IN THE CIRCUIT COURT OF THE 17TH JUDICIAL CIRCUIT IN AND FOR BROWARD COUNTY, FLORIDA

LINDA and JORGE AYRE, as Personal Representatives of the Estate of GERARDO AYRE, Deceased,

Plaintiffs,

vs.)No. 01-4410 CACE 12

HEALTHSOUTH OF FORT LAUDERDALE LIMITED PARTNERSHIP d/b/a SUNRISE REHABILITATION HOSPITAL, LUCY COHEN, M.D., LAUREN LERNER, M.D., HENRY LIN, M.D., HENRY LIN, M.D.,P.A., MATTHEW DEUTSCHER, M.D., DREW TOMENCHOK, M.D., GLENN MORRISON, M.D., FLORIDA PEDIATRIC NEUROSURGICAL ASSOCIATES, P.A., JOHN RAGHEB, M.D., UNIVERSITY OF MIAMI d/b/a UNIVERSITY OF MIAMI SCHOOL OF MEDICINE, VARIETY CHILDREN'S HOSPITAL d/b/a MIAMI CHILDREN'S HOSPITAL, PHILIP ALDANA, M.D., PUBLIC HEALTH TRUST a/k/a JACKSON HEALTH SYSTEM,

Defendants.

Fort Lauderdale, Florida

February 18, 2003

11:15 A.M.

DEPOSITION

OF

ARMANDO CORREA, M.D.

APPEARANCES:

FAZIO, DAWSON, DiSALVO, CANNON, ABERS, PODRECCA & FAZIO
BY: JEFF S. ABERS, ESQ., co-counsel, appearing on behalf of the Plaintiffs.

MARK DICKSON, ESQ., co-counsel, appearing on behalf of the Plaintiffs.

CONRAD & SCHERER
BY: REID A. COCALIS, ESQ., of counsel, appearing on behalf of the Defendant HealthSouth.

STEPHENS LYNN KLEIN LA CAVA HOFFMAN & PUYA, P.A.
BY: JONATHON P. LYNN, ESQ., of counsel, appearing on behalf of the Defendant Cohen, M.D.

BUNNELL, WOULFE, KIRSCHBAUM, KELLER, COHEN, McINTYRE & GREGOIRE, P.A.
BY: ANDREW J. RADER, ESQ., of counsel, appearing on behalf of the Defendants Lin, M.D. and Lin, M.D.,P.A.

WICKER, SMITH, O'HARA, McCOY, GRAHAM & FORD, P.A.
BY: ALEXANDRA ESPINOSA, JR., ESQ., of counsel, appearing on behalf of the Defendant Deutscher, M.D.

BILLING, COCHRAN, HEATH, LYLES & MAURO, P.A.
BY: VIVIAN FAZIO, ESQ., of counsel, appearing on behalf of the Defendant Tomenchok, M.D.

FOWLER, WHITE, BURNETT
BY: ROBERT BOUCHARD, ESQ., of counsel, appearing on behalf of the Defendants Ragheb, M.D. and University of Miami.

WOMACK & SAGE, P.A.
BY: DAVID APPLEBY, ESQ., of counsel, appearing on behalf of the Defendant Variety Children's Hospital.

Deposition of ARMANDO CORREA, M.D., a witness of lawful age, taken by the Plaintiffs for the purpose of discovery and for use as evidence in the above-entitled cause, wherein LINDA and JORGE AYRE, as Personal Representatives of the Estate of GERARDO AYRE, Deceased are the Plaintiffs and HEALTHSOUTH OF FORT LAUDERDALE d/b/a SUNRISE REHABILITATION HOSPITAL, et al. are the Defendants, pending in the Circuit Court of the 17th Judicial Circuit in and for Broward County, Florida, pursuant to notice heretofore filed, before TERESA F. DURANDO, RPR, Registered Professional Reporter and Notary Public in and for the State of Florida at Large, at Fowler White Burnett, 100 Southeast Third Avenue, Fort Lauderdale, Broward County, Florida, on the 18th day of February, 2003, commencing at 11:15 A.M.

Thereupon:

ARMANDO CORREA, M.D.,

a witness named in the notice heretofore filed, being of lawful age, and being first duly sworn in the above cause, testified on his oath as follows:

DIRECT EXAMINATION

Q. (BY MR. ABERS) Could I get your name,

sir.

A. Yes, sir. Armando, A-R-M-A-N-D-O, G. Correa, C-O-R-R-E-A.

Q. Tell me, what you have done to get ready for your deposition today. By that I mean not just getting ready for the deposition, but things you may have done a week, a month, two, three, four months ago as far as reviewing records, talking to Mr. Bouchard, anything.

A. Yes. I certainly have reviewed the records that were submitted to my office.

Q. Let's go through them. What did you review.

A. Sure. Death certificate; the records from Miami Children's Hospital; records from Sunrise Rehab center; the records from Dr. Glenn Morrison; the records from Plantation General Hospital; the records from Memorial Hospital; a stack of records from different providers.

Do you want me to go through the list?

Q. Yep.

A. Okay. Urology Center of South Florida; Dr. Lin, who is a pediatrician in Chicago; Dr. McLone, M-C-L-O-N-E; Dr. William Kaplan, an ophthalmologist in Chicago; Dr. Anita John; Dr.

Laskus; Mr. Gregory Harris; Dr. Kolettis, K-O-L-E-T-T-I-S; Dr. Kurless, Dr. Yore; Dr. Luis Rodriguez; Dr. Steven Gurvin; and Dr. Lawrence Adams; as well as the records from Chicago Memorial Hospital.

Q. Okay. And you reviewed some depositions, as well.

A. Yes, I have.

Q. Whose are they?

A. I have the depositions of Dr. Henry Lin; Dr. Drew Tomenchok; Dr. Matthew Deutscher; Dr. Lauren Lerner; Dr. John Ragheb; Dr. Lucy Cohen. That is the bulk of it.

Q. Bulk of it makes me think there is more. Do you mean that is all of it?

A. That's all the records I have reviewed. You also asked me if I had done other -- I have had discussion with Mr. Bouchard on at least a couple of occasions, one was this morning. The previous one was on May 23rd of 2002.

Q. Were there any other things that you reviewed other than the things you have already told us one-by-one?

A. No, sir.

Q. And did you review any kind of

literature, do any research on your own?

A. No, I did not.

Q. Did you talk to anybody else other than Mr. Bouchard to come to any of the opinions that you have?

A. No, I did not.

Q. Can I look at this stuff you have in front of you?

A. Certainly.

Q. When is the initial involvement that you have in this case? When did it first start? Was it with this letter in March of 2002?

A. That is correct.

Q. How did you get involved in this case? How did you and Mr. Bouchard come to talk?

A. Prior to that date I received a call from his law firm and he asked me if I was - if I would be interested in reviewing this case.

Q. Do you know how it was that he got your name?

A. No, I do not.

Q. Have you ever testified for his firm before?

A. No, I have not.

Q. Fowler White.

A. I have not testified for them.

Q. Have you ever testified before for any firm?

A. Yes, I have.

Q. Where, South Florida?

A. No, not in Florida.

Q. Where?

A. In Texas.

Q. For who?

A. A number of law firms.

Q. Go ahead.

A. Do you want me to - the ones I can recall?

Q. Yes.

A. Greer & Martin.

Q. Where are they located?

A. They're in Houston, Texas. Why don't I give you all the ones in Houston.

Q. Okay.

A. Fulbright & Jaworski; Allen & Sheey.

Q. A-L-L-E-N?

A. Yes, S-H-E-E-Y. Sherpe, S-H-E-R-P-E, and Ware, W-A-R-E; Crusie, C-R-U-S-I-E, Scott. Those are the ones that I can remember in Houston.

Q. Was that plaintiffs testimony, defense;

do you remember?

A. They're both. Some of them are defense. Some are plaintiffs.

Q. There are some other ones elsewhere than Houston?

A. Sure. San Antonio, Texas, Mr. Harold Lotz, L-O-T-Z; Lyon & Rhodes; Usek & Onkin. Those are the ones whose name I remember. Certainly there is more.

I have also testified for law firms in El Paso, Texas, Austin, Texas.

In other states you also want to know?

Q. You have testified in other states?

A. Yes, I have.

Q. How many other states?

A. Five or six.

Q. Did you start doing this testifying when you were in your residency in Texas?

A. No, I did not.

Q. When did you start testifying?

A. After completing my fellowship after joining the faculty of Baylor College of Medicine.

Q. How did you first get involved testifying?

A. I don't recall the exact reasons. I

believe it was a lawyer who had come across an article I had written and it was specific to his case.

Q. Have you ever in the past or currently done any kind of advertising of your services as an expert?

A. No, I do not.

Q. Do you list yourself with any service or anything like that?

A. No, I do not.

Q. So the only way somebody would find you is like a MedLine search or asking somebody else? You're not listed in any kind of journals or publications?

A. Not that I am aware.

Q. In these cases that you testified in, the ones in Texas, did you testify in trials?

A. I have testified in one trial in Texas.

Q. And the rest were depositions like we're doing here today?

A. Yes, sir.

Q. What about in Florida?

A. I have not testified in Florida in any deposition or at trial.

Q. This is the first time ever, this case?

A. In Florida, yes.
Q. Have you been hired by lawyers involving cases in Florida, even if you didn't testify?
A. Yes, I have.
Q. Who was that by?
A. I have another case that I have reviewed for this law firm down in Miami. I have had involvement in another case, but I do not recall the name of the law firm. That's the case that has since been settled.
Q. The two other cases that you're telling me, are they both cases where the defense hired you?
A. Yes, sir, the two in Florida.
Q. And this is the third one?
A. Yes, sir.
Q. So they're all on behalf of the defense.
A. The ones in Florida, yes.
Q. Do you know anybody at Fowler White? Do you know any of these lawyers on the stationery? When I say know, business, social, personal, related.
A. No, sir, none of them.
Q. The next question is if you, yourself, ever have been sued in a medical negligence case.

A. Yes, I have.
Q. How many times?
A. Just one time.
Q. Where was that?
A. In Austin during my residency.
Q. What kind of issue was involved in the case?
A. It was a child who died of complications following surgery for a congenital heart disease.
Q. There was an infection issue related to it?
A. No, sir.
Q. How were you involved in the case?
A. I was a resident taking care of this child in the pediatric intensive care unit.
Q. That's the only time?
A. Yes, sir.
Q. Any other time where maybe you weren't sued, where a lawsuit got filed but somebody wrote and said we may make a claim, anything like that?
A. No, sir.
Q. So, you told us what you reviewed here. Your first involvement you told me was March of 2002.
A. Yes, sir.

Q. That was with a phone call?

A. It was a phone call and then received - I received the records that are listed there.

Q. And the substance of the phone call was what?

A. I don't recall the full substance. Basically it was if I had any interest and time to review a case that involved an infectious disease process.

Q. And you said?

A. And I said, yes, I would be glad to do so.

Q. How do you charge for this work?

A. As you can see in that invoice, it's $300 an hour for review of the records.

Q. Any other charges associated with what you're doing?

A. My typical charge is $400 -- Are there anymore charges than this?

Q. Anymore charges that are different than $300 an hour for reviewing records?

A. Yes, $400 an hour for meeting with lawyers and typically when the depositions are in my hometown, it's $500 an hour for the deposition, $600 an hour for the trial testimony.

Q. And this money goes to you personally as opposed to some other facility or anything?

A. Yes, sir.

Q. And your bill through June is 1,275?

A. That's correct.

Q. How much more is there?

A. I have not billed any more.

Q. Roughly. You have two hours you met with Mr. Bouchard today.

A. Yes, sir.

Q. And the time for the deposition. What about before today?

A. In reviewing all the records, probably another five or six hours.

Q. Anything else?

A. No, sir.

Q. Do you plan to do anything else between now and sometime in the future that you're thinking about?

A. Specifically to this case?

Q. Well, I mean, I know you're planning on leaving here and going back to Miami and having lunch and things like that. I mean regarding this case.

A. If I am asked to.

Q. You don't have anything like that in your mind as you sit here right now.

A. That's correct.

Q. There is nothing else you're planning on doing, correct?

A. That's correct.

Q. Research, review, depositions, anything like that?

A. Unless you or Mr. Bouchard asks me to.

Q. Tell me, first of all, do you know any of the parties that are involved in this case?

A. No, I do not.

Q. You don't know any of the doctors involved, anybody at the facility?

A. No, I do not.

Q. Anybody at Memorial Hospital, Plantation General? These are all strangers to you?

A. Yes, sir.

Q. You reviewed the medical care that was provided to Gerry while he was at Sunrise Rehab?

A. Yes, I did.

Q. Tell me what problems he was having from an infectious disease point of few.

A. He was having at different times fever. That was his main complaint from an infectious

disease standpoint. He had a respiratory tract infection in the early part of the month. Later on he developed other symptoms that could be attributed to an infection, such as vomiting and headache.

Q. What kind of infection would that be?

A. Well, the infection that ultimately was responsible for his death, bacterial meningitis.

Q. How did you diagnose that?

A. I concluded that by looking at the records from Memorial Hospital, as well as Plantation Hospital, and the death certificate.

Q. Forgetting the death certificate, what in the records at Plantation General tell you that this boy died from bacterial meningitis?

A. The patient actually didn't die there. If you just review the history, it states that the patient was admitted there in a coma. He had what appeared to be brain dead at that time. And then, upon transfer to Memorial, the diagnosis of meningitis was established.

Q. Maybe I worded that poorly. I apologize.

I didn't suggest that he died when he was at Plantation General. But what was it at Plantation General that occurred or tells you as a

doctor that he did have bacterial meningitis? In other words, I am specifically talking about both his clinical situation, labs, whatever else you want to rely on.

A. If you allow me for a second.

Q. Sure, take your time.

MR. BOUCHARD: These my be easier. These have tabs in my copy.

A. The answer is his clinical course, the fact that he was unresponsive, and the possibility of meningitis was considered by the emergency room physician. The fact that the pupils were unresponsive and that his breathing was shallow, requiring intubation. All of these, along with what happened after, lead me to conclude that this patient probably had meningitis.

Q. Are you satisfied that that's what this boy died from? I mean, there is no question in your mind about that?

A. I think that, in very high probability, this patient died from meningitis.

Q. Okay. Now, is there something from your review of the records that could have been done to prevent him from dying of meningitis?

A. Not in my opinion.

Q. Why not?

A. Because the type of meningitis that he had was fulminate. The type of bacteria that he had is associated with high mortality in this specific type of presentation. And, unfortunately, there was not enough warning signs or time to make a difference based on his clinical presentation.

Q. You mentioned two things, you said the type of bacteria and type of what's the other thing you said?

A. The fulminate course.

Q. Tell me the type of bacteria.

A. Type of bacteria, well, the bacteria that he had, the one that was isolated, was a strep bacteria. He also had tests that suggest that two other bacteria were causing this meningitis, one is Hemophilus influenza type B and the other is pneumococcus.

Q. Are you telling me that neither one of those bacteria that drew out are amenable to treatment?

A. That's not what I said.

Q. That they could not be recognized timely or what?

A. No, that's not what I said, either. What

I said is if you put into account the type of bacteria that he had, the clinical course, there was no clear warning and there was no - it was not a situation where earlier administration of antibiotics would have made a difference.

Q. What do you define as earlier?

A. Well, any time earlier than when the first dose of intravenous antibiotic was given.

Q. When was that? That wasn't until Plantation General, right?

A. That's correct.

Q. Are you telling me at some point earlier if they had given him antibiotics that would not have made a difference?

A. I would say more likely than not it would not have.

Q. Is there a day, from looking at these records, where if they had started this boy on the type of antibiotics that are appropriate for this bug it would have made a difference?

A. No.

Q. Never?

A. No.

Q. This was a meningitis that couldn't be treated. Is that what you're telling me?

A. That is not what I am telling you. I am telling you that, based on the clinical presentation of the organisms, it's unlikely that administration of antibiotics at any time earlier than when it occurred it would have made a difference.

Q. What if they had started the antibiotics sometime on the morning of the 19th?

A. There is no scientific proof that that would have made a difference.

Q. What do you think if they had started him earlier than the 19th?

A. I can only speculate. The antibiotics would have been started. He would have continued to deteriorate and, more likely than not, he would still have died.

Q. So, you're telling me that there is some types of meningitis or some situations of meningitis where no matter what you do as a medical provider the patient is going to die?

A. I am telling you that there is clearly fulminate meningitis that has been associated with high mortality rate, irrespectively of the administration of the antibiotics.

So, I guess to answer your question, yes,

in this patient specific, it's more likely than not that the patient would have still died, even if antibiotics had still been administered earlier.

Q. No matter what kind of antibiotics, correct?

A. I mean, I am assuming that you're asking me the appropriate antibiotics that were started at Plantation.

Q. Which are what?

A. In most cases a third generation cephalosporin.

Q. Vancomycin and Rocephin or something?

A. Yes.

Q. You're telling me if they had started Vancomycin and Rocephin sometime earlier in his care, other than the Plantation General admission, it would not have made a difference?

A. Well, there is a point where you can stretch this. I mean, certainly not at the time of the clinical presentation.

Now, if you say, well, if the antibiotics had been started before the bacteria ever got in his system and had been continued to this time course, you know, in that situation I couldn't say that this couldn't have been prevented. That will

imply that, you know, every patient needs to go on antibiotic, you know, for the duration of their hospital stay.

So, I want to clarify that. I mean, there is a point, yes, where antibiotics may have made a difference, because this infection would not have occurred. What I am saying is, once the infection had established itself as a full type of meningitis, the administration of antibiotics was unlikely to have changed the outcome.

Q. Does any medical provider ever give a patient antibiotics for the prophylactic treatment of meningitis?

A. Yes, we do.

Q. Now, am I correct that in almost all cases of meningitis that you treat there are some signs and symptoms that warrant you coming to the diagnosis of possible meningitis?

A. Yes, there are.

Q. In other words, in your patients that you see, there are some signs or symptoms that occur that make you think as a physician this could be meningitis.

A. In some patients there are.

Q. And, in those situations, someone has

clinical signs or symptoms and then you start them on antibiotics.

A. That is correct.

Q. And those are the antibiotics you just talked about.

A. If I suspect bacterial meningitis, yes.

Q. And that's Vancomycin and Rocephin.

A. That's a good combination, yes, sir.

Q. Did this boy have any signs and symptoms of meningitis at any time before he got to Plantation General Hospital?

A. Yes, he did.

Q. And what were they and when did they occur?

A. Those occurred in the early hours of the 20th when he had fever, vomiting, headache, and alteration of the level of consciousness.

Q. Did he have any signs and symptoms that suggest meningitis before that date?

A. Not in my opinion.

Q. Nothing on the 19th?

A. On the 19th he did have a fever, which is a nonspecific finding. It's not specific or necessarily exclusive of meningitis.

Q. What was his fever?

A. On the 19th he had a temperature elevation initially to 101.2 and then later on in the day went as high as 105.

Q. And that you're calling a nonspecific fever?

A. I am calling -- Yes. I mean, a fever of 105 can be seen with a number of different infectious processes.

Q. Tell me them.

A. Certainly any of the common viral illness such as influenza, parainfluenza, adenovirus, respiratory syncytial virus. You can see that with bacterial infections such as salmonella, Shigella, E. coli, any bacteria that causes urinary tract infections, any bacteria that causes pneumonia, pyelonephritis, gastroenteritis, infections in the heart, the brain. Any infectious process that can produce pus can certainly have a temperature of up to 105.

Q. Are those --

A. There are a number of noninfectious things that can cause a fever this high, certainly tumors, connective tissue diseases, neurologic fever, fever from the origin of the central nervous symptom. That's what I mean by nonspecific. There

is literally hundreds of reasons why a patient can have 105.

Q. Are they amenable to treatment of antibiotic?

A. Some of them are, some of them are not.

Q. Was this boy on antibiotics?

A. At the time he had 105, yes, he was.

Q. Would the antibiotics have addressed some of those things you just talked about?

A. They may have addressed some of them, yes.

Q. What was wrong with him on the 17th, 18th, and 19th?

A. On the 17th, 18th, and 19th he was recovering from what was deemed to be a respiratory tract infection.

Q. Do respiratory tract infections lead to meningitis?

A. They frequently precede the development of meningitis. In fact, in some studies, 50 percent or more of the patients with bacterial meningitis have a preceding viral illness.

Q. Is there anything that would suggest in this boy's clinical picture on the 17th, 18th, and 19th that he could possibly be on the road to

developing meningitis?

A. On the 17th and 18th, no.

Q. Let me ask it this way: At any time before the 20th, was there anything that you reviewed in this boy's medical records that would suggest to a medical provider that there could be meningitis on the horizon?

MR. BOUCHARD: Object to the form of the question.

MR. ABERS: What's wrong with it?

MR. BOUCHARD: You're asking him possibilities. That's not the standard.

Go ahead. You can answer.

THE WITNESS: In retrospect, it is likely that the meningitis first developed around the 19th.

Q. (BY MR. ABERS) First developed?

A. The meningitis was -- The signs that preceded meningitis were on the 19th.

Q. What about the underlying things that sometimes occur before a patient gets meningitis, like the upper respiratory problems? What's the percentage of people that get that when they have meningitis that starts with upper respiratory?

A. I said 50 percent or more.

Q. So, is it fair to say that when patients such as this develop meningitis, half the time they start with some kind of upper respiratory involvement?

A. I think that is my statement, yes.

Q. That's what a medical doctor would know?

MR. BOUCHARD: Object to the form.

MR. RADER: Join.

Q. The average doctor would know that, correct?

MR. BOUCHARD: Object to the form.

MR. RADER: Join.

A. I don't know that the average doctor, but many doctors know that respiratory tract infections frequently precede the development of meningitis.

Q. Now, are respiratory tract infections usually taken care of with the use of antibiotics?

A. Depends on what the cause of the respiratory tract infection is.

Q. Do you know what his cultures ever grew up from the upper respiratory?

A. His cultures were negative.

Q. Meaning what? What's the significance of that to you?

A. Means that the bacteria that were looked

for that may cause respiratory tract infections were not in his sputum. So that suggests to me that this was probably viral in origin.

Q. Was there anything in his clinical picture that suggested he could be, as I said earlier, heading towards meningitis?

MR. BOUCHARD: Object to the form. When?

Q. At any time before the 20th. You said the 19th. Let's use before the 19th.

A. No.

Q. Nothing?

A. Nothing.

Q. Have you ever taken care of patients with meningitis?

A. Many times.

Q. Every day?

A. Virtually every day.

Q. Since what, '88?

A. Since '91.

Q. Since '91 when you were at the Children's Hospital of Austin, correct?

A. When I started my fellowship in pediatric infectious diseases. I have taken care of patients with meningitis since '88. When I said virtually every day is from '91.

Q. So that's at Baylor.

A. That's correct.

Q. That's for the last 22 years you have been taking care of patients just about every day that have meningitis.

A. I hope it's more like 11.

Q. 12. Sorry. I gave you an extra ten years for nothing.

You have been taking care of patients every day with that.

A. Yes, sir.

Q. Tell me what the signs and symptoms of meningitis are.

A. Well, the classic signs and symptoms are headache, vomiting, nausea, alteration in level of consciousness, fever, stiffness of the neck. In some occasions you may see a rash.

Q. Where?

A. In the skin, generally anywhere in the skin.

Q. Where is the most likely place to see it?

A. Usually in the extremities and trunk.

Q. Trunk meaning chest?

A. Meaning chest and abdomen.

Q. Okay, go ahead.

A. And those are the most common or the typical signs and symptoms of meningitis.

Q. Do they have to all be present at one time to make a diagnosis of meningitis or can one, two, or some other combination be present to let a physician start thinking meningitis?

MR. RADER: Form.

A. You asked me two questions. You asked me if they all have to be present to diagnose meningitis and then you asked me if they have to be present to suspect meningitis.

So the answer to the first question is, no, the diagnosis of meningitis is not established by clinical criteria. It's established by cultures.

The second question is, no, they don't all have to be present at the same time. In fact, frequently they are not.

Q. In retrospect, looking at Gerry's records while he was at Sunrise Rehab, do you see anything that could be defined as a sign or symptom of meningitis at any time he was a patient there, other than the 19th or 20th?

A. No, I do not.

Q. What about his rash?

A. No. In fact, his rash was described as an itchy rash, paretic rash. This is not the typical appearance of a rash from meningitis.

The rash from meningitis does not itch. It's almost exclusively seen with one type of bacteria that was not present in his spinal fluid.

Q. Where does it say that it was an itchy rash?

A. Described in the nursing notes at Plantation - I am sorry, at Sunrise Hospital.

Q. Can you find that for me?

MR. BOUCHARD: Do you want to know the date to save time?

MR. ABERS: Yes, have you got it there?

MR. BOUCHARD: The 8th, 10th --

MR. ABERS: What?

MR. BOUCHARD: July 8th --

MR. ABERS: What are you looking at?

MR. BOUCHARD: Nursing notes.

The 11th, 17th, and the 19th. They all say itching.

MR. ABERS: Yes, I know that.

THE WITNESS: It may be in the nursing notes instead.

MR. COCALIS: I bet you probably got them

from the MAR. On the 17th Benadryl two caps, complains of itching. I think that's where you got it from.

MR. BOUCHARD: Here is the 8th, nurse medication notes, starting at the 8th here and here.

THE WITNESS: In the nurses medication notes there is a reference to itching on 7/8 at 2225.

Q. (BY MR. ABERS) Where was that itching?

A. It just says complains of itching.

Q. How do you know what that's from?

A. No, I do not know where it's from.

Q. How do you know it was the rash on his chest or trunk that was itching?

A. Because the note on 7/10 states that he's complaining of itchy rash.

Q. Where is that rash?

A. It's not stated in this note.

Q. Okay. Do you find in the records, I think you told us earlier that there was an indication, at least that came to your mind, that it was not a rash related to meningitis because it was itchy.

A. I said it was itchy and it did not have

the typical appearance of a rash that you see with meningococcal meningitis.

Q. I am trying to find where you got that information.

A. I got it from reviewing the depositions --

Q. Whose deposition?

A. Well, all the depositions that I reviewed. I don't know exactly which one. Was the one who made the reference to what the appearance of the rash was. But, I have concluded that from reviewing those depositions, as well as the nursing notes.

Q. The nursing note you're relying on is the thing Mr. Bouchard is showing you, which is not a nursing note, but it's a nursing Medication Administration Record.

MR. COCALIS: Object to the form.

Q. It's not a typical nursing note in the sense of the narratives where the nurses write their observations.

MR. BOUCHARD: Object to the form of the question.

A. I do not know what you mean be typical. This is entitled nurse's medication note.

Q. You wouldn't call that a nurse's note, a Medication Administration Record. If you went to see a patient and said let me see the notes on the patient and they handed you that, you would say that's not the nurse's notes. That's the Medication Administration Record, right?

MR. BOUCHARD: Object to the form. Argumentative.

A. It's a nursing administration record of medications.

Q. It's not a nurse's note the way you think of nurse's notes which are observations and evaluations and impressions of the nurse.

A. That is correct.

MR. BOUCHARD: Object to the form.

Q. Is there anything in nursing notes that you reviewed that discusses this rash is my question.

A. If you allow me for a second.

Q. Sure.

A. Not in the specific nursing notes. However, there is a note that suggests there was itching on the progress notes dated July 9th.

Q. Where is that? What page are you looking at? Did you find that or Mr. Bouchard found that?

A. Mr. Bouchard just pointed out to me that there is --

MR. BOUCHARD: I am not sure what it says, to tell you the truth. It's hard to see. I am not sure if that's twitching or itching.

A. 7/9/99 the note says complaining of either itching or twitching.

Q. That's page 41?

MR. COCALIS: 40.

Q. You're looking at where down the page there?

MR. COCALIS: The next to the last entry.

Q. Let's assume it says twitching.

A. Okay.

Q. Do you think that says itching there?

A. No, I don't know what it says.

Q. Let's assume it says twitching.

A. Okay.

Q. Let's assume that the nurse, Lisa Jeffries, testified that it says twitching. If that says twitching, tell me where the note is that you're talking about that talks about this itch not being consistent with meningitis.

A. If the testimony is that it says twitching, there is no indication in that note that

this was not an itchy rash.

Q. So then you're wrong about what you told us just a few minutes ago.

A. No, I am not.

Q. You said earlier just a few minutes ago that this rash was not consistent with meningitis because the rash on his chest was itching, correct?

A. I said the rash was itching, yes.

Q. Where did you get that from?

A. As I mentioned to you, I got it from the nursing medication administration sheet.

Q. Doesn't say where the rash was or what it was for.

A. That's correct.

Q. So how do you know it's from that?

A. I can assume that.

Q. How?

A. That's the only place where it's been described that he had a rash. I haven't seen any notes saying that he had a rash, you know, on the tip of his toe and that that was what was causing this.

Q. Let's go back then to some of the other signs. Let's talk some more about signs and symptoms.

What about his temperature, you reviewed his temperature readings during the time he was at Sunrise?

A. Yes.

Q. What do you attribute that to, his temperatures that were not normal?

A. What time?

Q. Let's start with the first one and go through them all. I mean, first of all, let me ask you this: Without looking at all of them, I take it you have an opinion about what his temperature elevations were related to or caused by?

A. Yes, I do.

Q. What were they caused by?

A. The temperature elevations in the earlier part of the course were related to what was diagnosed as a respiratory tract infection.

Q. Okay.

A. Then, those --

Q. How do you know that?

A. That was the clinical diagnosis and I have no reason to disagree with that. He had production of thick sputum. He had slight elevation in the white count. He had respiratory symptoms. And those were all consistent with a

respiratory tract infection.

Q. Are those same symptoms of the respiratory tract infection the same symptoms that can precede meningitis or is there some difference to these?

A. No, just as I mentioned earlier, any respiratory tract infection can precede meningitis. This could certainly be those.

Q. And would they be susceptible to the antibiotics that were given there? In other words, should the antibiotics have made some difference in whatever bugs you're talking about?

A. I don't understand your question.

Q. They had him on Cipro and Biaxin while he was there.

A. Yes.

Q. Should those have addressed these bugs or whatever that was going on causing these symptoms?

A. You had asked me earlier and in fact they did not isolate a specific bacteria as the cause of his respiratory symptoms. So we can assume that more likely than not this was viral. So antibiotics would likely have not made a difference.

Q. We know that he didn't die from a viral

illness, he died from a bacterial illness, correct?

A. That is correct.

Q. There is not any doubt in your mind about that?

A. I think that it is very likely that he died from a bacterial meningitis.

Q. Is there any reason that he couldn't have been given a spinal tap to figure out if he had meningitis or not?

A. At what point?

Q. Ever.

A. Is there any reason? Well, first of all, there was no indication to do a spinal tap. That would be a reason to not do it.

Second, if there was an indication for spinal tap or if anybody felt that there was an indication for spinal tap, there was the issue of what his spinal cord anatomically was like, in other words, what the anatomy there was, knowing that he had a history of spina bifida with a lipomeningocele.

Q. Even with that history, there is a way to get enough CSF to analyze it, is there not?

A. Yes, it's likely that it was possible to do the spinal tap.

Q. You're saying it's likely it was possible. There is no medical indication that would prevent someone from doing a spinal tap on Gerry Ayre, is there?

A. The proper term is there any medical contraindication.

Q. Tell me.

A. There was no contraindication to doing the spinal tap, just like there was no indication.

Q. So, am I correct that there is nothing that would have prevented a doctor from doing a spinal tap on Gerry Ayre?

A. Other than his or her own clinical skills, no.

Q. In other words, there is no medical, anatomical, pathological, or any other kind of reason that one couldn't have been done should a doctor wanted to do one.

A. I had mentioned there may be some anatomical considerations in this particular patient.

Q. That you could work around.

A. That you would probably be able to work around.

Q. How long does it take to get results from

cerebral spinal fluid analysis?

A. To get results from what?

Q. To test for meningitis.

A. If you're looking for evidence of meningitis, there are a number of tests that can come back in a number of hours. The definitive test, again, for bacterial meningitis usually takes anywhere from one to five days and that is a culture.

Q. But, to address meningitis and treat it, you can certainly get started within a couple of hours of doing a tap.

A. That is correct.

Q. And what happens when you don't treat meningitis?

A. Again, which type of meningitis?

Q. Bacterial meningitis.

A. Bacterial meningitis is frequently a fatal disease if untreated.

Q. Why?

A. Because it's a very serious disease involving one of our most important organs and it's associated with mortality as high as 90 percent.

Q. What happens if it's treated; what's the mortality rate?

A. It depends on the specific organism and the therapy that is given, but certainly the mortality rate has decreased since the advent of antibiotics.

Q. To what?

A. Again, depends. For each and every one of different bacterial organisms there is a different number.

Q. Give me a range.

A. As little as 8 percent, as high as 50 or 75 percent.

Q. Can you tell anything from the kind of meningitis he had whether it is susceptible at all to any kind of therapy?

A. If you are asking me specifically is the bacteria that he had susceptible to the antibiotics currently available, the answer is yes.

Q. And those would be the ones you told us earlier, Vancomycin and Rocephin.

A. That's correct.

Q. As the two drugs of choice?

A. As a potential combination of drugs of choice.

Q. Was this boy at any greater risk of developing meningitis than somebody in the general

population?

A. Yes, I believe so.

Q. Why?

A. Because he had had a recent neurosurgical procedure that involved exposure of the brain.

Q. And why does that put him at an increased risk for meningitis?

A. Well, because the bacteria can gain access to the brain through the surgical wound.

Q. Is that something in your experience that an infectious disease doctor would know, that he is at increased risk for meningitis?

A. In my opinion, yes.

Q. Is that something that a pediatrician would know, in your experience?

A. In my experience, yes.

Q. Is that something that a neurosurgeon would know?

A. Yes.

Q. Is that something that a nurse taking care of post neurosurgical patients should know?

MR. COCALIS: Object to the form.

A. I am not qualified to give an opinion as to what nursing knowledge would be.

Q. But, as far as from a physician

standpoint, even given a pediatrician, a specialist like a neurosurgeon, a specialist like an infectious disease person, any physician in those specialties knows that a person who has neurosurgery is at increased risk of developing meningitis?

A. Yes, with the clarification that it depends, you know, on the type of neurosurgery that the patient had. You know, neurosurgeons also operate on organs outside the central nervous system.

Q. Given Gerry Ayre's type of surgery, you're telling us that any physician, no matter what their specialty, should know that the patient is at an increased risk of developing meningitis postoperatively.

A. That's not what I said.

Q. Correct me.

A. You asked me specifically for a neurosurgeon and pediatrician.

Q. All right.

A. And I answered yes to both of those.

Q. Let me rephrase it then. Let me clarify that.

You're telling me that any pediatrician,

neurosurgeon, infectious disease doctor should know that a patient who has the type of surgery Gerry Ayre had is at increased risk of developing meningitis.

A. Assuming that they know what the particulars of the surgery was, yes.

Q. Well, they should know that if they're taking care of the patient, right?

A. Not necessarily.

Q. They shouldn't know what kind of surgery a patient has? They shouldn't be familiar with a history?

A. They should be familiar with the fact that the patient had surgery. But I don't know that it's mandated that they know the details about the surgery.

Q. Well, let's put it this way: If they know it was neurosurgery and if they know it was surgery involving the spine, then they should be in that awareness level that meningitis can develop.

A. Again, not necessarily.

Q. Okay. What about physical medicine doctors, physiatrists, should they be in that same group of being aware that a patient like Gerry Ayre is at increased risk of developing meningitis?

A. I am not qualified to give an opinion.
Q. Fair enough.
Let's talk a little bit about the other signs and symptoms of meningitis and what Gerry may have had or may not have had that was observed while he was a patient there.
What about neck pain, is that a sign or symptom of meningitis?
A. It can be.
Q. Did Gerry Ayre have neck pain prior to July 19th?
A. Yes, he did.
Q. And what was causing that neck pain?
A. Well, before the surgery it appears that it was a combination of an anatomical malformation --
Q. We're only concerned about after the surgery.
A. Okay. If you're asking me just after the surgery, he had a very extensive procedure in his neck. It is my opinion that very likely the neck pain was related to the surgical procedure.
Q. How do you know that?
A. I do this based on what his clinical course was and what the typical pattern is for a

patient who has had a procedure done in his or her neck.

Q. Do you see anything in the record indicating neck pain that could suggest one of the signs or symptoms of meningitis?

A. Yes, I do.

Q. Where is that?

A. I believe that very likely the neck pain that he was experiencing between the evening of the 19th and early on the 20th was probably due to meningitis.

Q. Where did you get that from?

MR. BOUCHARD: Object to the form of the question. I am not sure --

Q. Where in the records do you get that opinion?

A. Do the records say it's from meningitis? They don't.

Q. No. Where in the records do you come to the opinion that the neck pain that he had on the 19th and 20th -- Am I using the right dates?

A. The 19th and 20th, yes.

Q. Where in the records do you get that the neck pain that he had on the 19th and 20th comes from meningitis?

A. I'm not getting an opinion from the records. I am getting an opinion from my interpretation of them.

Q. Well, did he have neck pain at any point before the 19th?

A. Yes, he did.

Q. How is that different than the neck pain he had on the 19th?

A. I don't know if it's any different in terms of what is described in medical records. But I can tell you that, based on what his clinical course is, based on his presentation, the neck pain that he had on the 19th and 20th was more likely related to the meningitis, while the pain that he had before was more likely related to his post-op course.

Q. Other than testifying in favor of the defendant in this case, how do you know that? I mean, what is in these records that tells you as a doctor that there is a difference in those two types, kinds, or anything to do with neck pain?

MR. COCALIS: Object to the form.

MR. BOUCHARD: Object to the form.

MS. FAZIO: Join.

MR. RADER: Join.

A. The reason that I can state that is I know that he did not have meningitis when he had the neck pain earlier in his course.

Q. How do you know that?

A. Because of the clinical course and the presentation, the type of meningitis that he had. I know that he didn't have meningitis; otherwise, he would have died much earlier. And I know that the presentation that he had on the 19th and 20th could be consistent with meningitis.

You're right. Maybe the 19th or 20th it was still from post-op pain. I don't have a way of knowing. But, now knowing that he did have meningitis at that time, it is possible that it was from the meningitis.

Q. So the answer to my question then is, in truth, you don't know the answer to my question as to whether this pain that he had on the 19th and 20th was from meningitis or from post surgical pain from the operation site.

MR. BOUCHARD: Object to the form.

A. No, the answer to your question was, I am of the opinion that the pain that he had before the onset of meningitis was from post-op complications and I do not know if the pain that he had after the

onset of meningitis was from post-op or if it was actually due from the meningitis.

Q. If meningitis kills a patient if it's untreated and it's so easy to diagnose, is there any reason that there shouldn't have been a test for it earlier than Plantation General Hospital?

MR. BOUCHARD: Object to the form of the question.

MR. RADER: Form.

A. I disagree with your statement that it's so easy to diagnose.

Q. Well, does analysis of the cerebral spinal fluid usually give you the answer as to whether there is bacterial meningitis or not?

A. What does that have to do with easy or not?

Q. With what?

A. With being easy or not to make a diagnosis?

Q. Well, people die if you don't make the diagnosis, right?

A. That's correct.

Q. Is it pretty easy to do the spinal tap?

A. Yes.

Q. Okay. And someone should be at an

increased level of suspicion for meningitis in this boy, right?

A. No, not necessarily.

Q. I thought you told me earlier they should be. He's at greater risk of developing, right?

MR. BOUCHARD: Object to the form.

A. That's correct, but I didn't say that in this boy he was at an increased risk of meningitis. You asked me a question that was nonspecific as to patients who have had a neurosurgical procedure like his.

Q. Tell me what you do as an infectious disease doctor about a fever of unknown origin.

A. If the patient meets the criteria of fever of unknown origin, I do a workup to try to find the cause of the fever.

Q. What do you define as a fever of unknown origin?

A. It's a fever that has been ongoing for more than 14 days and in which there is no specific source for the fever and in which a basic workup has been done.

Q. Did this boy have a fever of unknown origin?

A. No, he did not.

Q. You don't agree with Dr. Ragheb?
A. By the definition that we use in infectious disease, this was not a fever of unknown origin.
Q. Assume that the doctors who took care of this boy thought he had a fever of unknown origin. Just assume that that's true.
A. That's fine. Maybe we should use the term fever without a source.
Q. Let's do that. That's even better.
Let's assume that the doctors taking care of this boy thought he had a fever from an unknown source. What do you do in that kind of situation?
A. Well, I cannot assume that because they did --
MR. BOUCHARD: Object to the form of the question.
A. -- they did have a potential source in their care of this patient. If you're asking me to assume that there was no source --
Q. Yeah.
A. They should have done or they would have done a workup to try to establish what the source was.
Q. And a workup is defined as?

A. Well, depends on what the patient's symptoms were other than the fever.

Q. Headache.

A. In this particular patient? A CAT scan to define the anatomic area to make sure that there was not a complication.

Q. Okay. And assuming they do a CAT scan and it's negative, next?

A. Yes, sir. CBC, blood culture. In this patient who had respiratory symptoms, a chest x-ray, culture of the sputum.

Q. Now they still have a fever. What do they do? They get those results and they still have a fever to deal with. What's next?

A. Again, because you're asking me to assume, I need to know more of what has happened since then.

Q. Well, let's talk about his sed rates. Have you looked at those?

A. You're changing from a theoretical situation to what this patient's situation is.

Q. Let's go to the sed rates. What significance did his sed rates have to you?

MR. BOUCHARD: Before that, I need to take a break.

(Whereupon, a brief recess was taken.)

Q. When we took a break I was going to ask you about the sed rates and what you thought about them in Gerry's case.

A. I thought that the sedimentation rate was elevated.

Q. What do you attribute it to?

A. The sedimentation rate is a nonspecific test that tells you the degree of inflammation that is ongoing.

Q. And why is his going up instead of down?

A. I do not know the specific reason in his case of why they continue to be elevated rather than coming down. As I mentioned earlier, it's a nonspecific test that just tells you how much inflammation is ongoing and I don't know in his case why they remain high.

Q. When you use the word nonspecific, I realize as a doctor you use it and we might take it differently, so what do you mean by nonspecific?

A. Sedimentation rate is just an indicator - it's what we call an acute phase reactant. In other words, this is an indicator of how much inflammation, how much swelling is going on in the body. It doesn't tell you if there is swelling

from an infection, if it's swelling from a trauma, if it's swelling from a post-op procedure or post-op course, if it's swelling from a connective tissue disease. It just tells you there is ongoing inflammation in the body.

Q. What is the most likely scenario for the elevated sed rate in Gerry Ayre?

A. I believe -- First let me ask you a point in time.

Q. Well, do you know what his sed rates were?

A. Yes, I do.

Q. First one was 92.

A. Yes.

Q. Second one was 108.

A. That's correct.

Q. Third one 125.

A. Yes, sir.

Q. Do you know when they were done?

A. Yes, they were done in the time period between the 12th and the 16th or 17th.

Q. So you answered your own question, right?

A. Well, I don't know if there was other sed rates that you were taking into consideration.

Q. No, just those three.

A. I believe that it was probably a combination of factors, both the fact that he was covering from a very extensive surgical procedure and the sed rate may have also been - may have also remained elevated or continued to elevate because of an ongoing infection.

Q. Well, let's talk about infection second. Let's talk about the postoperative reasons first.

He is how long post-op when they do the first sed rate?

A. Approximately three weeks.

Q. And the second?

A. Three weeks and two days.

Q. And the third?

A. Three weeks and four days.

Q. Does that tell you as a doctor that with a sed rate going up instead of down that it's less likely to be related to postoperative changes or reactions, things like that?

A. No, it does not.

Q. It does not. In your experience, that's perfectly consistent with a postoperative course?

A. In surgery as extensive as this one, it's not unusual to see elevation of the sedimentation rate persist for four or five weeks.

Q. Is it likely?

A. I don't know that there has been any study that looks at how long this lasts. So I am not able to answer that question.

Q. If someone asks you this question, tell me how you would answer it. The question is: Forgetting everything else about Gerry Ayre's medical situation, other than the date and type of surgery that he had and the three sed rate readings, would you say that that is unlikely to be related to a postoperative change?

A. I would answer that by saying that some of it may be related to a postoperative change and it's possible that there is another process that is explaining why the sed rate is going up instead of down.

Q. An if it's not a postoperative change, is it related, in all likelihood, to infection?

A. It could be to infection.

Q. What kind of infection?

A. As I mentioned to you, this is a nonspecific test. So it does not tell you by any means which kind of infection.

Q. But it does indicate the possibility of infection.

A. It indicates the possibility of a persistent inflammatory process.

Q. Is there anything about the sed rate readings and the times that they were done that would suggest to you that it can't be meningitis?

A. No. It's an unrelated test. It's a test that has no bearing on the diagnosis of meningitis.

Q. I didn't say it did. I am asking you if there is anything about those three readings, 92, 108, and 125 and when they were done that suggests to you, hey, this can't be meningitis or it's unlikely to be meningitis.

A. And my answer is no.

Q. So they could indicate meningitis. There is nothing about the numbers or the times that they're done that prevents them from being associated with meningitis.

MR. BOUCHARD: Let me just object to the form of the question. Do you mean in Gerry Ayre's case or in general?

MR. ABERS: In Gerry Ayre's case.

MR. BOUCHARD: Now you're changing the question. Before you were asking generally. Now you're asking in Gerry Ayre's case.

MR. ABERS: Then I screwed up.

THE WITNESS: And my answer was also no. There is no correlation between the sedimentation rate and the presence or lack of presence of meningitis.

Q. (BY MR. ABERS) But, what I am trying to get clear in my own mind is, do they in any way exclude the possibility of meningitis? In other words, I am trying to get at if you're going to say anything like the fact that the sed rate is rising and the level that it's at tells me this wouldn't be meningitis.

A. No, I am not going to make that statement, because I have said I do not see any correlation between the sedimentation rate and the development or lack of meningitis.

Q. What other lab studies were done that were significant to you while he was at Sunrise Rehab, anything?

A. If you excuse me for a second. There was a urinalysis done on 7/3/99. There was a blood culture done on 7/12/99. There was a urine culture done on 7/13/99.

Q. Would any of those tests you've mentioned so far cause a sed rate to move in the way it's moving?

A. Would any of those lab results --

Q. Would they be associated with the sed rates that we're talking about?

A. There is no association.

Q. Okay.

A. I mean, if anything, just drawing labs may cause your sedimentation rate to go up because it's a response to inflammation.

Q. But not to the levels that he had.

A. No, that's correct. And he also had a CAT scan that was ordered at the time that he was there, as well as a CBC on 7/14.

Q. What is the date of the CAT scan?

A. The CAT scan, I believe, was either done the 15th or 16th.

Q. That was done at Miami Children's.

A. That's correct.

Q. What's the thing you said after that?

MR. COCALIS: CBC on 7/14. I don't think you mentioned sputum culture.

A. There is a sputum culture on 7/13 of '99.

Q. How long does it take to get sputum cultures, since you mentioned that?

A. Would you clarify? How long does it take to do them?

Q. No. How long does it take to obtain the culture?

A. Well, it depends if the patient is coughing or not. It usually would take a couple of minutes.

Q. I mean, if a doctor says you need sputum cultures times two before we start the antibiotics, how long should it take to get those two cultures?

MR. COCALIS: Object to the form.

A. I don't understand what you're asking me. The procedure itself takes one or two minutes.

Q. Do you have to wait until somebody voluntarily coughs or can you say try and cough something up and let's get a culture of it?

A. Depends on the situation, but you typically will ask the patient to, you know, try to cough up some sputum to get it.

Q. Go ahead.

A. There is a C reactive protein done on 7/14. There is another blood culture done on 7/14. There is a culture of the eye done on 7/8. Then there is a C reactive protein done on the 19th.

Q. Okay.

A. I don't know if we missed it or not, but there is a blood culture on the 12th.

MR. COCALIS: You said that.

A. I think we had mentioned the one on the 14th already. Those are the labs that have been ordered.

Q. Tell me about the C reactive protein. What does that measure?

A. C reactive protein, just like sedimentation rate, is an indicator of inflammation.

Q. Caused by what?

A. By the same potential causes that I described with the sedimentation rate.

Q. Post-op changes or infection.

A. Post-op changes, infection, trauma, connective tissue disease.

Q. Can we rule out connective tissue disease in Gerry?

A. I don't know that we can rule it out. I think that it's unlikely.

Q. Trauma?

A. Depends on what your definition of trauma. We know that the trauma of surgery, the post-op, but, yes, we can rule out trauma.

Q. So, tell me about the C reactive protein levels in Gerry.

A. C reactive proteins were elevated.

Q. How much?

A. Markedly elevated.

Q. The fact that the first reading was what did you say?

A. I didn't say.

Q. Go ahead and say.

MR. COCALIS: Jeff, just for clarification, are you talking about collection dates or reporting dates?

MR. ABERS: I think they did them the same day on both, didn't they?

MR. COCALIS: For C reactive? Actually the report of the 19th was collected on the 17th. That's why I am asking. He said the 19th, but it was actually collected on the 17th.

MR. ABERS: Let's see what he finds.

MR. COCALIS: One on the 14th is reported the 15th.

THE WITNESS: The C reactive protein on 7/14 was 92.

Q. (BY MR. ABERS) What's normal?

A. I am sorry, I apologize. That was the sedimentation rate. I apologize for that.

It was 19.

Q. What date is this?

MR. COCALIS: Once you get into the lab section, we're talking about the fourth page of the labs, which is on page 136 and on page 152.

MR. ABERS: Why don't you give him yours.

MR. COCALIS: If you go in the order they come, it's the fourth and sixth pages of the lab section.

MR. BOUCHARD: We have them.

THE WITNESS: The first C reactive protein is collected on 7/14/99 and the result was 19.05.

Q. (BY MR. ABERS) Is that normal?

A. No, it's not.

Q. What's normal?

A. SmithKline Lab it's less than .80.

Q. Is that significantly elevated?

A. That's what I said, yes.

Q. That indicates one of the two scenarios you talked about earlier.

A. That is correct.

Q. Either infection or post-op changes, reaction, whatever you want to call it.

A. It indicates inflammation.

Q. And the other C reactive protein was - I

think it's page 152.

A. Page 152 and this was done on the 17th. And it's recorded as being 15.55.

Q. Which is still markedly elevated?

A. That's correct.

Q. Same explanation as to the reason why?

A. That is ongoing inflammation.

Q. Or infection.

A. There is ongoing inflammation that may be from infection.

Q. Now, let me ask you to turn to page 54.

MR. BOUCHARD: He doesn't have them numbered.

MR. ABERS: How can they not be?

MR. BOUCHARD: Earlier set. I got a set without numbers and a set with numbers.

MR. ABERS: I thought they were numbered from the first day. That was the presuit ones.

MR. LYNN: Don't say presuit.

Q. (BY MR. ABERS) Do you have that page in front of you?

A. Yes.

Q. That's the nurse's notes on the 19th, correct?

A. It's Variance Progress Notes.

Q. The nurse wrote these notes. Take my word for it. She says she did, anyway.

Read this note on the 19th and tell me what you think is going on with Gerry.

MR. BOUCHARD: From the top to the bottom.

Q. You've read it before, I take it, today.

A. Yes, I have.

Do you want me to read it aloud?

Q. No. Read it to yourself.

A. What is going on is on the 19th, the afternoon of the 19th, he is starting to feel sick again. He has aches and not eating very well. The reports of the cultures and the sedimentation rate have been discussed with Dr. Tomenchok and he decides to call Dr. Lin to discuss the bacteria that grew from the blood culture and was considered to be a skin contaminant.

Q. That's not what is causing this boy's symptoms, is it?

A. In retrospect? No.

Q. I mean, forget retrospect. At that moment in time, which I guess you're talking about on July 19th at 2:00 -- Is that where you're talking?

A. Yes.

Q. Where it says Dr. Tomenchok stated Strep viridans was a skin contaminant, continue Bactrim for ten days. Do you see that note?

A. Yes.

Q. That skin contaminant that he's talking about, the Strep viridans, is not what is giving Gerry these other symptoms that are being discussed, is it?

A. That's correct.

Q. What kind of symptoms do you get from Strep viridans?

A. In this particular case, if it was a skin contaminant, you don't get any symptoms.

Q. Can we safely say that this note here where Dr. Tomenchok stated that the Strep viridans was a skin contaminant does not in any way reflect any symptoms that Gerry would have, such as neck pain, headache, fever, those kind of things?

MR. BOUCHARD: Object to the form of the question. You're including things that weren't in that note.

A. And you're asking me --

Q. What's the significance of Strep viridans?

A. None. It's nonsignificant for the purposes of this case.

Q. It has nothing to do with his medical situation, then, correct, other than it's present?

A. Other than a contaminated culture, that's correct.

Q. Let's go back to the question of what's going on with Gerry on the 19th. You read to the end of the page there?

A. Yes, I did.

Q. That takes us down to 2300 on the 19th.

A. He continues to not feel well. His temperature goes up to 105 degrees. He is vomiting, but remains alert and oriented. He is given Tylenol and Motrin, as well as ice compresses. And that eventually brings down his temperature to 99.3.

By 2300 hours his temperature is down to 98.1.

Q. So just reading this note, what do you think is wrong with him?

MR. BOUCHARD: Let me just object to the form. In retrospect or based on what he sees in just this record?

Q. I don't know how you differentiate

between those two things. You answer it any way you want. Just tell me how you're answering it.

A. If I isolate this note and try to not think of anything else, he has a fever and he's not feeling good, he's vomiting.

Q. Have you ever gotten a call about a patient like this, given what you just read here, similar situation?

A. I'm sure I have received calls regarding patients with similar symptoms.

Q. You've taken care of patients with a scenario just like this.

MR. BOUCHARD: Object to the form.

A. Well, again, if we don't assume - if we take out anything else, his previous history, not knowing anything else, just this scenario, yes, I have.

Q. And when you get a call like this, you do what?

MR. BOUCHARD: Object to the form.

MR. LYNN: A call like what?

Q. Not a call. When you get a situation like this, you do what? Let's say you come in to see the patient and you read this page. You're an infectious disease expert. I take it you just

don't put the chart down and walk away.

MR. BOUCHARD: Object to the form.

A. You're asking me to give an opinion as to standard of care for the physicians and nurses involved in this case, and I was not asked and I have not drawn any conclusions regarding the standard of care of the providers involved at this time of the care received at this time.

Q. I never asked you about standard of care. I never said one word about it. I just asked what you do. What would you do given this situation? You pick up the chart and read this. What do you do?

MR. BOUCHARD: I object to the form of the question.

A. Well, I first go and get more history to find out why this patient is at HealthSouth hospital. I find out what preexisting conditions are. I try to find out what his course has been before this first note. And if I am in the facility and picking up the chart, I would proceed with doing a physical exam and then determining what I do next.

Q. See where it says 1900 on there?

A. Yes.

Q. If you just got to that point, what would you do, where it says temperature 105, patient alert, oriented; what would be your medical advice at that point?

A. Again, it depends --

MR. BOUCHARD: Object to the form.

A. What information I was able to obtain up to that point. There is a number of situations that I can foresee here that may change my approach.

If this is the only information I had, again, I would, under ideal circumstances, go and examine the patient and try to get a better history to determine what my next step would be.

Q. Would you say give him some Motrin 600 milligrams and do nothing else?

MR. BOUCHARD: Object to the form of the question.

MR. RADER: Join.

A. Based on just the information in this page in this chart in a theoretical situation where I wouldn't know anything else, I would want to know what the physical exam was and what the history was before giving this medication.

Q. Okay. There is no way you would just say

Motrin with no further medical advice, is there?

MR. BOUCHARD: Object to the form of the question.

A. Again, in that theoretical situation and assuming that the only facts that I knew is what you have just given me on this page, I would probably not just give him Motrin.

Q. You have got to see the patient at that point, don't you?

MR. BOUCHARD: Object to the form of the question.

A. Again, the ideal circumstances and in this theoretical circumstance, yes.

Q. Well, that's what doctors are supposed to do, right? They're supposed to go and see the patient under the same situation here?

MR. BOUCHARD: Object to the form.

A. No, I don't know that I can make that statement. You know, any doctor may have more information than what is written in this specific page that I am holding.

Q. If they don't have any more information than that, is it fair to say they better get some?

MR. BOUCHARD: Object to the form.

MR. RADER: Join.

A. I think it's a reasonable statement. I would want to know a little bit more about this patient.

Q. Do you consider this advice here of Motrin appropriate medical advice, given what you're reading on that page?

MR. BOUCHARD: Object to the form.

MR. RADER: Objection.

A. I don't consider it inappropriate. You want to try to get the fever down. Motrin 600 milligrams is an appropriate dose for reduction of fever.

Q. It's not enough medical care, is it, to meet the standard of care?

MR. BOUCHARD: Object to the form.

MR. RADER: Join.

A. As I said before, I have not given any opinions regarding standard of care. And if you're asking me theoretically just based on this page of information, I would consider that I would need more information.

Q. And that information would only be obtained by you going to see the patient face-to-face.

A. Not necessarily. Very often we get calls

from the emergency room, an outside clinic, treating physician in another place, and many times we have to make decisions or suggestions based upon what is relayed to us by the staff that is actually seeing the patient.

Q. And if the staff doesn't tell you what you need to know, what do you do? Do you ask more questions?

A. If there are certain issues that I want to know, yes, you ask more questions or you - if it's in a reasonable situation, may elect to go see the patient.

Q. A reasonable situation is what?

A. Well, let me tell you what is a reasonable situation. I get calls every day from South Dakota, North Dakota, Nebraska where I cannot physically see the patient.

Q. That's because you're in Minnesota.

A. That's correct. So that's what I refer to if I'm not physically able to go see the patient.

Q. Let me ask you something: Is this your first time in Fort Lauderdale?

A. No, it's my second time.

Q. Do you know your way around here?

A. Not at all.
Q. I want you to assume that this doctor is in town, in other words, in southeast Florida. Okay?
A. Okay.
Q. That he's not separated like Rochester, Minnesota to Yankton, South Dakota or something. He didn't get a call from out of state or out of area. Is there any reason he shouldn't have gone to see this kid?
MR. BOUCHARD: Object to the form of the question.
MR. RADER: Objection.
A. You asked me what would I do. You didn't ask me what he or she would have done.
Q. Answer that first.
MR. APPLEBY: What doctor are you talking about?
MR. ABERS: The doctor that got this call at 1930, Dr. Lin.
MR. BOUCHARD: Object to the form of the question.
MR. RADER: Join.
THE WITNESS: The first question is, if I was able to, I would go see the patient.

Q. (BY MR. ABERS) Why?

A. Because I did not get enough information to satisfy my clinical needs.

Q. And the reason you would go is because that's what good medicine is, right? That's the standard of care.

MR. BOUCHARD: Object to the form.

A. That's what is expected from a pediatric infectious disease physician practicing where I do.

Q. And it would be expected from any doctor taking care of a patient in this same situation, infectious disease specialist or not, wouldn't it?

MR. BOUCHARD: Object to the form of the question.

MR. RADER: Objection.

A. I do not know what other information was available to that physician. Again, if you're asking me if this is the only information, what is written here, that's the only information that a physician had, I would say that at least in the pediatric specialty you would want to obtain more information, whether it's by phone or by physically seeing the patient.

Q. And pediatric specialty, you mean a

regular pediatrician.

A. Yes, sir.

Q. From your reviewing this chart, do you think there is any way this boy's medical care could have been addressed differently?

MR. BOUCHARD: Object to the form of the question.

MR. COCALIS: Join.

A. To be honest with you, I haven't looked at it from that standpoint. If you ask me can things have been done in a different way, certainly there is many different ways of practicing medicine appropriately.

When I was asked to look at this chart, I looked from the standpoint of the standard of care and causation as it applies to Dr. Ragheb. So, I'm not able to give you an opinion at this time of whether a different approach would have resulted in a different outcome.

Q. What do you think?

MR. BOUCHARD: Object to the form.

A. I think that the -- Let me start: I think this is a very tragic case. I cannot even imagine what it would feel like to lose a child under these circumstances. It's tragic.

And I believe that the type of meningitis that this child had was a fulminate one, was where, despite appropriate antibiotics, more likely than not the outcome would have been the same.

It's easy to look at this in hindsight. Maybe he shouldn't have had the surgery to start with. Maybe some things could have been done a different way.

But, do I see that a change in the approach to this patient may have resulted in a different outcome? I cannot honestly tell you that more likely than not that would be the case.

Q. You don't think this tragedy could have been avoided with a spinal tap done sometime before the 20th?

A. No, I don't think that a spinal tap would have saved this child's life.

Q. Do you think he deserved a chance to have a spinal tap done and get treated?

MR. BOUCHARD: Object to the form.

MR. RADER: Objection.

A. Well, we need to clarify that a spinal tap is not the treatment for this meningitis. I mean, this patient could have received the right antibiotics without a spinal tap and still very

likely would have had the same outcome.

You know, certainly, I mean, you know, it would have been nice to see that the antibiotics were started earlier and, if that had been the case, we wouldn't be sitting here. But I don't think the outcome would have been any different.

Q. So that's what we should tell this boy's parents, that it would have been nice if they had started them, but it wouldn't have made a difference?

MR. BOUCHARD: Object to the form of the question. Argumentative.

Don't answer that question.

Q. It would have been nice, but it wouldn't have made a difference?

A. I have been instructed not to answer that question.

Q. I am asking a different questions. Are you telling me that starting the antibiotics would have been nice, but it wouldn't have made a difference anyway?

A. When I said it would have been nice, I meant it wouldn't have us here in this room if the antibiotics would have been started earlier; but, yes, that's correct, it would more likely than not

not have made a difference.

Q. Why wouldn't we be in this room?

A. Because then you wouldn't have issue to blame or claim that there was a mismanagement of this patient.

Q. If they had started the antibiotics earlier than the 20th.

A. If I understand, your case is revolving around the fact that the antibiotics were not started until the 20th. And, what I am saying is, if they had been started on the 19th, then we wouldn't be here because there wouldn't be that argument that antibiotics may have made a difference. That's all I am saying.

I am saying, you know, that I understand that this is a very tragic situation and, you know, certainly you want to hope in a patient like this that everything that can be done was done.

That's my answer.

Q. Have you ever had one of your patients die from meningitis?

A. Yes, I have.

Q. And was it a similar type of meningitis that Gerry had?

A. I have had patients with meningitis due

to the organisms that Gerry had die, yes.

Q. Were you involved with their care for some period of time before they died or were you called in afterwards or what was the --

A. There has been different situations. Sometimes I have been involved with them since the time they came in the hospital and other occasions we're involved later on as the course is progressing.

Q. How many times has that happened?

A. That patients die from meningitis?

Q. Under your care.

MR. BOUCHARD: Object to the form of the question.

You can answer.

A. Any type of meningitis?

Q. Bacterial meningitis.

A. Five or six times that I can think of.

Q. Over how long a period of time?

A. 14 years.

Q. And how many patients have you taken care of with bacterial meningitis?

A. I don't know that number.

Q. Thousands?

A. Maybe hundreds.

Q. Are you aware of any studies or articles or any kind of research of any type that suggests information on the type of meningitis that Gerry had and that intervention would not have cured it?

A. Yes, I am.

Q. Can you tell me what comes to mind?

A. Yes, sir. There is an article by Dr. Michael Radesky, who evaluated or did a study or looked at, I believe, 22 different studies involving meningitis in which he came to the conclusion that in fulminate meningitis, that's the one that Gerry had, the timing of the administration of antibiotics does not affect the outcome.

Q. Did you know that he was involved in our case?

A. No, I did not know.

Q. He gets involved often.

Go ahead. Anything else?

A. There is an editorial in the same journal where this paper was published that --

Q. What journal was it?

A. I believe it was Pediatrics or it may have been Pediatric Infectious Disease Journal. I apologize, but I don't recall the exact reference.

Q. That's all right.

A. But there is an editorial by Dr. Fiegan and Kaplan in which the same conclusions are drawn.

Q. Anything else?

A. No, sir.

Q. And I might have asked this earlier and I apologize if I did.

Is there anything in the lab results at either HealthSouth, at Plantation General, at Memorial, that tells you this was a fulminate meningitis that cannot be cured or are you relying on just the clinical presentation?

A. No, you haven't asked that question and, yes, there is laboratory data that this was a fulminate meningitis.

Q. What is that?

A. It's based on the evaluation of the spinal tap, of the fluid that was obtained on the day that he died.

Q. Can you turn to that?

A. There are three different pages. The first one is labeled CSF Gram's stain and culture. That one shows few white blood cells, many gram-positive cocci in pairs. Moderate gram-negative bacilli and the culture grew three

plus streptococcus intermedius.

Q. Which tells you what?

A. Tells me what the fluid looked like under the microscope and that the bacteria that grew was this one that I have mentioned.

The second laboratory reference is a serology sheet that states that the rapid test for meningococcus was negative, for pneumococcus was positive, for Hemophilus influenza was positive, and for group B strep was negative.

Finally, third one looks at the cell count of the CSF. It had 63 red blood cells and 18 white blood cells.

In addition, there are 20 cells that were counted with 19 of them being segs and one was a monobacteria.

Q. Tell me specifically what in those three pages you have just looked at tells me that this was a fulminate meningitis that could not be cured by antibiotics.

A. I have not said that this was not cured by antibiotics. I said more likely than not would not have affected the outcome of this child.

What points me to that is the fact that he had a meningitis with three different organisms.

More important than that is the fact that his white cell count was only 18.

This is, first, a poor prognosis sign and, second, tells me that the infection has been so overwhelming and developing so fast that his CSF has not been able to mount the appropriate inflammatory response.

The fact that there are many bacteria easily seen and you only have 18 white cells is clearly indicative of an overwhelming fulminate meningitis.

Q. Do you think that's possible at all because he has been fighting an infection for two weeks before that?

A. No.

Q. Why not?

A. Because, if he had been fighting this infection for two weeks and, very specifically, if he had been fighting a meningitis with these three organisms for two weeks, as you are theoretically asking, first of all, his white count would have been markedly elevated, in the 1,000 to 10,000 or even more range.

Second, the patient would likely not survive if he had meningitis two weeks earlier.

Q. Well, what about some sort of infection for two weeks earlier, is there any doubt that he had some sort of infection for, let's say, a week to ten days before he died?

A. No, there is no doubt that he had some sort of infection. And that infection had no bearing on the white count in this spinal fluid.

Q. What about being on antibiotics?

A. Not on the antibiotics that he was.

Q. It would make no difference on the lab report? It would not have affected that?

A. You're asking me specifically about the white count?

Q. Yes.

A. It wouldn't have affected it to this range, no.

Q. So those are the three things that tell you the answer to the question of the lab studies that tell you this was a fulminate meningitis that antibiotics would not have been able to take care of it.

A. In addition to the clinical course, yes.

I apologize. There is one more lab that suggests this is a fulminate meningitis.

The white count done at Columbia

Plantation General Hospital on 7/20/99 showed a white count of 4.0, again indicating an overwhelming infection that has - excuse me for repeating the word, overwhelmed the normal immune response of white cells.

Q. Did you ever think, while you were reading through these records or have a thought that you were surprised or anything about the idea that no one talked about meningitis before he got to Plantation General Hospital?

MR. BOUCHARD: Object to the form of the question.

Q. I mean, when you're reading through these records, did you ever have a thought, you know what, I can't understand why nobody even thought of it, even wrote the word down as a possibility?

MR. BOUCHARD: Object to the form.

A. I don't know that nobody thought about it. It's certainly not reflected in any of the notes. The word meningitis is not used in any of the notes prior to the time he was admitted to Plantation General Hospital.

Q. Didn't that strike a cord to you at all?

MR. BOUCHARD: Objection to the form.

A. In all honesty, I didn't look at this

case from that standpoint.

Q. Well, look at it from that standpoint and tell me the answer.

MR. BOUCHARD: Object to the form of the question.

A. Again, I don't know what they thought or didn't think about it. At least it is not reflected in the medical records and there was no indication at that time before the evening of the 19th to consider meningitis.

Q. So you're telling me as you sit here that when you read through these records, right up until July 19th, you weren't sitting there thinking, you know what, somebody must have thought about meningitis. I mean, it must be here somewhere. You didn't have that thought in your mind?

A. No.

MR. BOUCHARD: Object to the form.

Q. What other opinions do you have in this case other than the ones you told us about?

MR. BOUCHARD: Object to the form of that question.

Q. Have you come to any other opinions that you're going to testify to?

A. Yes. I had rather clarify them, because

I don't know which opinions are you going on?

Q. Go ahead. You mean clarify and summarize, is that what you want to do?

A. Absolutely.

Q. Feel free.

A. First of all, as I said, this is a tragic case that in my opinion this patient died of fulminate meningitis due to at least one organism and likely three different organisms. And this was bacterial in origin.

My second opinion is that at the time that he was seen by Dr. Ragheb, he did not exhibit symptoms or clinical findings of meningitis and that the evaluation provided by Dr. Ragheb was appropriate and fell within the standard of care.

Number 3 is that the patient became afebrile for a period of at least four days following the office visit to Dr. Ragheb and that his clinical course had stabilized and improved during that time period.

It is also my opinion that on the 19th the patient developed a fever and his symptoms progressed with the development of overt, overwhelming meningitis.

And, as I had previously mentioned, it is my opinion that, more likely than not, the administration of an antibiotic on an earlier time on July 19th would not have changed the outcome of this child.

Q. What about on July 18th?

MR. BOUCHARD: Object to the form.

Q. Antibiotics on July 18th.

A. Well, we cannot say one way or another. I mean, if the bacteria at that time was not in his central nervous symptom and that is the day that the bacteria picked to go through the respiratory tract and go and seed the brain, it is possible that it would have made a difference in the outcome. That would have meant that the meningitis would not have developed. But, I am also of the opinion that there was no indication to start antibiotics on the 18th.

Q. If Vancomycin and Rocephin had been used on the 18th or earlier, would this boy have died from bacterial meningitis?

A. I don't think we can say one way or another.

Q. Why not?

A. Because, again, we don't have a way of

determining which day and at what time did the bacteria gain access to the central nervous system.

Q. Does Vancomycin and Rocephin work on the bacteria before it gets to the central nervous system?

A. They could have.

Q. If the bacteria was present that ultimately caused him to have a fulminate meningitis, wouldn't Vancomycin and Rocephin at some point get rid of that bacteria if it's administered?

A. Unfortunately not. These bacteria usually live in the respiratory tract and in the respiratory tract the amount of antibiotic you can get frequently does not clear the colonization of one's respiratory tract.

So, the administration of antibiotics would not have decreased the colonization. If an antibiotic had been on board in his blood stream at the time in the second that the bacteria gained access to the blood stream, it is possible that the infection could have been prevented.

Q. And what's a reasonable period of time before the 19th where this bacteria would have made this transition?

A. A relatively short period of time.

Q. Like give me a reasonable medical probability estimate.

A. I don't think I can give you a reasonable medical probability, because we have no way of determining this in a scientific way. I can tell you, based on my understanding and knowledge about the organism, it is likely that it occurred in a matter of hours prior to the development of the fever and the symptoms of overt meningitis.

Q. So that puts us sometime on the 19th? That is what you're telling me?

A. I am just saying it's a wide range, but somewhere between the 18th and the 19th it is likely that this bacteria gained access to the central nervous system.

Q. So, given that scenario that you just told me, which is a good faith estimate by you, I guess within reasonable medical probability, if he had been started on Vancomycin and Rocephin on the morning of the 18th, would that have addressed this problem and cured it?

MR. BOUCHARD: Object to the form.

A. There is a number of factors involved here. It's not just the administration of

antibiotics. It also may have to do with some specific issues to the host, where this bacteria gained access from. So it is certainly not a 100 percent situation.

Is it possible that administration of antibiotics somewhere around the 18th or 19th would have prevented the bacteria from seeding? The answer is yes.

Q. Is it more likely than not, like 51 versus 49?

A. I don't think I could quantify it and I don't think anybody could.

Q. Did you ever talk to Dr. Ragheb?

A. I do not know him and I have never talked to him.

Q. You just read over his note on the 16th?

A. I read over his note on the 16th and I read his testimony in deposition.

Q. You told us that earlier. But you read his note on the 16th?

A. Yes, I did.

MR. ABERS: Okay.

MR. BOUCHARD: I need to take a short break and see whether I or anyone else have questions.

MR. ABERS: Sure.

(Discussion off the record.)

MR. BOUCHARD: That's it.

We'll read.

AND FURTHER DEPONENT SAITH NOT.

(Signature of the Witness)

CERTIFICATE

STATE OF FLORIDA

COUNTY OF BROWARD

I, TERESA F. DURANDO, RPR, Registered Professional Reporter, certify that I was authorized to and did stenographically report the foregoing proceedings on the 18th day of February, 2003, at Fowler White Burnett, 100 Southeast Third Avenue, Fort Lauderdale, Broward County, Florida; and that the transcript is a true record; and that said witness read the same and subscribed his name thereto.

I further certify that on the day of , 2003, I notified Mr. Bouchard that the deposition of ARMANDO CORREA, M.D. is now ready for signature.

I further certify that I am not a relative, employee, attorney, or counsel of any of the parties, nor am I a relative or employee of any of the parties' attorney or counsel connected with the action, nor am I financially interested in the action.

Dated this day of , 2003.

TERESA F. DURANDO, RPR,
Registered Professional Reporter

CERTIFICATE OF OATH

THE STATE OF FLORIDA

COUNTY OF BROWARD

I, the undersigned authority, certify that ARMANDO CORREA, M.D. personally appeared before me and was duly sworn.

WITNESS my hand and official seal this day of , 2003

TERESA F. DURANDO, RPR,
Registered Professional Reporter
Notary Public - State of Florida
My Commission No.
Expires: