 15 book for that meeting, that's all. We're in the 16 process of starting to pull the data together to 17 publish a paper on that topic. 18 Q. Now I understand that you hold an 19 administrative position at, and I'm not sure how 20 to say the name here --. 21 A. LeBonheur. 22 Q. -- LeBonheur Children's Hospital, correct'? 23 A. That's correct. 24 Q. You're Chief of the Division of Pediatric 25 Neurosurgery; is that correct?</p>



<p style="text-align: right;">Page 29</p> <p>1 A. That's correct.</p> <p>2 Q. How much time do you spend per week with</p> <p>3 regard to administrative duties as chief?</p> <p>4 A. It varies from week to week but I may go a</p> <p>5 week where I have relatively few responsibilities</p> <p>6 or I may have a week where I spend several hours</p> <p>7 working at it. It's not a certain percentage of</p> <p>8 my time.</p> <p>9 Q. Well, I'd like for you to describe to me</p> <p>0 your professional responsibilities and how you</p> <p>1 divide your professional time.</p> <p>2 Tell me just on average how you split up</p> <p>3 your time between clinical practice,</p> <p>4 administrative duties, academics, research or any</p> <p>5 other professional activities that you do.</p> <p>6 A. Okay. Again, it's fairly fluid but the</p> <p>7 vast majority of my time is spent in clinical</p> <p>8 practice and that involves teaching conferences,</p> <p>9 that involves making rounds with residents. It's</p> <p>10 working with fellows and residents in the</p> <p>11 operating room.</p> <p>12 Q. What percentage of your time would you say</p> <p>13 is spent on the clinical practice such as you</p> <p>14 just described?</p> <p>15 A. Probably 80 percent.</p>	<p style="text-align: right;">Page 31</p> <p>1 though, generally most of the patients that you</p> <p>2 see have some neurosurgery related concern,</p> <p>3 either they're being referred for evaluation with</p> <p>4 you or possible surgery, those types of cases'?</p> <p>5 A. Right. We'll see the occasional patient</p> <p>6 referred to us because neurological symptoms that</p> <p>7 turn out to have a neurological rather than a</p> <p>8 neurosurgical condition.</p> <p>9 Q. But the concern was the possibility of</p> <p>10 maybe needing neurosurgery or neurosurgical</p> <p>11 evaluation?</p> <p>12 A. Right.</p> <p>13 Q. Have you been involved in any research</p> <p>14 dealing with the subject matter of papilledema?</p> <p>15 A. Not specifically.</p> <p>16 Q. Research dealing specifically with</p> <p>17 increased intracranial pressure'?</p> <p>18 A. Not specifically.</p> <p>19 Q. How about fenestrations of arachnoid cysts,</p> <p>20 any particular research dealing with specifically</p> <p>21 that area'?</p> <p>22 A. The study that we've talked about with</p> <p>23 behavioral abnormalities within children with</p> <p>24 arachnoid cysts, all of those children were</p> <p>25 treated surgically.</p>
<p style="text-align: right;">Page 30</p> <p>1 Q. Then how about administrative duties,</p> <p>2 academics and research?</p> <p>3 A. A lot of that time is nights and weekends</p> <p>4 so it's a little bit hard for me to quantify it</p> <p>5 but the administrative I would say maybe five</p> <p>6 percent and academics slash research time</p> <p>7 probably the difference, the remainder.</p> <p>8 Q. Is your current neurosurgery practice</p> <p>9 limited to pediatric cases?</p> <p>0 A. No.</p> <p>1 Q. If you would break it down for me. How</p> <p>2 many --, what portion of your practice is</p> <p>3 pediatrics as opposed to adult?</p> <p>4 A. Off the top of my head I would estimate</p> <p>5 probably 60 to 70 percent is pediatrics and the</p> <p>6 remainder is adults.</p> <p>7 Q. Do you see any pediatric patients that do</p> <p>8 not have neurosurgery related concerns, such as a</p> <p>9 neurologist or pediatric type case?</p> <p>0 A. No, not typically. I see -- one of my</p> <p>1 areas of special interest is epilepsy surgery and</p> <p>2 I do see patients where I do medical management</p> <p>3 of their epilepsy as well.</p> <p>4 Is that what you're trying to get at?</p> <p>5 Q. Um, aside from that special interest,</p>	<p style="text-align: right;">Page 32</p> <p>1 Q. Was what a study that was conducted here?</p> <p>2 A. No, it was conducted at Arkansas Children's</p> <p>3 Hospital.</p> <p>4 Q. And has that -- what was the question, the</p> <p>5 research question, that was being looked at in</p> <p>6 that research study?</p> <p>7 A. It's an evaluation of children with middle</p> <p>8 fossa arachnoid cysts. Basically we had a</p> <p>9 clinical observation that most of the kids we</p> <p>10 were seeing with middle fossa arachnoid cysts had</p> <p>11 behavioral problems, either attention deficit</p> <p>12 disorders or behavioral problem and yet the</p> <p>13 literature pertaining to arachnoid cysts doesn't</p> <p>14 address behavioral problems in these children and</p> <p>15 doesn't describe it very well.</p> <p>16 So we performed detailed neuropsychological</p> <p>17 testing on some of these children both before and</p> <p>18 in some cases after surgery to define their</p> <p>19 behavioral problems, behavioral abnormalities to</p> <p>20 see whether they got better with surgery or not.</p> <p>21 Q. Is that research concluded?</p> <p>22 A. Yes, but as I said we're just now starting</p> <p>23 to put together the result.</p> <p>24 Q. So data has been selected; is that correct?</p> <p>25 A. Correct.</p>

<div> <div>Page 33</div> <div> <p>1 Q. Have you -- has any of it been analyzed to</p> <p>2 the point where there is a report on that data?</p> <p>3 A. Not a written report, no.</p> <p>4 Q. Has any of it been reported in the</p> <p>5 scientific literature even the preliminary</p> <p>6 findings'?</p> <p>7 A. Just the abstract that I mentioned to you.</p> <p>8 Q. In that particular study how many -- what</p> <p>9 was the population, what size sample did you use</p> <p>0 when you were studying?</p> <p>1 A. We had, I think, 24 children in the study.</p> <p>2 Q. Were all of those drawn from Arkansas</p> <p>3 Children's Hospital or were they coming from,</p> <p>4 reporting from, other centers and sites?</p> <p>5 A. They were all tested there.</p> <p>6 Q. Who was the chief investigator in that</p> <p>7 study?</p> <p>8 A. I was the neurosurgeon and Carolyn</p> <p>9 Patterson is the neuropsychologist.</p> <p>0 Q. And there was just the one study site; is</p> <p>1 that correct?</p> <p>2 A. That's correct.</p> <p>3 Q. At Arkansas Children's Hospital?</p> <p>4 A. That's correct.</p> <p>5 Q. After you had an opportunity to collect all</p> </div> </div>	<div> <div>Page 35</div> <div> <p>1 problem.</p> <p>2 Q. Doctor, you don't hold yourself out as an</p> <p>3 expert in neuroophthalmology, do you?</p> <p>4 A. No.</p> <p>5 Q. Or vocational counseling?</p> <p>6 A. No.</p> <p>7 Q. Where do you have hospital privileges'?</p> <p>8 A. I have privileges at LeBonheur Children's</p> <p>9 Hospital, at Methodist Hospital, Baptist East</p> <p>0 Hospital, Collierville Hospital, St. Francis</p> <p>1 Hospital, the Regional Medical Center called the</p> <p>2 Med, the VA Hospital here in town.</p> <p>3 I have consulting privileges at St. Jude</p> <p>4 Children's Cancer Research Hospital and at</p> <p>5 Arkansas Children's Hospital.</p> <p>6 Q. Have your hospital privileges ever been</p> <p>7 suspended or revoked?</p> <p>8 A. No.</p> <p>9 Q. And the places that you've named, other</p> <p>0 than the consulting privileges that you've</p> <p>1 mentioned, are those admitting privileges for</p> <p>2 those hospitals?</p> <p>3 A. Yes.</p> <p>4 Q. Doctor, have you ever given a formal</p> <p>5 presentation on the subject matter of papilledema</p> </div> </div>
<div> <div>Page 34</div> <div> <p>1 this data what were your findings? I mean, I</p> <p>2 understand you don't have a final report written</p> <p>3 but must, I'm sure, have some impression.</p> <p>4 A. The gist of it was that 80 percent of those</p> <p>5 kids had behavioral abnormalities, either</p> <p>6 attention deficit disorder or some other</p> <p>7 psychological problem and in most cases it didn't</p> <p>8 seem to get much better following treatment of</p> <p>9 the arachnoid cyst whether it was by shunt or</p> <p>0 operation.</p> <p>1 The point is that these children need to</p> <p>2 have formal psychological evaluations if they</p> <p>3 have a history suggesting these sorts of</p> <p>4 problems.</p> <p>5 Q. Were you able to have any theories as to</p> <p>6 why these children have behavioral problems even</p> <p>7 after they have treatment?</p> <p>8 A. Not yet.</p> <p>9 Q. Is that part of the research study to come</p> <p>0 up with some theories as to why these particular</p> <p>1 findings are occurring even after the children</p> <p>2 received treatment?</p> <p>3 A. That was not the goal of the study. The</p> <p>4 goal was to determine how often this happened,</p> <p>5 whether treatment seemed to influence the</p> </div> </div>	<div> <div>Page 36</div> <div> <p>1 and increased intracranial pressure'?</p> <p>2 A. In what regard? I mean I give teaching</p> <p>3 conferences to medical students and things like</p> <p>4 that to residents.</p> <p>5 Q. Have any of those presentations or lectures</p> <p>6 ever been reduced to written form, to videotape,</p> <p>7 or audio type in regard to papilledema and</p> <p>8 increased intracranial pressure?</p> <p>9 A. I don't think so.</p> <p>0 Q. Do you have any notes or outline or</p> <p>1 syllabus for presentation on that topic'?</p> <p>2 A. No.</p> <p>3 Q. Is there a textbook that you consider to be</p> <p>4 the leading textbook in the field of</p> <p>5 neurosurgery, pediatric neurosurgery?</p> <p>6 MS. CARULAS: Note my objection to</p> <p>7 the leading, but go ahead.</p> <p>8 A. Oh, there are two that come to mind.</p> <p>9 There's a publication, a textbook on pediatric</p> <p>0 neurosurgery, that was published by the pediatric</p> <p>1 section in Congress this last year. It's in my</p> <p>2 office. I don't have the name of the textbook</p> <p>3 unless it's in here.</p> <p>4 It's called Pediatric Neurosurgery, Surgery</p> <p>5 of the Developing Nervous System, Fourth Edition,</p> </div> </div>

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 1 David McClellan editor, published by W.B.  
 2 Saunders in Philadelphia.  
 3 There's another textbook that rivals that  
 4 one entitled Principals of Practice of Pediatric  
 5 Neurosurgery, editors Albright, Pollack and  
 6 Adelson published by Thieme, T-H-I-E-M-E,  
 7 publishers and that copyright is 1999, I believe.  
 8 Q. Are those texts that you recommend to the  
 9 neurosurgery residents that you work with?  
 10 A. I do.  
 11 Q. Are those texts in your personal library,  
 12 also?  
 13 A. Yes.  
 14 Q. Do you refer to them from time to time?  
 15 A. Yes.  
 16 Q. Do you find the information in them to be  
 17 reliable?  
 18 A. Fairly reliable. Depends on the chapter.  
 19 (Doctor's pager sounds.)  
 20 MS. TOSTI: If you need to answer  
 21 that, go ahead.  
 22 (Short pause.)  
 23 Q. (BY MS. TOSTI) In regard to the reports  
 24 that you reviewed I want to go through those and  
 25 put them on the record. I'm going to mention

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 1 some of them and if you can tell me if you recall  
 2 reviewing them. Please look at the materials  
 3 that you have in front of you if you have a  
 4 question.  
 5 You reviewed the records from Kids in the  
 6 Sun which I believe were the pediatricians  
 7 records, correct?  
 8 A. Correct.  
 9 Q. Also the Signature Eye Association records  
 10 with Dr. Marcotty's notations?  
 11 A. I have those.  
 12 Q. There was a Southwest General Hospital  
 13 emergency room visit I believe November 20 of '97  
 14 just prior to the --  
 15 A. I have that.  
 16 Q. -- Cleveland Clinic admission. You've seen  
 17 the Cleveland Clinic outpatient records, correct?  
 18 A. Correct.  
 19 Q. And the two Cleveland Clinic Hospital  
 20 admissions, the first one on December 17 of '97  
 21 for the cyst fenestration as well as the April  
 22 14, 1998 admission for the shunt procedure,  
 23 correct?  
 24 A. Yes.  
 25 Q. How about the psychological counseling

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 1 records of Deddo (phonetic) & Associates?  
 2 A. I have some of those.  
 3 Q. The pediatric ophthalmology records of  
 4 Dr. Amy Jeffrey, who I believe saw Kevin sometime  
 5 after his care at the Cleveland Clinic, do you  
 6 recall seeing those?  
 7 A. I don't know that I've seen those, Amy  
 8 Jeffrey? If there in this compendium I have  
 9 them. If they're not, I don't have them.  
 10 Q. How about Dr. Allen Cohen?  
 11 A. Yes, I have his deposition certainly and I  
 12 have some of his records, yes.  
 13 Q. There is a Dr. Allen Cohen and then there  
 14 is a Dr. Bruce Cohen. Dr. Bruce Cohen I believe  
 15 was the Cleveland Clinic neurologist.  
 16 A. Correct, I have a letter from Allen Cohen  
 17 and I have Bruce Cohen's deposition.  
 18 Q. I believe there is also an evaluation by a  
 19 neurologist by the name of Dr. Howard Tucker, do  
 20 you recall seeing anything from him?  
 21 A. No, I don't.  
 22 Q. The depositions that you have reviewed, I  
 23 believe you have Dr. Mark Luciano's deposition  
 24 before you, correct, you've read it?  
 25 A. Yes.

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 1 Q. Dr. Andreas Marcotty ophthalmologist, have  
 2 you received his --  
 3 A. Marcotty's deposition I don't recall.  
 4 Q. Okay. It's not in the group of depositions  
 5 that you have before you?  
 6 A. No, it's not.  
 7 Q. You don't have recollection of specifically  
 8 reading his deposition or receiving it?  
 9 A. I don't.  
 10 Q. Dr. Gregory Kostnorsky the  
 11 neuroophthalmologist that saw Kevin, did you see  
 12 his deposition, have you received it?  
 13 A. I don't believe so.  
 14 Q. And Dr. Bruce Cohen's you have Dr. Bruce  
 15 Cohen's?  
 16 A. I do.  
 17 Q. Have you read Dr. Bruce Cohen's deposition?  
 18 A. Yes.  
 19 Q. Have you read the depositions of  
 20 plaintiff's expert Dr. Peter Savino and  
 21 Dr. Samuel Neff?  
 22 A. I read Dr. Neff's. I don't have Dr. Savino  
 23 but I have a letter that says I've received it  
 24 but I don't know if I've read that or not.  
 25 Q. In regard to Kevin's parents the

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1 depositions of Ann Kiss his mother and Raymond  
 2 Kiss, his father, have you read those  
 3 depositions?  
 4 **A.** I believe I have but I don't have them with  
 5 me today.  
 6 **Q.** Now, Doctor, you also had an opportunity  
 7 apparently to review some imaging films that you  
 8 have on the desk in front of you. If you could  
 9 just tell us what the film was and the date of  
 10 the film that you reviewed.  
 11 **A.** I have a CT scan of the head dated February  
 12 10, 1998, Kevin kiss. I have the CT scan of the  
 13 head dated 22 of January 1998. I have an MRI of  
 14 the head dated 8 July 1990. I think that's it.  
 15 Hold on a second. I have some more.  
 16 **Q.** Are those multiple images from the same  
 17 date?  
 18 **A.** These are, yes. I'm not sure that is the  
 19 correct date. Maybe I told you wrong. I have 7  
 20 of April 1998.  
 21 **Q.** I haven't heard you mention -- I believe  
 22 there may have been an MRI on November 21 of 97  
 23 and a CT scan on April 17 and another one on  
 24 June 4. I haven't heard those dates as yet.  
 25 **A.** Here's the 21st of November 1997 MRI.

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1 **Q.** Okay. Anything from April 17 a CT of the  
 2 head or June 4?  
 3 **A.** These are all November 21, 1997. This is  
 4 January 22, 1998 CT and this is 10 February '98  
 5 CT. That's all I've got.  
 6 **Q.** Okay. Now you mentioned that you believe  
 7 that you did have a report of Dr. Neff but you  
 8 don't have it in your file and I don't recall  
 9 whether or not you said you had a report of  
 10 Dr. Savino?  
 11 **A.** I believe I do but not in my file.  
 12 **Q.** Have you reviewed the report of Dr. Hedges,  
 13 the other defense expert in this case, have you  
 14 ever reviewed that report?  
 15 **A.** No, I haven't.  
 16 **MS. CARULAS:** I sent that to you,  
 17 too.  
 18 **A.** He's -- what kind of doctor is he?  
 19 **Q.** (BY MS. TOSTI) Neuroophthalmology. So you  
 20 have had that sent to you?  
 21 **A.** Um-hmm, yes.  
 22 **Q.** Did you have it before you rendered your  
 23 report in this case?  
 24 **A.** I don't recall.  
 25 **Q.** Have you reviewed the reports of the

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1 vocational counseling experts in this case'?  
 2 **A.** No.  
 3 **Q.** At anytime did you request that defense  
 4 counsel send you any additional materials other  
 5 than the ones that you originally received?  
 6 **A.** I don't believe so.  
 7 **Q.** Now you mentioned that you did take a look  
 8 at a neuroophthalmology chapter or text in  
 9 formulating your opinions.  
 10 Did you do any other research or refer to  
 11 any other medical journals or textbooks in  
 12 formulating your opinions in this case, anything  
 13 else that you did?  
 14 **A.** Not specifically to this case but I have  
 15 pretty much an up-to-date file of all the medical  
 16 literature on arachnoid cysts in children because  
 17 of the book chapters in the research project I've  
 18 been involved with. So I think I reviewed  
 19 literature but it wasn't specifically pulled for  
 20 this case.  
 21 **Q.** In preparation for this deposition did you  
 22 do any research or review of any of the medical  
 23 literature specifically for this deposition?  
 24 **A.** No.  
 25 **Q.** As you sit here today are there any

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1 publications that you believe have particular  
 2 significance to the issues in this case?  
 3 What I'm asking for is there a particular  
 4 publication or journal article or set of  
 5 standards that you feel have particular  
 6 implications here?  
 7 **A.** No,  
 8 **Q.** Did you consult with any physicians at  
 9 anytime regarding this case?  
 10 **A.** No.  
 11 **Q.** Have you ever spoken to Dr. Luciano?  
 12 **A.** Yes.  
 13 **Q.** When have you spoken to him?  
 14 **A.** Um, I interviewed for a job at Cleveland  
 15 Clinic before I took this job and we met as part  
 16 of that interview process. So that was probably  
 17 three years ago or so.  
 18 **Q.** Did Dr. Luciano conduct part of your  
 19 interview, all of your interview?  
 20 **A.** We met for 30 minutes or something like  
 21 that out of a day.  
 22 **Q.** But was it his responsibility to speak with  
 23 you as part of the interview process --  
 24 **A.** Yes.  
 25 **Q.** -- for the Cleveland Clinic position'?

<div> <div>Page 45</div> <div> <p>1 A. That's correct.</p> <p>2 Q. What was the reason why you did not obtain</p> <p>3 a position with Cleveland Clinic and ended up</p> <p>4 here?</p> <p>5 MS. <b>CARULAS</b>: Just note my</p> <p>6 objection.</p> <p>7 A. I thought this was a better job for me.</p> <p>8 Q. (BY MS. TOSTI) Let me rephrase the</p> <p>9 question. That was a bad question. Did</p> <p>10 Cleveland Clinic offer you a position'?</p> <p>11 A. No.</p> <p>12 Q. They did not?</p> <p>13 A. No.</p> <p>14 Q. Okay. And aside from the meeting that you</p> <p>15 had with Dr. Luciano three years ago in regard to</p> <p>16 the possibility of a position with Cleveland</p> <p>17 Clinic have you ever spoken with him at any other</p> <p>18 time?</p> <p>19 A. Yes.</p> <p>20 Q. When else?</p> <p>21 A. We crossed paths at a professional society</p> <p>22 meeting.</p> <p>23 Q. When was the last time that you met with</p> <p>24 Dr. Luciano'?</p> <p>25 A. I don't think I've ever met with him other</p> </div> </div>	<div> <div>Page 47</div> <div> <p>1 case.</p> <p>2 Q. Now aside from the face-to-face meeting and</p> <p>3 coming across him at on organizational meeting</p> <p>4 and the e-mail contact have you had any other</p> <p>5 contact with him'?</p> <p>6 A. Not to my knowledge.</p> <p>7 Q. How about with Dr. Bruce Cohen?</p> <p>8 A. I met him once as part of the interview</p> <p>9 process that day at Cleveland Clinic. That's the</p> <p>0 only time to my knowledge that he and I have ever</p> <p>1 spoken.</p> <p>2 Q. Did you have a face-to-face interview with</p> <p>3 Dr. Cohen?</p> <p>4 A. I did.</p> <p>5 Q. How long did that last'?</p> <p>6 A. I believe it was 30 minutes.</p> <p>7 Q. Aside from that encounter with Dr. Cohen</p> <p>8 have you come in contact with him any other way?</p> <p>9 A. <del>No</del></p> <p>0 Q. Dr. Kosmorsky, he's a neuroophthalmologist</p> <p>1 at Cleveland Clinic, have you had any contact</p> <p>2 with him?</p> <p>3 A. No.</p> <p>4 Q. Dr. Marcotty the ophthalmologist that saw</p> <p>5 Kevin, have you had any contact with him?</p> </div> </div>
<div> <div>Page 46</div> <div> <p>1 than the interview at Cleveland Clinic but as I</p> <p>2 said, we may pass paths at meetings and say, hi,</p> <p>3 to one another.</p> <p>4 I can't recall specifically when the last</p> <p>5 time would have been. We had our annual meeting</p> <p>6 in December of this year in Manhattan. Both of</p> <p>7 us were at the same meetings but I don't recall</p> <p>8 any specific conversations with him.</p> <p>9 Q. How many times do you think that you have</p> <p>10 come across Dr. Luciano?</p> <p>11 A. What do you mean come across?</p> <p>12 Q. Well, you've had contact with him?</p> <p>13 A. Well, I'm in charge of the membership for</p> <p>14 the American Society of Pediatric Neurosurgeons,</p> <p>15 so we've had some e-mail correspondence regarding</p> <p>16 his application for membership within the last</p> <p>17 several months that would have probably been</p> <p>18 three or four e-mails.</p> <p>19 Q. And the e-mail correspondence has that been</p> <p>20 strictly related to the organization Association'?</p> <p>21 A. Yes.</p> <p>22 Q. Have you had any conversation with him,</p> <p>23 e-mail contact or any other contact with him in</p> <p>24 regard to this case?</p> <p>25 A. No, he and I have never discussed this</p> </div> </div>	<div> <div>Page 48</div> <div> <p>1 A. No.</p> <p>2 Q. How about Dr. Neff, have you ever come in</p> <p>3 contact with Dr. Neff?</p> <p>4 A. Not that I know of.</p> <p>5 Q. And we ran through some of the other</p> <p>6 physicians that had contact with Kevin after all</p> <p>7 of the -- these occurrences, Dr. Amy Jeffrey and</p> <p>8 Dr. Allen Cohen, Dr. Howard Tucker.</p> <p>9 Have you ever met or come in contact with</p> <p>0 any of those physician'?</p> <p>1 A. Allen Cohen I have.</p> <p>2 Q. How did you come in contact with Dr. Allen</p> <p>3 Cohen?</p> <p>4 A. He and I are in the same professional</p> <p>5 societies together.</p> <p>6 Q. Have you ever had any conversation with</p> <p>7 Dr. Cohen where you sat down and talked with him'?</p> <p>8 A. We have conversations quite a bit but not</p> <p>9 about this case.</p> <p>0 Q. When is the last time you talked with</p> <p>1 Dr. Cohen?</p> <p>2 A. Probably at that December meeting.</p> <p>3 Q. So most of your contact would have been</p> <p>4 through a professional organization'?</p> <p>5 A. Yes.</p> </div> </div>

<p style="text-align: right;">Page 49</p> <p>1 Q. Have you ever had any contact with  2 Dr. Peter Savino --  3 A. No.  4 Q. -- who is acting as the plaintiff's expert  5 in this case?  6 A. No.  7 Q. I can't recall if I mentioned this,  8 Dr. Thomas Hedges'?  9 A. Don't know him.  10 Q. Aside from the interview process that you  11 went through was that a one day interview process  12 or was it longer than one day at the Cleveland  13 Clinic'?  14 A. It was one day.  15 Q. Who else did you interview with when you  16 interviewed? You mentioned Dr. Luciano and  17 Dr. Cohen. Who else did you see?  18 A. Dr. Yung Lee. Dr. Mark Mayberg the  19 chairman there, I'll think of his name in a few  20 minutes, there is another one that I know of for  21 sure. Elaine Wiley the neurologist that runs the  22 pediatric epilepsy unit.  23 I'm sure there were others. It was a full  24 day of interviews. Thomas Babb is a Ph.D who  25 does research in epilepsy there.</p>	<p style="text-align: right;">Page 51</p> <p>1 Q. Aside from the interviewing that you did  2 and those conferences have you been to the  3 Cleveland facility for any other reason'?  4 A. Not that I recall.  5 Q. Now I believe on your CV it indicates that  6 you previously were with the Neurological Surgery  7 Associates in Little Rock, Arkansas.  8 Why did you leave that position'?  9 A. To take the job here.  10 Q. And what was the incentive to come here?  11 MS.CARULAS: Note my objection but  12 go ahead.  13 A. It's not at all relevant to this case but I  14 came here because I had joined a six man private  15 practice group but was the only person in the  16 group that did pediatrics so I had no call  17 coverage because all my other partners did  18 adults. So I didn't have any time for my  19 children and my family.  20 Q. Have you generated any personal notes on  21 this case?  22 A. No.  23 Q. Have you -- okay. I'd like you to describe  24 for me what your -- just an overview of your  25 neurosurgical practice for like in a week's time</p>
<p style="text-align: right;">Page 50</p> <p>1 Q. Did they ever tell you why the position  2 wasn't offered to you there?  3 A. Well, I never pursued the position there.  4 Q. Wasn't that the objective of the interview  5 process? Weren't you going there specifically  6 for a position; weren't they interviewing for a  7 position'?  8 A. Well, an interview works two ways. You  9 decide if you like the place and they decide if  10 they like you.  11 Q. Do you know who eventually got the position  12 that you were interviewing for?  13 A. They've never filled that position.  14 Q. (BY MS. TOSTI) Have you ever had any  15 training at the Cleveland Clinic?  16 A. No.  17 Q. Have you ever attended professional  18 conferences there?  19 A. Yes.  20 Q. When is the last time you've done that?  21 A. It's been a number of years ago. They have  22 regular conferences on epilepsy and I've been to  23 two of those that I can recall. Both of them  24 were probably in the early 90's. I don't think  25 I've been to any in the last five years.</p>	<p style="text-align: right;">Page 52</p> <p>1 what you normally do in the course of a week, how  2 you split up your time, what it is that  3 Dr. Roop does during the week.  4 A. Well, typically I have a full day of clinic  5 on Tuesdays and a half day of clinic on Thursday  6 afternoons. The rest of my time is generally  7 spent on patient care.  8 And on Monday nights we have a teaching  9 conference which is a clinical conference and on  10 Wednesday mornings we alternate between a brain  11 tumor conference and a journal club.  12 Wednesday afternoons we have a pediatric  13 brain tumor conference at St. Jude that's a  14 multidisciplinary conference. Friday mornings we  15 alternate grand rounds and morbidity and  16 mortality conferences.  17 Q. Do you do spine surgery'?  18 A. Yes.  19 Q. What percentage of your practice is spine  20 surgery?  21 A. Maybe 20 percent, something like that.  22 Q. And what percentage would you say deals  23 chiefly with issues involving the brain'?  24 A. The majority of it.  25 Q. Doctor, I have a copy of what I believe is</p>

<p style="text-align: right;">Page 53</p> <p>1 your expert report that I've marked as</p> <p>2 plaintiff's Exhibit 2. If you would just</p> <p>3 identify that for our court reporter.</p> <p>4 (Whereupon, the above-mentioned</p> <p>5 document was marked as Exhibit 2.)</p> <p>6 (Document passed to the witness.)</p> <p>7 A. That is a letter I had written offering a</p> <p>8 formal opinion on this case.</p> <p>9 Q. (BY MS. TOSTI) That letter is dated July</p> <p>0 26 of 2001; is that correct?</p> <p>1 A. That's correct.</p> <p>2 Q. Did you provide defense counsel with any</p> <p>3 drafts of your report before rendering this July</p> <p>4 26, 2001, report?</p> <p>5 A. No.</p> <p>6 Q. And this is the only report that you</p> <p>7 provided to defense counsel?</p> <p>8 A. Yes.</p> <p>9 Q. Aside from your report have you provided</p> <p>0 defense counsel with any written memoranda on</p> <p>1 this case?</p> <p>2 A. No.</p> <p>3 Q. Have you ever written out answers to</p> <p>4 questions for defense counsel in this case?</p> <p>5 A. No.</p>	<p style="text-align: right;">Page 55</p> <p>1 A. No.</p> <p>2 Q. And do you still maintain all the opinions</p> <p>3 that you've expressed in your report?</p> <p>4 A. I'll stand corrected on the left eye, but</p> <p>5 other than that --</p> <p>6 Q. With that correction. Do you intend to do</p> <p>7 any additional work on this case or review any</p> <p>8 additional material in this case before the time</p> <p>9 of trial'?</p> <p>0 A. Not unless I find a need to do so.</p> <p>1 Q. Have you been asked to do any additional</p> <p>2 work?</p> <p>3 A. No, ma'am.</p> <p>4 Q. Tell me what your assignment was that you</p> <p>5 were given relative to this case. When it came</p> <p>6 to you what were you asked to do?</p> <p>7 A. I was asked to look at the care offered</p> <p>8 Kevin Kiss by Mark Luciano and determine in my</p> <p>9 own mind whether that care was appropriate or</p> <p>0 not.</p> <p>1 Q. Was Dr. Luciano's care the only physician</p> <p>2 that you were asked to look at and make that</p> <p>3 determination'?</p> <p>4 A. Well, I don't know that I was specifically</p> <p>5 directed to only examine his care but being a</p>
<p style="text-align: right;">Page 54</p> <p>1 Q. Did you speak with anyone from Ms. Carulas'</p> <p>2 office or Ms. Carulas to discuss the contents of</p> <p>3 your report before you finalized it?</p> <p>4 A. Yes, I believe I did.</p> <p>5 Q. What did that discussion entail?</p> <p>6 A. I don't recall specifics of it. She had</p> <p>7 called and asked if I would be willing to prepare</p> <p>8 a written report. I think we just talked in</p> <p>9 general terms what that report might contain.</p> <p>0 Q. Did she or anyone else in her office</p> <p>1 request that you make any changes to your</p> <p>2 proposed report?</p> <p>3 A. No -- I'm sorry, yes. On the second</p> <p>4 paragraph it says, severe visual loss in his</p> <p>5 right eye. I was informed that that was the left</p> <p>6 eye.</p> <p>7 Q. And does your report of July 26, 2001,</p> <p>8 memorialize opinions that you currently intend to</p> <p>9 express as an expert in the trial of this matter?</p> <p>0 A. It contains all the opinions I've been</p> <p>1 asked to express. If I'm asked to express other</p> <p>2 opinions, I'd be happy to do so.</p> <p>3 Q. Well, at this point in time are there any</p> <p>4 opinions that you intend to express at trial that</p> <p>5 aren't summarized in this July 26, 2001 report'?</p>	<p style="text-align: right;">Page 56</p> <p>1 neurosurgeon, being that he received</p> <p>2 neurosurgical care, that was my primary</p> <p>3 objective.</p> <p>4 Q. Doctor, tell me what an arachnoid cyst is</p> <p>5 just in general terms.</p> <p>6 A. It's a cyst that generally contains spinal</p> <p>7 fluid and that spinal fluid is contained by a</p> <p>8 thin membrane that is arachnoid tissue which is</p> <p>9 one of the left meninges.</p> <p>0 Q. And what is the incidence of arachnoid</p> <p>1 cysts in the pediatric population?</p> <p>2 A. I don't know that number.</p> <p>3 Q. Are there signs and symptoms associated</p> <p>4 with arachnoid cysts when they are symptomatic'?</p> <p>5 A. When they are symptomatic there are usually</p> <p>6 signs and symptoms. They may be seen</p> <p>7 incidentally.</p> <p>8 Q. In regard to the type of cyst that Kevin</p> <p>9 had, I think it was a left middle cranial fossa</p> <p>0 arachnoid cyst, what would be the type of signs</p> <p>1 and symptoms that you would see with the type of</p> <p>2 cyst that Kevin Kiss had?</p> <p>3 A. Most common, headache.</p> <p>4 Q. Anything else'?</p> <p>5 A. Well, we've discussed behavioral problems</p>

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1 that we've seen in these children, symptoms of  
 2 raised intracranial pressure may be associated  
 3 with the cysts, seizures can be associated with  
 4 them, visual disturbances associated with the  
 5 cysts.  
 6 If they're large, enough they can cause  
 7 hemiparesis. Particular to the left side  
 8 occasionally it will interfere with speech  
 9 development.  
 10 Q. What would be the signs of increased  
 11 intracranial pressure that would be a sign if  
 12 that was present?  
 13 A. Typically headaches, possibly nausea and  
 14 vomiting more common in the morning, sometimes  
 15 double vision or blurred vision.  
 16 Q. And would those be the visual disturbances  
 17 that you were talking about, also, part of the  
 18 visual disturbances that you were talking about?  
 19 A. Yes, ma'am.  
 20 Q. What other visual disturbances have you  
 21 seen with those types of cysts?  
 22 A. Well, those would be far in the way the  
 23 most common. Occasionally you have a visual loss  
 24 if it progresses where you may have visual  
 25 hallucinations and they cause seizures, temporal

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1 lobe seizures.  
 2 Q. Are there complications associated with  
 3 arachnoid cysts? Now some of the signs and  
 4 symptoms I understand may also be determined a  
 5 complication, but are there any additional  
 6 complications that can occur that you haven't  
 7 already mentioned?  
 8 A. Certainly.  
 9 Q. What would be those complications  
 10 associated with it?  
 11 A. Those cysts have been reported to rupture  
 12 and cause fluid collection in the brain, such as  
 13 hygromas that can cause increased intracranial  
 14 pressure.  
 15 They have been reported to rupture and  
 16 cause acute subdural hematomas or chronic  
 17 subdural hematomas. They have been reported to  
 18 cause endocrine abnormalities when they involve  
 19 the portion of the brain that controls hormones.  
 20 They have been associated with visual loss.  
 21 Q. How is an arachnoid cyst diagnosed?  
 22 A. Nowadays mainly by MRI.  
 23 Q. Is that the best test for arachnoid cysts,  
 24 the best diagnostic study?  
 25 A. In my opinion.

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1 Q. Was that true in 1997 at the time Kevin  
 2 first started with his problems?  
 3 A. Yes.  
 4 Q. And how is an arachnoid cyst treated? I  
 5 understand there are different options.  
 6 A. That's correct.  
 7 Q. What would basically be the different  
 8 options?  
 9 A. Well, are you asking for my opinion or for  
 10 a summary? If the cysts are asymptomatic or if  
 11 they only cause minor symptoms, they may be  
 12 treated with observation. Generally an MRI to  
 13 make sure that they're not enlarging.  
 14 If arachnoid cysts cause only headaches,  
 15 then an option is to treat the headaches with  
 16 headache medicines and if they cause seizures, an  
 17 option is to treat the seizures with medication.  
 18 If they cause behavioral problems, an option is  
 19 to use behavioral modifying medications to  
 20 control outbursts.  
 21 Regarding surgery for increased pressure  
 22 there are two main options that have been used.  
 23 One is surgery to fenestrate either by open  
 24 craniotomy or by endoscopic, minimal evasive  
 25 approaches. The other is to divert the fluid

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1 through some sort of a shunt.  
 2 Q. And you appeared to have a preference as to  
 3 how you normally would proceed. What is your  
 4 opinion as to how those should be treated?  
 5 A. Well, when I first got into practice I used  
 6 the shunt on them. I found in a hurry that if  
 7 you shunt them, you may alleviate the symptoms  
 8 but patients are usually deemed to have their  
 9 shunt the rest of their lives, and anytime they  
 10 have a headache or if a fever or do poorly in  
 11 school, the family is in the emergency room  
 12 wondering if the shunt has quit working and  
 13 needed to be revised.  
 14 Fairly often shunts will malfunction and  
 15 have to be revised or perhaps get infected and  
 16 have to be dealt with, whereas in most instances  
 17 if you fenestrate these middle fossa arachnoid  
 18 cysts, you can cure the patient. So in my  
 19 opinion curing them is much better than treating  
 20 their cysts with a shunt.  
 21 Q. So as a primary procedure do you treat them  
 22 with the medications that you've outlined here,  
 23 or would you move for fenestration of the patient  
 24 if they're symptomatic?  
 25 A. It depends on the patient. I would say



<p style="text-align: right;">Page 61</p> <p>1 with the majority of patients who present with  2 headaches I will proceed with medical management  3 of the headaches first as long as their vision is  4 stable. If their symptoms progress or if they  5 fail the medications, then we'll proceed with  6 surgery.  7 Q. You mentioned if they were asymptomatic or  8 had minor symptoms, one option would be to follow  9 with observation and follow up with MRI.  10 How often you do an MRI in a situation like  11 that?  12 A. Typically I'll do one in six months and if  13 it's stable I do one in a year and if it's  14 stable, then I won't do another one unless their  15 symptoms change.  16 Q. You mentioned that if a child had headaches  17 and their vision was stable, how do you determine  18 if their vision is stable?  19 A. I refer them to an ophthalmologist.  20 Q. So if they come in and have diagnostic  21 evidence on MRI of an arachnoid cyst, they're  22 complaining of headaches, would that be an  23 instance where you would send them to an  24 ophthalmologist for general visual field tests?  25 A. Generally, yes. Not just visual.</p>	<p style="text-align: right;">Page 63</p> <p>1 fenestrations'?</p> <p>2 A. Not necessarily. I don't operate on every  3 cyst I see.  4 Q. Back to my original question, how many  5 arachnoid cyst fenestrations would you do in a  6 year's time usually?  7 A. One or two.  8 Q. Now you do other cyst fenestrations,  9 correct?  10 A. I do.  11 Q. Are those others brain fenestration?  12 A. Brain and spinal cord, yes.  13 Q. How many -- of all the types of cysts there  14 are, how many cyst fenestrations do you do in a  15 year or month's time?  16 A. I suspect it varies a lot from one year to  17 the next, but probably half dozen or so.  18 Q. And do you currently do shunt procedures in  19 pediatric cases?  20 A. Absolutely.  21 Q. How many have you done in the last year'?</p> <p>22 A. I don't know the numbers. It's one of the  23 most common operations I do.  24 Q. You do those not only for cysts but also  25 for hydrocephalus situations?</p>
<p style="text-align: right;">Page 62</p> <p>1 Q. For a vision examination that would include  2 formal field testing?  3 A. That's correct.  4 Q. How often in your practice do you see  5 pediatric cases with arachnoid cysts?  6 A. Oh, as a guess three times per year, two or  7 three times per year, something like that.  8 Q. How many have you seen in pediatric cases  9 with arachnoid cysts the size that Kevin had?  10 A. I've seen several that size. I couldn't  11 tell you an exact number. His is large.  12 Q. Now I take it you perform arachnoid cyst  13 fenestration procedures in your practice,  14 correct'?</p> <p>15 A. I do.  16 Q. How often do you do fenestration cyst  17 procedures?  18 A. You mean cysts other than arachnoid cysts'?</p> <p>19 Q. Arachnoid cyst fenestration, how often do  20 you do that procedure?  21 A. That would be my first choice for any  22 patient that has a cyst that was easily  23 accessible.  24 Q. So the two or three cases that you see a  25 year would those likely also be having cyst</p>	<p style="text-align: right;">Page 64</p> <p>1 A. Correct.  2 Q. Can you give me a ballpark in a month's  3 time how many shunts you do or a week's time if  4 that's easier for you?  5 A. I've not done many since I moved to Memphis  6 as I have done in Arkansas and there our service  7 would typically perform 25 or 30 shunts a month.  8 Of those typically half of those would be mine.  9 Here I tend to do a lot more intracranial  10 craniotomy type work, brain tumors, epilepsy  11 work. So I'm not doing near the number of shunts  12 I was then. Probably somewhere between five and  13 ten a month, something like that.  14 Q. Now is the diagnosis of arachnoid cyst is  15 usually made prior to the time that you first see  16 the child; does the child usually come to you  17 with that diagnosis'?</p> <p>18 A. Most commonly they come with MRI's in hand  19 nowadays.  20 Q. And could you explain just briefly what  21 fenestration is. I'm speaking of an arachnoid  22 cyst.  23 A. It involves cutting windows in the cyst  24 wall, removing as much of the cyst wall as you  25 can. The arachnoid cyst walls are often stuck to</p>

<p style="text-align: right;">Page 65</p> <p>1 vital structures like arteries, cranial nerves  2 and so forth, so you typically can't remove the  3 cyst wall, but you can communicate the fluid  4 spaces with the adjacent CSF space.  5 Q. Now these cysts, are they usually fluid  6 filled, cerebral spinal fluid filled?  7 A. That's correct.  8 Q. When the cyst is fenestrated where does the  9 excess cerebral spinal fluid go'? Is it absorbed  0 by the body system if you have a successful  1 fenestration'?  2 A. Correct.  3 Q. #at is a shunt procedure in regard to a  4 cyst?  5 A. That involves placing a tube inside the  6 membranes into the CSF space contained by the  7 cyst membrane and then diverting the fluid to  8 some other body cavity, usually the abdomen.  9 Q. Now generally speaking does a child have to  0 be symptomatic before -- symptomatic with  1 arachnoid cyst before there is a recommendation  2 for surgery for fenestration of the cyst?  3 A. That's a matter of opinion.  4 Q. Well, in your opinion does a child have to  5 be symptomatic before you would recommend</p>	<p style="text-align: right;">Page 67</p> <p>1 A. That's correct.  2 Q. Is there anything that would cause you to  3 move to shunting rather than fenestration'? Are  4 there certain symptoms or certain things that  5 would occur that may cause you to say in this  6 case a shunt would be more appropriate?  7 A. Yes. First of all, if the patient is too  8 ill to tolerate a craniotomy, the shunt is not as  9 big an operation. Secondly if the cyst is in a  0 location where fenestration is not likely to work  1 or where it may be risky.  2 For example, supercellular arachnoid cysts  3 the cysts are usually involving both the optic  4 nerves and pituitary glands and in those cases  5 often shunting is the better operation.  6 Q. Does the size of the arachnoid cyst make a  7 difference as to whether fenestration or shunting  8 would be most appropriate?  9 A. No. The presence of hydrocephalus  0 preoperatively does. Sometimes children have  1 hydrocephalus when they present with arachnoid  2 cysts.  3 Q. So when you are in a position to say, I'm  4 going to recommend fenestration for a child, what  5 signs or symptoms would be the indicators that a</p>
<p style="text-align: right;">Page 66</p> <p>1 fenestration of the arachnoid cyst?  2 MS. CARULAS: Just note my  3 objection, but go ahead.  4 A. In general they are. Occasionally if we  5 see an MRI scan where it looks like there's a lot  6 of deformation or shift in the brain in a  7 child -- sometimes in young children it's hard to  8 tell whether they're symptomatic or not. But if  9 it looks like there's a lot of mass effect, then  0 sometimes we make a recommendation to treat them  1 on that basis.  2 Q. (BY MS. TOSTI) What's a Third Nerve Palsy?  3 A. That means the ocular motor nerve doesn't  4 work properly.  5 Q. #at would be the signs and symptoms of a  6 Third Nerve Palsy?  7 A. It can be petosis, P-E-T-O-S-I-S, which is  8 a lid lag on one side or it can be an asymmetry  9 in the pupils.  0 Q. So, Doctor, just so I have this down, when  1 surgical intervention is indicated for arachnoid  2 cysts you would generally recommend fenestration  3 over shunting?  4 A. I do.  5 Q. Just in general terms'?</p>	<p style="text-align: right;">Page 68</p> <p>1 surgical option would be appropriate for an  2 arachnoid cyst'?  3 MS. CARULAS: Note my objection, but  4 go ahead.  5 Q. (BY MS. TOSTI) We've mentioned all these  6 other options, but what indicators would there be  7 for saying that this particular arachnoid cyst  8 should be treated with the surgical option?  9 One you mentioned was mass effect that  0 might cause you to go to a surgical option.  1 A. Yes.  2 MS. CARULAS: I'm just objecting  3 because I think it's beyond the scope of this  4 case in that your own expert is not criticizing  5 this and we're under a constraint of time and I  6 just don't see the relevance to this case, but go  7 ahead.  8 A. Well, we've already talked about failure of  9 the medicine to alleviate symptoms as a potential  0 for surgery, progressive symptoms in a child. In  1 other words, if they seem to be deteriorating,  2 that could be an indication for surgery.  3 Q. (BY MS. TOSTI) If the child has a large  4 arachnoid cyst, is there an increased risk for  5 hydrocephalus if you don't do a shunt, if you</p>

<p style="text-align: right;">Page 69</p> <p>1 just fenestrate it?</p> <p>2 A. Not to my knowledge. I don't know that</p> <p>3 that issue -- I should say I haven't seen that</p> <p>4 specific question answered in a study.</p> <p>5 Q. In what percentage of the cases is a single</p> <p>6 surgical procedure, such as a fenestration, or</p> <p>7 let's say a fenestration, successful in</p> <p>8 controlling the problems associated with</p> <p>9 arachnoid cysts'?</p> <p>10 A. For me probably somewhere in the vicinity</p> <p>11 of 70 percent, 75 percent. Of the children we</p> <p>12 treated with fenestration if not required a</p> <p>13 shunt, had a good resolution of their symptoms.</p> <p>14 Q. Do you in your practice if you do a</p> <p>15 fenestration, do you do a second fenestration'?</p> <p>16 A. It depends on the case.</p> <p>17 Q. Have you done that in the past?</p> <p>18 A. A second fenestration?</p> <p>19 Q. Yes.</p> <p>20 A. Yes.</p> <p>21 Q. Once a cyst fenestration is done how do you</p> <p>22 determine if it's successful or not; what are the</p> <p>23 indicators; what do you look for?</p> <p>24 A. Sometimes that can be difficult especially</p> <p>25 in a child with behavioral problems, but you'd</p>	<p style="text-align: right;">Page 71</p> <p>1 a period of time.</p> <p>2 Q. How long does it have to be present before</p> <p>3 you term it chronic'?</p> <p>4 A. I don't know the specific definition for</p> <p>5 that.</p> <p>6 Q. Doctor, in the course of your practice do</p> <p>7 you inspect the interior of your patient's eyes</p> <p>8 with an ophthalmoscope when it's indicated to</p> <p>9 look for papilledema, is that something that you</p> <p>0 do?</p> <p>1 A. Absolutely.</p> <p>2 Q. And providing patients are cooperative, how</p> <p>3 long does it take you to check patients eyes</p> <p>4 specifically to determine if papilledema is</p> <p>5 present or not present?</p> <p>6 A. Depends on the patient. If they're</p> <p>7 cooperative, it usually takes a couple of</p> <p>8 minutes.</p> <p>9 Q. Now do all neurosurgeons in their training</p> <p>0 learn how to do a visual inspection of the</p> <p>1 interior or the eye with an ophthalmoscope to</p> <p>2 look for papilledema?</p> <p>3 A. Yes.</p> <p>4 Q. During the course of their training do they</p> <p>5 learn that?</p>
<p style="text-align: right;">Page 70</p> <p>1 like to see a resolution of their symptoms. On</p> <p>2 the other hand sometimes it can take a period of</p> <p>3 time before their symptoms improve clinically.</p> <p>4 Q. Would you -- if the fenestration was not</p> <p>5 successful in relieving increased intracranial</p> <p>6 pressure, what signs and symptoms would you see?</p> <p>7 A. You may see signs and symptoms of increased</p> <p>8 intracranial pressure which includes headaches</p> <p>9 nausea, vomiting, papilledema, those clinical</p> <p>10 indicators of increased intracranial pressure</p> <p>11 that would be commonly recognized.</p> <p>12 Q. What is papilledema?</p> <p>13 A. Papilledema from a clinical perspective is</p> <p>14 elevation of the optic nerve head and blurring of</p> <p>15 the optic disk margins. Is that your question'?</p> <p>16 Q. Does it involve swelling of the optic</p> <p>17 nerve?</p> <p>18 A. It can, yes.</p> <p>19 Q. How do you diagnose papilledema?</p> <p>20 A. Usually by endoscopi examination.</p> <p>21 Q. That's utilizing an ophthalmoscope and</p> <p>22 looking at the interior of the eye, correct?</p> <p>23 A. That's correct.</p> <p>24 Q. What is chronic papilledema?</p> <p>25 A. It's papilledema that has been present for</p>	<p style="text-align: right;">Page 72</p> <p>1 A. Yes.</p> <p>2 Q. Would you agree that anytime a patient has</p> <p>3 brain surgery one of the complications that can</p> <p>4 occur is increased intracranial pressure'?</p> <p>5 A. Depending on the brain surgery it's a</p> <p>6 possible complication, yes.</p> <p>7 Q. Would you agree that a fundoscopic exam to</p> <p>8 check for papilledema should be part of every</p> <p>9 routine follow-up exam after brain surgery for an</p> <p>10 arachnoid cyst fenestration?</p> <p>11 MS. CARULAS: Objection.</p> <p>12 A. Every routine follow-up exam? No, I don't</p> <p>13 think that's necessary.</p> <p>14 Q. (BY MS. TOSTI) Would you agree that during</p> <p>15 the initial period, the initial first few months,</p> <p>16 after an arachnoid cyst fenestration a</p> <p>17 fundoscopic exam should be part of every</p> <p>18 follow-up visit'?</p> <p>19 MS. CARULAS: Note my objection.</p> <p>20 A. For me personally I would do that.</p> <p>21 Q. (BY MS. TOSTI) What about in general as</p> <p>22 the standard of care, is that what a reasonably</p> <p>23 prudent neurosurgeon would do in those</p> <p>24 circumstances after an arachnoid cyst</p> <p>25 fenestration in every follow-up visit for the</p>

<p style="text-align: right;">Page 73</p> <p>1 first few months after the surgery, check the 2 fundus of the eye to see if there is papilledema'? 3 MS. CARULAS: Note my objection, go 4 ahead. 5 A. I think there is no standard of care but a 6 prudent surgeon would. 7 Q. (BY MS. TOSTI) Doctor, isn't it true that 8 one of the things that can happen after a cyst 9 fenestration that the fenestration or drainage 0 hole can close up and the cyst can again cause 1 problems for a patient'? 2 A. Yes. 3 Q. And isn't it also true that even when a 4 cyst is successfully fenestrated -- in other 5 words, there is a hole put into the membrane, it 6 doesn't always relieve the increased intracranial 7 cranial pressure and sometimes a shunt may be 8 necessary'? 9 A. That's true. 0 Q. And have you had patients where there's 1 been a fenestration done and it did not relieve 2 the symptoms and you've gone on to recommend that 3 a shunt be done? 4 A. Yes. 5 Q. Would you agree that it's a neurosurgeon's</p>	<p style="text-align: right;">Page 75</p> <p>1 headaches, then you would not jump into a second 2 surgery. 3 Q. Well, I wasn't asking if you should move to 4 a second surgery, but if you had a patient that 5 had surgery and had their symptoms relieved, 6 headaches gone away, vision had gotten better and 7 then after several weeks headaches come back, 8 vision problems start over, would that be a 9 scenario that would raise a level of concern that 10 there may be increased intracranial pressure 11 occurring'? 12 MS. CARULAS: Note my objection. 13 A. Sure. 14 Q. (BY MS. TOSTI) Isn't it true that one of 15 the earliest signs of increased intracranial 16 pressure is swelling of the optic disk'? 17 A. It may be signs, not symptoms. 18 Q. So if you have a new finding of papilledema 19 in a patient who has just recently undergone an 20 arachnoid cyst fenestration, would that raise the 21 level of concern for increased intracranial 22 pressure? 23 A. Yes. 24 Q. Doctor, once your suspicious that the 25 patient has increased intracranial pressure,</p>
<p style="text-align: right;">Page 74</p> <p>1 duty to watch the patient carefully for signs and 2 symptoms that may indicate the fenestration did 3 not resolve the problems? Meaning the increased 4 intracranial pressure caused by the arachnoid 5 cyst. 6 A. Yes. 7 Q. Doctor, in a patient that has a cyst 8 fenestration and then has symptoms of relief but 9 then goes on to develop new signs and symptoms of 0 headaches and blurred vision, would that raise a 1 concern that the fenestration may not have worked 2 and that the intracranial pressure may be 3 increasing again? 4 A. Yes. 5 Q. Is headache one of the early signs of 5 increased intracranial pressure? 7 A. If you don't mind, let me back up to your 3 previous question for clarification. In patients 3 who have had chronically increased intracranial 0 pressure, i.e., chronic headaches related to 1 arachnoid cysts, sometimes it can take a number 2 of weeks, sometimes two or three months for their 3 symptoms to settle down. 4 So just for clarification if they came back 5 in a month and said they were still having</p>	<p style="text-align: right;">Page 76</p> <p>1 we're speaking of the patient that has had an 2 arachnoid cyst fenestration, would you agree that 3 it's important to monitor the patient to 4 determine if the condition is getting worse, 5 getting better or staying the same? 6 A. The patient should be monitored whether 7 it's by a neurosurgeon or ophthalmologist. It's 8 very -- in my practice I generally ask a 9 pediatric neuroophthalmologist to follow that 10 aspect of the child's care for me and let me know 1 if they think the child is getting worse. 2 Q. If the neuroophthalmologist comes back to 3 you and says, gee, this papilledema did not 4 resolve itself, and, in fact, it looks like it's 5 gotten somewhat worse, what do you do in that 6 case? 7 MS. CARULAS: Note my objection. Go 8 ahead. 9 Q. (BY MS. TOSTI) It's your impression that 10 this child from your evaluation has increased 11 intracranial pressure and the 12 neuroophthalmologist has warned you that the 13 papilledema has not improved, in fact may be 14 advancing, is that -- 15 A. That's two different things. So for</p>

<p style="text-align: right;">Page 77</p> <p>1 clarification if the papilledema is not</p> <p>2 improving, that is if it's stable and if I've</p> <p>3 satisfied myself that the child's intracranial</p> <p>4 pressure is not dangerously high, I may just</p> <p>5 follow it.</p> <p>6 I may not do anything accept make sure that</p> <p>7 the ophthalmologist and I follow it together. On</p> <p>8 the other hand, if it's progressive, then</p> <p>9 generally we'll recommend treatment.</p> <p>10 Q. And one of the things that the</p> <p>11 neuroophthalmologist does is do a complete visual</p> <p>12 examination including the visual fields that we</p> <p>13 talked about?"</p> <p>14 A. Correct.</p> <p>15 Q. Including the inspection of the fundus of</p> <p>16 the eye and including the visual acuity?</p> <p>17 A. That's correct.</p> <p>18 (Doctor's pager, short pause.)</p> <p>19 Q. (BY MS. TOSTI) Doctor, we had an</p> <p>20 interruption here but when you monitor a</p> <p>21 patient's increased intracranial pressure after</p> <p>22 cyst fenestration, one of the things that should</p> <p>23 be done is to monitor the patient for papilledema</p> <p>24 that you, as a neurosurgeon, may do that or you</p> <p>25 may refer the patient to a neuroophthalmologist</p>	<p style="text-align: right;">Page 79</p> <p>1 and vomiting in an ill appearing child, we</p> <p>2 obviously are more concerned.</p> <p>3 The point being that papilledema in and of</p> <p>4 itself is not normal, it's something we like to</p> <p>5 keep an eye on, but not all papilledema is the</p> <p>6 same.</p> <p>7 Some papilledema is mild, visual acuity is</p> <p>8 stable, it's not progressive and we may just</p> <p>9 follow it and hope that it goes away. Other</p> <p>10 times it may be rapidly progressive and we may be</p> <p>11 forced to do something about it in a hurry.</p> <p>12 Q. (BY MS. TOSTI) But that would mean that</p> <p>13 you would want to keep track and be watching to</p> <p>14 determine if it is stable or if it is changing</p> <p>15 and becoming worse, correct?</p> <p>16 A. Hopefully, or in many instances we have to</p> <p>17 rely on the families to let us know if they think</p> <p>18 their child is getting worse. Many times we</p> <p>19 consult with neurologists or</p> <p>20 neuroophthalmologists to help us to sort out the</p> <p>21 child, if you would.</p> <p>22 Q. If the patient has chronic persistent</p> <p>23 papilledema after a cyst fenestration, are there</p> <p>24 complications that can be associated with that?</p> <p>25 A. With papilledema?"</p>
<p style="text-align: right;">Page 78</p> <p>1 to have a complete eye evaluation and to monitor</p> <p>2 that situation on an ongoing basis, correct?</p> <p>3 A. Correct.</p> <p>4 Q. Now if the child did not have papilledema</p> <p>5 before surgery, undergoes a cyst fenestration and</p> <p>6 then develops papilledema after surgery, after</p> <p>7 undergoing a cyst fenestration, is that cause for</p> <p>8 concern?</p> <p>9 MS. CARULAS: Note my objection. Go</p> <p>10 ahead.</p> <p>11 A. Obviously it's -- first of all, that's</p> <p>12 something that I don't know that I've ever seen</p> <p>13 before. If I have, it's uncommon. But,</p> <p>14 secondly, obviously you'd be concerned anytime</p> <p>15 you saw papilledema particularly if it wasn't</p> <p>16 there before and it was afterwards.</p> <p>17 Sometimes around the time of surgery, by</p> <p>18 that I mean in the first month or so after</p> <p>19 surgery I may see some transient rises in</p> <p>20 intracranial pressure related to changes in CSF</p> <p>21 circulation or whatever. That may be transient.</p> <p>22 So if the child is not too symptomatic and</p> <p>23 if the clinical exam is not too alarming, it's</p> <p>24 something that we may just follow. On the other</p> <p>25 hand, if it's something associated with nausea</p>	<p style="text-align: right;">Page 80</p> <p>1 Q. With chronic cyst papilledema after</p> <p>2 fenestration.</p> <p>3 A. Yes.</p> <p>4 MS. CARULAS: Note my objection.</p> <p>5 Q. (BY MS. TOSTI) You may continue.</p> <p>6 A. What was your question?</p> <p>7 Q. Are there complications associated with</p> <p>8 chronic papilledema after cyst fenestration?"</p> <p>9 A. My answer was yes.</p> <p>10 Q. What are those complications?</p> <p>11 A. Complications associated with chronic</p> <p>12 papilledema may be progressive visual loss,</p> <p>13 progressive constriction of visual fields, those</p> <p>14 would be the primary things.</p> <p>15 In the long run if it's severe enough, it</p> <p>16 could lead to optic atrophy, which again</p> <p>17 clinically manifests in visual loss.</p> <p>18 Q. What is optic atrophy?"</p> <p>19 A. It's actual loss of the nerve fibers within</p> <p>20 the optic nerve.</p> <p>21 Q. And would you agree that it's well</p> <p>22 recognized in your field of neurosurgery that</p> <p>23 chronic papilledema can lead to optic atrophy</p> <p>24 resulting in visual field loss?"</p> <p>25 MS. CARULAS: Note my objection. Go</p>

<p>Page 81</p> <p>1 ahead.</p> <p>2 A. It is in some instances. It doesn't</p> <p>3 necessarily have to.</p> <p>4 Q. (BY MS. TOSTI) Isn't optic atrophy</p> <p>5 something that occurs over a period of time,</p> <p>6 usually months, rather than something that's</p> <p>7 sudden that happens in a few hours or a day'?</p> <p>8 A. Right.</p> <p>9 Q. And with a patient who has chronic</p> <p>0 papilledema would you agree that the patient</p> <p>1 should be followed for signs of atrophy'?</p> <p>2 A. I don't know how to answer that question.</p> <p>3 That's not a well stated question. We've already</p> <p>4 talked about the fact that --</p> <p>5 Q. Let me rephrase it. When a patient has</p> <p>6 chronic papilledema would you agree that the</p> <p>7 patient should be followed closely for signs of</p> <p>8 visual field loss?</p> <p>9 A. I think looking for signs of visual field</p> <p>0 loss is an appropriate way to follow children</p> <p>1 with chronic papilledema. Again, if it's mild,</p> <p>2 depending on the severity of the papilledema one</p> <p>3 might -- and the chronicity of it -- one might</p> <p>4 see them once a year as we might with some of our</p> <p>5 other patients, or we may see them once every six</p>	<p>Page 83</p> <p>1 chronic papilledema would you agree that</p> <p>2 peripheral vision is usually affected first?</p> <p>3 A. Yes.</p> <p>4 Q. I think you've already told me that a</p> <p>5 serial, formal visual field test is helpful in</p> <p>6 monitoring a patient with chronic papilledema for</p> <p>7 visual loss, correct'?</p> <p>8 A. Correct. I guess we should make it plain</p> <p>9 that most neurosurgeons I know don't do normal</p> <p>0 field testing. That's something an</p> <p>1 ophthalmologist does.</p> <p>2 Q. Right, and that you would co-manage a</p> <p>3 patient with the neuroophthalmologist doing that,</p> <p>4 probably, portion of the evaluation of the child</p> <p>5 and reporting back to you?</p> <p>6 A. Right.</p> <p>7 Q. Do you have an opinion as to whether</p> <p>8 confrontation visual fields are effective in</p> <p>9 evaluating a patient for field visual loss'?</p> <p>0 A. Yes, I think we do that every day as a</p> <p>1 screening test on our part.</p> <p>2 Q. Do you think that in regard to the patient</p> <p>3 that may have chronic papilledema with visual</p> <p>4 field defects that it's an effective way to</p> <p>5 evaluate the patient to determine if they have</p>
<p>Page 82</p> <p>1 months, or if it's severe or we're worried about</p> <p>2 them, we may see them twice a week.</p> <p>3 Q. So it would be dependent on a complete</p> <p>4 visual examination, correct, so that you can make</p> <p>5 the determination is this stable or is it</p> <p>6 something that's becoming more severe; you would</p> <p>7 need to evaluate the child.</p> <p>8 A. That's correct, not just a visual</p> <p>9 examination but the child as a whole.</p> <p>0 Q. When I say visual I mean fundoscopic,</p> <p>1 visual fields, visual acuity, those types of</p> <p>2 examinations, a complete assessment by a</p> <p>3 neuroophthalmologist.</p> <p>4 A. Complete neurosurgical assessment, right.</p> <p>5 Q. Isn't it <i>true</i> that when there is gradual</p> <p>6 vision loss in one eye the vision loss may not be</p> <p>7 recognized by the patient until it's fairly well</p> <p>8 advanced?</p> <p>9 A. Absolutely.</p> <p>0 Q. So you would agree that in a child it</p> <p>1 wouldn't be unusual for a child not to be aware</p> <p>2 of a gradual vision loss that occurs</p> <p>3 predominantly in one eye?</p> <p>4 A. Child or adult.</p> <p>5 Q. And with the vision loss associated with</p>	<p>Page 84</p> <p>1 lost vision?</p> <p>2 A. I think it can be effective in a</p> <p>3 cooperative child.</p> <p>4 Q. Why then do you refer a patient with</p> <p>5 chronic papilledema to a neuroophthalmologist if</p> <p>6 it's just as effective -- is it just as effective</p> <p>7 as formal visual field testing'?</p> <p>8 A. I didn't say that. You didn't ask that.</p> <p>9 Q. I'm going to let you clarify your answer</p> <p>0 then. Is it as effective as formal field</p> <p>1 testing?</p> <p>2 A. No.</p> <p>3 Q. Can you get a normal result on</p> <p>4 confrontational visual field testing and then</p> <p>5 have formal visual field testings done and find</p> <p>6 out that you have defects in the visual fields'?</p> <p>7 MS. CARULAS: Note my objection. Go</p> <p>8 ahead.</p> <p>9 A. You may be able to pick up subtle</p> <p>0 abnormalities in the visual fields by formal</p> <p>1 testing that you might not pick up by</p> <p>2 confrontational testing, but in a cooperative</p> <p>3 patient any significant deficit I think you</p> <p>4 should be able to pick up, at least in an</p> <p>5 experienced examiner's hands, you should be able</p>

<div> <div>Page 85</div> <div> <p>1 to pick up --</p> <p>2 Q Do you -- excuse me.</p> <p>3 A Again, if you have a child that has</p> <p>4 behavioral problems and may not be the most</p> <p>5 cooperative or has problems with attention, then</p> <p>6 you may rely on someone who does it for a living</p> <p>7 rather than on yourself.</p> <p>8 Q Doctor, would you agree that in the</p> <p>9 pediatric patient that is experiencing increased</p> <p>10 intracranial pressure after cyst fenestration the</p> <p>11 risk of optic nerve damage increases with the</p> <p>12 duration of the papilledema?</p> <p>13 A Your question is whether the risk of losing</p> <p>14 vision is greater over time in a patient with</p> <p>15 chronic papilledema'!</p> <p>16 Q After cyst fenestration. If a patient has</p> <p>17 increased intracranial pressure after cyst</p> <p>18 fenestration, does the risk for optic nerve</p> <p>19 damage increase with the duration of the</p> <p>20 papilledema?</p> <p>21 A I can't say that with certainty. If it's</p> <p>22 inild and stable, it may not be at risk for visual</p> <p>23 loss.</p> <p>24 Q Are there any signs or indications on</p> <p>25 fundoscopic exam that would indicate to you that</p> </div> <div>Page 86</div> </div>	<div> <div>Page 87</div> <div> <p>1 two studies, the MRI or CT. to nile out increased</p> <p>2 intracranial pressure'?</p> <p>3 A. I would say in general you can't measure</p> <p>4 intracranial pressure with an MRI or CT scan.</p> <p>5 Sometimes you can get clues from MRI's and CT</p> <p>6 scans that the pressure is kind of not a</p> <p>7 problem.</p> <p>8 For example, if we see a child with large</p> <p>9 ventricles and we put a shunt in and the</p> <p>10 follow-up scan shows the ventricles have gotten</p> <p>11 smaller and there is now fluid in the</p> <p>12 subarachnoid space, it is generally presumed that</p> <p>13 the pressure is decreased.</p> <p>14 Q. It tells you something about the position</p> <p>15 of structures or the size of structures, but it</p> <p>16 can't tell you how much pressure those structures</p> <p>17 are under, correct'?</p> <p>18 A. That's correct.</p> <p>19 Q. Now before you take patients for cyst</p> <p>20 fenestration do you check them for papilledema'?</p> <p>21 A. Yes.</p> <p>22 Q. Is that something that reasonably prudent</p> <p>23 neurosurgeons would do with their patients is</p> <p>24 check for papilledema before doing a cyst</p> <p>25 fenestration'?</p> </div> <div>Page 88</div> </div>
<div> <div>Page 86</div> <div> <p>1 the papilledema has been present for awhile and</p> <p>2 is in its early stages?</p> <p>3 A. Usually if it's severe papilledema we</p> <p>4 assume that it's -- well, let me rephrase that.</p> <p>5 Just by looking at the back of someone's eye I</p> <p>6 can't tell you with certainty how long the</p> <p>7 papilledema has been present. You can have</p> <p>8 papilledema develop within a day or two in some</p> <p>9 cases.</p> <p>10 On the other hand, we see children with</p> <p>11 chronic shunt malfunctions who came in with</p> <p>12 raised intracranial pressure for weeks who never</p> <p>13 show papilledema.</p> <p>14 Q Is that something that you would defer to a</p> <p>15 neuroophthalmologist as to whether or not you can</p> <p>16 tell how long the papilledema has been present'?</p> <p>17 A I would be surprised if they could tell you</p> <p>18 how long it had been present with certainty.</p> <p>19 Q Do you use any type of grading system to</p> <p>20 note the seventy of the papilledema?</p> <p>21 A Just my monitor.</p> <p>22 Q Doctor, would you agree that a CT scan and</p> <p>23 an MRI of the brain are not reliable diagnostic</p> <p>24 studies to rule out the presence of increased</p> <p>25 intracranial pressure; that you can't use those</p> </div> <div>Page 87</div> </div>	<div> <div>Page 88</div> <div> <p>1 MS. CARULAS: Note my objection,</p> <p>2 A. At some point. If you're trying to say do</p> <p>3 I do it immediately before I take them to</p> <p>4 surgery, I don't, but as part of my history and</p> <p>5 physical that's part of the workup.</p> <p>6 Q. (BY MS. TOSTI) The preoperative</p> <p>7 evaluation --</p> <p>8 A. That's correct.</p> <p>9 Q. -- would include a check for papilledema --</p> <p>10 A. That's correct.</p> <p>11 Q. -- before cyst fenestration?</p> <p>12 A. That's correct.</p> <p>13 Q. Why is it that you do that?</p> <p>14 A. I'd like to know if it's present so that if</p> <p>15 something changes postoperatively I will have</p> <p>16 something to compare it to.</p> <p>17 MS. TOSTI: We are going to suspend</p> <p>18 this deposition and I reserve the right to</p> <p>19 continue it as both defense counsel and I need to</p> <p>20 catch an airplane. It's the last flight out of</p> <p>21 Memphis this evening. We will continue this</p> <p>22 deposition probably by telephone at a mutually</p> <p>23 agreeable time and date.</p> <p>24 THE WITNESS: Okay.</p> <p>25</p> </div> <div>Page 89</div> </div>

1 COURT REPORTER'S CERTIFICATE

3 STATE OF TENNESSEE:

4 COUNTY OF SHELBY:

5

I, CATHY A. HASTINGS, Certified Court  
6 Reporter and Notary Public, Shelby County,  
Tennessee, CERTIFY:

7 1. The foregoing deposition was taken  
before me at the time and place stated in the  
8 foregoing styled cause with the appearances as  
noted:

9 2. Being a Shorthand Reporter, I then  
reported the deposition in Stenotype to the best  
10 of my skill and ability, and the foregoing pages  
contain a full, true and correct transcript of my  
11 said Stenotype notes then and there taken;

12 3. I am not in the employ of and am not  
related to any of the parties or their counsel,  
and I have no interest in the matter involved.

13

14 WITNESS MY SIGNATURE, this, the \_\_\_\_

15 day of \_\_\_\_\_, 2002.

16

17

18 CATHY A. HASTINGS, CCR  
Court Reporter  
19 Notary Public for  
Shelby County, Tennessee  
20

21 My commission expires:  
22 October 13, 2003

23

24

25





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