ORIGINAL

IN THE COURT OF COMMON PLEAS
FOR THE COUNTY OF CUYAHOGA, OHIO

TRACY ANN SMITH,
Administrative, etc.,
Plaintiff,

v.

UNIVERSITY HOSPITALS
OF CLEVELAND, et al.,

Defendant. CASE NO. 327823

Camden, New Jersey
February 2, 1999

Transcript of testimony of LEE J. BROOKS, M.D., as taken by and before DENISE M. PITCHFORD, Registered Professional Reporter and Commissioner of Deeds of the Commonwealth of Pennsylvania, at the offices of Cooper Health Systems, Dorrance Building, 401 Haddon Avenue, commencing at 3:05 o'clock in the afternoon.

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I N D E X

E X H I B I T S

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(Exhibits P-1 through P-5 marked for identification.)

MS. TOSTI: Before we begin, can I enter the stipulation that Ohio Rules of Civil Procedure will apply and that there would be a waiver of any defects in notice or service?

UNIDENTIFIED SPEAKER: Certainly.

MS. TOSTI: I think you need to identify yourself when you answer.

MS. PETRELLO: No objections. Petrello.

MS. CUTRBERTSON: No objection. Cuthbertson.

MR. O'DONNELL: This is Jack O'Donnell. No objections.

MS. TOSTI: Colleen, you're coming in very weakly. Are you on a speaker phone?

MS. PETRELLO: Yes.

MS. TOSTI: Because we can barely hear you. We can hear the other

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two pretty well.

MS. PETRELLO: Is this any better?

MS. TOSTI: A little bit.

MR. TQRGERSON: Just shout out Colleen when you want to say something.

MS. PETRELLO: Okay.

MS. ***TOSTI:*** Would you swear in the witness, please?

LEE J. BROOKS, M.D., after having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MS. TOSTI:

Q. Doctor, would you state your full name for us, please?

A. Lee J. Brooks.

Q. And what is your home address?

A. 28 Bunning Drive, Voorhees, New Jersey.

Q. And what is your current business address?

A. 401 Haddon Avenue, Camden, New

Jersey.

Q. And in February of 1996, what was your business address?

A. Rainbow Babies and Childrens Hospital. I don't remember the exact street address.

Q. In February of 1996, who was your employer?

A. Case Western Reserve University.

Q. And were you employed by anyone else besides Case Western Reserve in February of 1996?

A. No.

Q. Were you an employee of any professional medical group in February of 1996?

A. My paycheck came from Case Western Reserve.

Q. Okay, Doctor, I believe that when you answered discovery requests in this case when you were asked whether you were an employee of any particular medical

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group, your response was that you were a member of University Faculty Practice. Is that the name of a group that you were employed by?

A. I don't remember.

MS. CUTHBERTSON: Hey, Jeanne, while we're starting this out, do you mind if the rest of us introduce ourselves?

MS. TOSTI: No, go ahead.

MS. CUTHBERTSON: Dr. Brooks, my name is Pat Cuthbertson. I represent University Hospitals of Cleveland.

THE WITNESS: Howdy.

MS. CUTHBERTSON: Hi.

MS. PETRELLO: Dr. Brooks, my name is Colleen Petrello, and I represent Dr. Collins and Dr. Hlavin,

THE WITMESS: Hi.

MS. PETRELLO: Hi.

MR. O'DONNELL: And this is Jack **O'Donnell**. I'm here for Dr. Rowane.

THE WITNESS: Okay.

MR. O'DONNELL: And so long as

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we're interrupting questions right now, with Dr. Collins a couple weeks ago I could hear the doctor fine, but I could hardly hear Jeanne. But today is the opposite. Maybe if you could move the phone closer to the doctor.

MR. TORGERSON: He'll speak up.

THE WITNESS: Okay, I'll try to speak louder.

MS. TOSTI: In actuality, the phone is sitting in front of the doctor.

MR. O'DONNELL: Okay.

BY MR. TOSTI:

Q. Okay, Doctor, you have a copy here of Answers to Interrogatories that were made, and the question that was put to you in Interrogatory Number 7 was, "At the time that you rendered care to plaintiff or plaintiff's decedent, were you an employee of any professional group or any corporate entity?'?

And the answer that you listed

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was University Faculty Practice.

MR. TORGERSON: Wait a minute. Are you asking him if that's the answer to that question? We'll stipulate that is the answer to that question.

BY MS. TOSTI:

Q. That's the answer. Is that a correct answer?

A. I honestly don't know where the money funneled into Case from. I got my paycheck from Case, and I considered them my employer.

Q. Okay. Well, the answer that you gave here is "University Faculty Practice" in answer to the question, "At the time that you rendered care to plaintiff or plaintiff's decedent, were you an employee of any professional group or corporate entity?" You answered.

And Number 58, "If answer to the proceeding Interrogatory is in the affirmative, please state the complete name of any professional group or any

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corporate entity or address of its statutory agent."

And you answered, "University Faculty Practice."

A. Yes.

MR. TORGERSON: Okay, objection.

That's not a question, Doctor. She's making a statement. Make sure that you answer questions.

BY MS. TOSTI:

Q. That was the question, that was the answer that you gave at the time that you answered these Interrogatories, correct?

MR. TORGERSON: Objection. You may answer.

A. I honestly do not know where the thing came from. I don't. know what happened to -- I don't know. I don't know.

Q. Doctor, there's a verification page on these Interrogatories that you

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signed that says that you've read the foregoing answers to these sets of Interrogatories and that it states that the same are true to the best of your ability and knowledge.

Do you recall signing that?

A. I don't recall signing it, but that's my signature.

Q. Okay. And that's notarized also, Doctor, isn't it, Doctor?

A. Yes, it is.

Q. And so, Doctor, what I'm asking you, is this a truthful answer that you were employed by University Faculty Practice at the time that you rendered care to Patricia Smith?

MR. TORGERSON: Just a moment. Let me insert an objection. That's been asked and answered, and we've stipulated that that's his answer. And the thing you just read him, the verification said the same are true to the best of his ability and knowledge.

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Now, I don't know what more you can ask him to say because he's said he doesn't know now.

BY MS. TOSTI:

Q. Well, I would like to know if you can tell me what University Faculty Practice is, what is that?

MR. TORGERSQN: If you know, go ahead, Doctor.

A. I don't know with certainty.

Q. Okay. You don't know with certainty?

A. Right.

Q. Were you ever employed by University Faculty Practice?

A. Not to my knowledge.

MR. TORGERSON: Let me just say that I can't tell whether that is a generic description of what he believed was his employer or as the question seems to ask a specific group, which I guess what you are getting at. We will try to find out what the Doctor's memory does not

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assist him in answering at this time to find out whether that was a specific group or a generalized statement of his understanding of his arrangement at that time.

Q. Okay, Doctor, in February of 1996, were you ever a professional employee of Children's Research Foundation?

A. Not to my knowledge.

Q. Okay. In answer to the Complaint in this matter, your attorney Joseph Farchione answered on your behalf and indicated that the corporation that you were a member of was Children's Research Foundation. Was that incorrect?

MR. TORGERSOM: Let me make an objection. But go ahead if you can answer whether it was correct that the attorney who then represented you answered at that time.

A. I'm not sure. Now I'm confused.

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Q. All right. Let me rephrase the question. Have you ever had any association with Children's Research Foundation?

A. Yes.

Q. Okay. What was your association with Children's Research Foundation?

A. My understanding is that the Children's Research Foundation represented the Department of Pediatrics at Rainbow Babies and Childrens Hospital.

Q. When you say represented, what do you mean by that?

A. It was part of Rainbow.

Q. Were you employed by Children's Research Foundation through the Department of Pediatrics?

A. Not to my knowledge. All of my paychecks said Case Western Reserve University.

Q. Did you hold any type of a position with Children's Research

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Foundation at any time?

A. Not that I know of.

Q. And other than the services that you provided through Case Western Reserve University, did you provide any professional services for any other entity?

A. I'm not sure what you mean.

Q. Beyond the work that you did through Case Western Reserve University and were paid for under the auspices of Case Western Reserve, did you do any other professional work outside of that?

MR. TORGERSON: Point of time, February of '96?

MS. TOSTI: February of '96.

A. I took care of my patients.

Q. Okay. Did you have a private practice aside from what you were doing for Case Western Reserve?

A. No.

Q. Okay. So that was still under the umbrella of the work that you were

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doing for Case Western Reserve University?

A. Correct.

Q. Doctor, what is your current professional medical employer, medical group employer?

A. Cooper Hospital.

Q. And do you have any practice outside of what you do here at Cooper Hospital?

A. No, I don't.

Q. Have you ever had your deposition taken before?

A. Yes.

Q. How many times?

A. One or two.

Q. And why was your deposition being taken? And by that I mean, were you a defendant, an expert, a treating physician?

A. I was an expert witness.

Q. The two times or the couple times that your deposition was taken, was that while you were still in the Cleveland

area?

A. Yes.

Q. And the couple times that your depositions were taken, what was the subject matter of the cases that you were acting as an expert witness on?

A. One that I can recall was an infant with pulmonary disease who died. And I don't recall specifically others.

Q. Now, Doctor, I'm sure your attorney has reviewed some of the rules that we usually follow during depositions.

This is a question and answer session. It's under oath. It's important that you understand the question that I ask you. If you don't understand the question or if I've phrased it inartfully, just let me know and I'll be happy to rephrase it or ask it again. Otherwise, I'm going to assume that you understood the question that I asked you and that you're able to answer it.

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If at some point you wish to look at any medical records, I don't know if your attorney has provided you with any copies, but you may feel free to do so if you have those available.

At some point your attorney or some of the other attorneys that are with us via conference phone may enter an objection. You are still required to answer my question unless your attorney tells you not to. And all of your answers should be verbally given because our court reporter can't take down head nods or any type of hand motions.

MR. TORGERSON: Let me simply say, let your attorney make an objection before you answer any questions. So give a pause before you answer.

THE WITNESS: Okay.

BY MS. **TOSTI:**

Q. Have you ever been named as a defendant in a medical negligence case?

A. Yes.

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MR. TORGERSON: Objection.

BY MS. TOSTI:

Q. Okay, your answer was yes, Doctor?

A. Yes.

Q. Wow many times?

A. Once.

Q. And when was that?

A. About five years ago.

Q. Where was the case filed?

A. In Ohio.

Q. Cuyahoga County?

A. I believe so.

Q. And what was the allegation of negligence in that case?

A. It's not clear. I was one of many physicians who were named.

Q. Well, what was the subject matter that it involved?

A, It was a child who had asthma.

Q. And what happened to the child?

A. To the best of my knowledge,

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he is doing well, although he still has asthma.

Q. And do you know what was alleged that you did improperly or what the allegation was?

A. That was never clear.

Q. How was that case resolved?

A. I was released from the case in a very early portion.

Q. Okay. And do you recall the name of the plaintiff in that case?

A. I don't.

Q. Have you ever had your hospital privileges called into question, suspended or revoked?

A. Never.

Q. And what states do you currently hold a license to practice?

A. New Jersey. I don't recall. if my Ohio license is still active or inactive.

Q. Okay. At the time that you rendered care to Patricia Smith, you were

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licensed in the State of Ohio, is that correct?

MR. TORGERSON: Note an objection, foundation. If the question is at the time of the events involving Patricia Smith, I think you can answer that question.

MS. TOSTI: That was my question.

BY MS. TOSTI:

Q. At the time that *you* rendered care to Patricia Smith, were you licensed in the State of Ohio to practice medicine?

MR. TORGERSON: I've objected to your characterization of rendering care of Patricia Smith at the time. And we dispute that he rendered care, that's the basis of my objection. If that helps you to --

MS. TOSTI: Let me rephrase my question then.

BY MS. TOSTI:

Q. In February of 1996, were

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you -- I'm sorry, were you licensed in the State of Ohio to practice medicine?

A. Yes, I was.

Q. Okay. Was your medical license in Ohio or any other state ever been suspended, revoked or called into question?

A. No, it hasn't.

Q. Okay. Doctor, have you ever given medical testimony at trial in a case?

A. Yes.

Q. Okay. And in what capacity were you giving medical testimony at trial?

A. I was an expert.

Q. Was that in like one of the two cases that you had your deposition taken?

A. Yes.

Q. Okay. And at any time that you gave testimony, did any of the cases that you gave testimony involve issues of

obstructive sleep apnea?

A. Could you rephrase the question?

Q. Yes. You have told me that you have given testimony at trial. And my question to you is, the times that you gave testimony at trial, did any of those cases involve issues of obstructive sleep apnea?

A. No.

Q. Any involving sudden death?

A. Yes.

Q. Okay. What was the case that you testified in that had to do with sudden death?

A. It was an infant in another state who was born severely prematurely, had many respiratory problems and died suddenly at home.

Q. Any involving seizures during sleep?

A. None.

Q. And Row many times have you

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given testimony at trial?

A. Just that once.

Q. And Doctor, what hospitals do you currently have privileges at?

A. Cooper Hospital,

Q. And are they admitting privileges?

A. Yes.

Q. Okay, Doctor, I have a copy of your curriculum vitae, which you previously produced in a Request for Production of Documents. It's been marked as Plaintiff's Exhibit 1. I would like you to look it over, and tell me if you have any additions or corrections that you'd like to make to it.

A. There are some more recent publications that aren't on here.

Q. Okay. In regard to the publications that do not appear on here, do any of them deal with sleep apnea in adults?

A. No.

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Q. Okay. Do any of them deal with hypoxia or oxyhemoglobin desaturation during sleep?

A. You're referring to the references that are not on this?

Q. Yes. Yes.

A. I don't believe so.

Q. Okay. And do any of them deal with issues of seizures during sleep, any of the ones that are not currently on this curriculum vitae?

A. No.

Q. And Doctor, the postgraduate training that you have listed on your C.V., these are all in the area of pediatrics and pediatric pulmonology, is that correct?

A. That is correct.

Q. And do yau have any additional post doctoral training in adult sleep disorders?

A. I took several courses in sleep disorders that were primarily aimed

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at adults.

Q. Okay. And when did you do that?

A. Maybe 10 years ago.

Q. And how long were those courses?

A. The longest was two weeks.

Q. Okay. And how many courses did you take?

A. Probably two or three.

Q. Okay. And the longest was two weeks, Wow long were the other courses?

A. I think one was about a week and another one was just a few days.

Q. Okay. And other than those courses that you've just told me about, have you had any other training or identification in the area of adult sleep disorders?

A. Yes.

Q. Okay. When, would you describe that for me?

A. I'm frequently asked to speak

as part of a course on sleep medicine, and I'm usually the -- I usually stay and listen to the other speakers.

Q. And how often do you do that?

A. A couple of times a year.

Q. Are these like seminars or conferences?

A. Yes, that's exactly right.

Q. And over how long a period does that conference usually run?

A. Usually they are from two to five days.

Q. What is the reason that you left your position in Cleveland?

A. I had an opportunity here to start my own division, and they gave me a big raise. Plus my wife is from the area, and we were tired of shoveling snow.

Q. Is there less snow here?

A. A lot less.

Q. When did you relocate?

A. I think that was September of '96.

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Q. And do you currently hold any title or position at Case Western Reserve University?

A. Yes, I am. I think I'm Clinical Associate Professor of Pediatrics at Case.

Q. Okay. And in regard to that particular title, what are your duties?

A. That I'm participating in some research projects with people at Case and elsewhere. And this makes it easier for me to continue to participate.

Q. Okay. What type of research projects, what's the subject matter?

A. This is a study of infants who might be at risk for sudden infant death syndrome.

Q. And aside from that position as a clinical, did you say an associate?

A. Clinical Associate Professor.

Q. Of Peds. Do you have any other positions or titles with University Hospitals of Cleveland?

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A. No.

Q. Now, I believe you told me that you do not have a private practice outside of your position here at the hospital, is that correct?

A. That's right.

Q. What is your current title and position here?

A. I am head of the Pediatric Pulmonary Division, and Director of the Family Sleep Center at Cooper Hospital. And I'm Associate Professor of Pediatrics at Robert Wood Johnson Medical School.

Q. Okay. Now, in regard to the sleep disorder center here, what type of patients, and by that I mean children, adults or anything in between do you normally see in that center? What is the correct title for the center so that I'm calling it the right thing?

A. Family Sleep Center.

Q. Family Sleep Center, okay. In regard to the Family Sleep Center, how

would you characterize the patient population that you see there?

A. Perhaps 25 percent infants, five percent adults and the remainder children and adolescents.

Q. Okay. Of the patients that are seen in the Family Sleep Center, do you personally do evaluations of patients at the center?

A. I'm not sure I understand the question.

Q. Do you see patients, do an evaluation, history, or is your position more administrative? I want to know what your clinical -- let me rephrase that.

Do you have clinical responsibilities in which you see patients directly in the Family Sleep Center?

A. Yes, I do.

Q. Okay. Would you tell me what those responsibilities or duties are that you have that are clinical?

A. When a patient is referred to

me in the Family Sleep Center, I would take a history, examine them, and decide what tests and/or treatments are needed.

Q. And of the patients that you see, would the breakdown on percentages be close to what you just told me in regard to five percent adults, 25 percent infants and the rest adolescents and children?

A. That would be fair.

Q. Doctor, of the five percent of the adult patients that you may come in contact with, how many of the patients that you see have obstructive sleep apnea? And I'm speaking of the adult patients that you see.

A. Probably 95 percent of the adults have obstructive sleep apnea.

Q. And the other five percent would be other sleep disorders?

A. That's right.

Q. Now, Doctor, you were also Director of the Polysomnogram Laboratory at Rainbow Babies and Childrens, and I

don't know if I have the proper titles for that particular unit. What is the correct title for the sleep disorders center at Rainbow Babies and Children that you worked at?

A. Of the center or of the lab?

Q. You were Director of the Polysomnogram Laboratory, was that correct?

A. Correct.

Q. Was there someone else that was the head of the center?

A. No, and let me -- I would -- no.

Q. Okay.

A. At Rainbow?

Q. Let's start with what was your title at Rainbow Babies and Children in regard to the sleep lab?

A. At what time?

Q. In February of 1996.

A. At that time, I did not have an official title.

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Q. Okay, were you functioning as the Director of the Polysomnogram Laboratory in February of '96?

A. No, I was not.

Q. Was there a director?

A. Yes, there was.

Q. Who was that?

A. Dennis Landis.

Q. Okay. At what point in time -- your curriculum vitae says that you had a hospital appointment from 1986 to '96 as Director of the Polysomnogram Laboratory and Sleep Disorders Center at Rainbow Babies and Childrens Hospital. Did your position as director change sometime in '96?

A. At that time I was responsible for all pediatric patients. That's why we specified Rainbow Babies and Childrens.

Q. Okay. Sa were you doing in February of '96, were you working with adults at all?

A. Yes, I was.

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Q. Was there someone else that had responsibility for adults as director for adults?

A. I'm not sure.

Q. In February of '96, were you seeing patients other than those that you saw in the sleep center, did you have a pulmonology group of patients that you saw in the hospital aside from those that were being seen in the sleep disorder center?

A. Yes.

Q. And were those pediatric patients?

A. Yes.

Q. Did you see adult patients outside of the sleep center?

A. Extremely rarely.

Q. In February of '96, what percentage of the patients that were being seen in the sleep disorder center were adult patients?

A. I'm not sure I can answer that.

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Q. You can't give me an approximation? Was the majority of them children?

A. I can give you an approximation of the patients that I saw.

Q. Okay. In February of '96 in regard to the patients that you saw, can you give me a breakdown on the age range of the patients?

A. Probably one-third infants, one-third children and one-third adults.

Q. Okay. Did you have any title or specific responsibility -- first off, did you have any specific title in regard to the polysomnogram laboratory in February of '96?

MR. TORGERSON: Could you read that question back?

(The record is read back as requested.)

A. I was Director of the Pediatric Polysomnography Laboratory.

Q. And did that title change at

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any point in 1996?

A. I don't think so.

Q. Okay, Now, in regard to the sleep center, did you have any title in the sleep center?

A. What sleep center do you mean?

Q. I'm sorry, at University Hospitals Sleep Center. You had told me that that was different than the polysomnogram laboratory, and I'm asking you if you had any particular title associated with the sleep center?

A. Not other than what I've told you.

Q. I don't believe that you told me that there was any titles. So I'm asking if you had a specific title, and I would like you to answer yes or no to that.

MR. TORGERSON: Well, I'll object. I think it's been asked and answered, but go ahead if you can. She

may simply be asking you to repeat so as to avoid confusion. If your answer is the same that's previously been given, you should tell her what that answer is. You've said. it's the same so...

A. I was the Director of Pediatric Polysomnography.

Q. Maybe I'm confused then. I thought you told me that the laboratory was separate from the sleep center, is that correct, those are two different things?

A. Correct.

MR. TORGERSON: Well, okay. Give me -- wait just a minute. Be sure and give me a chance to object, Doctor.

THE WITNESS: Okay.

BY MS. TOSTI:

Q. Is the laboratory separate from the sleep center, because you had indicated earlier that there seemed to be a difference between the polysomnogram laboratory and the sleep center, are they

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two different entities?,

MR. TORGERSOM: Objection. That's her characterization, but answer the question, but understand that it's her characterization of what she believes you said previously.

A. Okay. Yes, they are not the same.

Q. Okay, are they in the same area of the hospital? Are they in the same physical. setting?

A. No.

Q. There are two separate physical settings, the polysomnogram laboratory is a separate area from the sleep center, is that correct?

A. Correct.

Q. And you've told me the pofysomnogram laboratory you did have a title as Director of Pediatrics for the Polysomnogram Laboratory, correct?

MR. TORGERSON: Objection. Asked and answered. Go ahead.

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BY MS. TOSTI:

Q. Correct.

A. Yes.

Q. Now, in regard to the sleep center, did you have any titles?

A. I was Director of the Pediatric Sleep Center at Rainbow Babies and Childrens Hospital --

Q. Okay.

A. -- in February of '96.

Q. Thank you. Doctor.

Now, Doctor, you are Board certified in several areas, is that correct?

a. That's right.

Q. Okay. Those areas, if you could just run through them for me that you hold Board certification in?

A. I'm Board certified in sleep medicine. I'm Board certified in pediatric pulmonology, and I'm Board certified in pediatrics.

Q. And did you pass both of those

on the first try in regard to the Board certification test?

A. Yes.

Q. Now, Doctor, on your curriculum vitae you have a presentation that you did, I believe in San Francisco in 1997 titled Obstructive Sleep Apnea: How are Children Different from Adults?

Do you recall that presentation that you made?

A. Yes, I do.

Q. Has that particular presentation ever been reduced to a written form or a video or an audiotape?

A. No, it hasn't.

Q. Any syllabus or handouts from that particular presentation?

A. I don't recall if I prepared one.

Q. Okay. How are children different from adults in regard to obstructive sleep apnea?

A. That was a 15-minute talk.

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Q. Well, can you give me three of the main ways that they're different, the three top ways that they're different?

MR. TORGERSOM: Note an objection, but go ahead.

A. Children tend to have more non-obstructive events. Children generally respond better to surgery than do adults. Children have fewer events overall than do adults.

Q. Okay. You also did a **1991** presentation in Columbus on your curriculum vitae on the Diagnosis and Management of Sleep Apnea.

Has that ever been reduced to writing or an audio or videotape?

A. Could you read me the title, please? When was that?

Q. Take a look on your C.V., it's a **1991** presentation. It was in Columbus, Ohio. On Page 7 at the bottom.

a. *Yes.* I don't recall if there's a handout.

– LEE J. **BROOKS**, M.D. –

Q. Mow, Doctor, in regard to the publications listed on your C.V., are there any that you feel have particular significance to this case?

MR. TORGERSON: Mote an objection, but you can answer if you can tell by looking at or recalling what they are about.

A. Many of them deal with obstructive sleep apnea.

Q. Out of the ones that are listed, which one do you feel has the greatest significance to this case?

MR. TORGERSON: Note an objection. The objection is this presumes he has total recall of what they are, but to the extent that you can generally remember and testify,

BY MS. TOSTI:

Q. Well, I would ask that you look at the C.V. in front of you and look through the various titles that you have listed there. And if at this time there's

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one that you feel has a high level of significance, I would like you to point it out to me.

MR. TORGERSOM: That's fair. It's okay what he says now, but if he reads over them tonight and says Eureka, I wouldn't want him to be precluded from modifying his answer.

MS. TOSTI: That's fine,

MR. TORGERSON: I'm further going to object because that implies that he knows what the issues are in this case as of this date. Although the doctor has submitted Interrogatories to plaintiff asking them to outline what their contentions of liability are with respect to him, it has not answered those directly, so that we may not know all of the issues in this case, But with that additional objection, go ahead and answer the question if you can, Doctor.

MS. PETRELLO: Petrello. Same objection.

– LEE J. BROOKS, M.D.–

A. Maybe if you could tell me what you're interested in, and I could tell you which of the articles pertain to that.

Q. Well, what I'm asking, as you sit here today, Doctor, if there's a particular article on there that you believe has any significance tu this case, and if at this point there isn't one that jumps out at you, and I realize that you haven't read every one of them just before this deposition, just tell me that.

A. There isn't one that jumps out at me at this time.

Q. Can you tell me what you reviewed for this deposition?

A. I reviewed the polysomnogram report. I reviewed -- I briefly reviewed the deposition of Dr. Rowane. I reviewed the preliminary interpretation of the report.

Q. Okay. Have you reviewed any of the medical records of Patricia Smith?

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A. No, I have not.

Q. Wave you reviewed the records that were kept by the sleep center?

A. I did look over a couple of pages from the sleep center, yes.

Q. Have you seen the death certificate on Patricia Smith?

A. No.

Q. The autopsy?

A. No.

Q. And have you looked at any of the raw data from the polysomnogram?

A. Not in years.

Q. Not in preparation for today's deposition?

A. That's right.

Q. Have you consulted with any physicians in preparation for this deposition?

A. No.

Q. And since this case was filed, have you discussed this case with any physicians?

A. No.

Q. You haven't talked with Dr. Rowane or Dr. Collins or Dr. Hlavin?

A. No.

Q. And other than with counsel, have you discussed this case with anyone else since it was filed?

A. No.

Q. Do you have any personal notes or personal files on this case?

A No, I don't.

Q. Have you ever generated any such notes?

A. No.

Q. Doctor, is there a particular textbook in the area of sleep disorders that you consider to be the best or the most reliable?

MR. TQRGERSQN: Objection, but you can answer. In what regard? Sleep disorders?

S. TOSTI: Yes. That was my question.

- LEE J. BROOKS, M.D.-

A. Probably the most comprehensive would be Kryger's, A Textbook of Sleep Medicine.

Q. Do you refer to that text sometimes in your practice?

A. Sometimes.

Q. Do you consider it to be authoritative?

MR. TORGERSON: Objection. What do you mean by authoritative?

THE WITMESS: That was my question.

BY MS. **TOSTI:**

Q. One that you rely on in regard to information to guide you in your practice?

MR. TORGERSON: I note an objection, but you can answer,

A. I use many resources. **That's** one of them.

Q. Do you find the information contained in that book to be reliable?

A. For the most part.

- LEE J. **BROOKS**, M.D.-

Q. Okay. Doctor, during the remainder of this deposition, my questions are going to refer to adult patients, and I realize that you have a fairly large population of pediatric patients that you see. But when we talk about some of the medicine involving sleep apnea, I'm referring to adult patients, okay?

A. Okay.

Q. With that understanding, what is obstructive sleep apnea?

A. It's when the patient is unable to ventilate during sleep because of general obstruction of the upper airway.

Q. And what causes it?

A. Usually it's caused by a floppy pharynx.

Q. Anything else, any other causes?

A. I believe that's the primary cause.

Q. Okay. What other risk factors

for obstructive sleep apnea in an adult?

A. Obesity.

Q. Anything else?

A. That's the primary risk factor.

Q. Is nasal obstruction a risk factor?

A. Probably.

Q. What about enlarged tongue?

A. Perhaps.

Q. Have you ever seen enlarged tongue in the literature as being a risk factor for obstructive sleep apnea?

A. Not in adults, no.

Q. Are there any physical characteristics that a sleep expert looks for when evaluating someone with obstructive sleep apnea?

A. Pes.

Q. Okay, what are those?

A. Look at weight, look at the characteristics of the face and the pharynx, neck circumference.

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Q. Okay, and are there any others?

A. Re always do a full physical exam.

MS. CUTHBERTSON: I couldn't hear the last part of that. Please repeat it.

A. We always do a full physical exam.

Q. In regard to the face and the pharynx, what are you looking for as a sleep expert that might tell you that this is a characteristic of someone who may have obstructive sleep apnea?

A. Rather than telling me if someone has sleep apnea, it can lead me in the direction of treatment.

Q. But I'm asking you as to what facial structures would key you in to that?

A. We would look for what we call a crowded pharynx. That may suggest that they may be more amenable to surgical

treatment. There is an association with obesity. So the more obese the patient, the greater the risk for sleep apnea.

Q. Well, my question to you, Doctor, was in regard to the face and the pharynx. You told me you looked for the crowded pharynx. What do you look for in regard to the facial structure that may key you into leading into the direction that this patient may have obstructive sleep apnea?

A. We look at the relative size of the jaw.

Q. Okay. And what in regard to the size of the jaw is important?

A. If the jaw is small, then the person may be amenable to certain surgical procedures to treat the sleep apnea.

Q. Okay. Doctor, we were talking about physical characteristics that an expert looks for in evaluating. You also mentioned neck circumstance. What in regard to neck circumference is

significant?

A. In adults it seems that a larger neck circumference, that patients with obstructive sleep apnea may have a larger neck circumference than patients without obstructive sleep apnea.

Q. Okay. People with obstructive sleep apnea, do they have any characteristic facial features?

A. There's no way to diagnose obstructive sleep apnea just by looking at the patients.

Q. That was not my question, Doctor, whether you could diagnose a patient. My question is whether or not there is any trend in facial features in patients that have obstructive sleep apnea?

A. There's tremendous variability in everything. And there are patients with small jaws who have sleep apnea and patients with small jaws who don't have sleep apnea.

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Q. So Doctor, there is no features that a sleep expert would look for in a patient other than the small jaw that you've already mentioned in regard to sleep apnea?

A. The small jaw, the crowded pharynx that we talked about.

Q. What are the signs and symptoms of obstructive sleep apnea?

A. The patient would snore, Perhaps someone has noted that they stop breathing during sleep. Their sleep may be restless. They may be sleepy during the daytime. They may have difficulty concentrating at work or at school.

Q. Is hypertension associated with obstructive sleep apnea?

A. Yes.

Q. In regard to the onset of obstructive sleep apnea, is that a gradual or usually sudden type of an onset?

A. I believe it's usually gradual.

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Q. Now, are there **any** complications associated with severe obstructive sleep apnea?

A. Probably the most common complication is daytime sleepiness.

Q. What other complications are associated with severe obstructive sleep apnea?

A. Over **many** years the patient might develop cor pulmonale.

Q. Anything else?

A. Those are the two big ones that come to mind right now.

Q. Is hypertension one of the complications that can occur as a result of severe obstructive sleep apnea?

A. Hypertension is associated with sleep apnea. It's less clear what's cause and effect since obesity is a predisposing factor to both,

Q. Is cardiomyopathy an associated complication of obstructive sleep apnea?

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A. Not that I know of.

Q. What about cardiac arrhythmias, is that a complication that's associated with severe obstructive sleep apnea?

A. It can be.

Q. What about sudden death, is that a complication associated with severe obstructive sleep apnea?

A. I don't believe it is.

Q. Doctor, would you agree that obstructive sleep apnea is a potentially life-threatening disorder?

MR. TORGERSON: Objection. If you agree with the question.

BY MS. TOSTI:

Q. You may answer, Doctor.

A. Yes.

Q. Can obstructive sleep apnea cause sudden death in sleep?

A. I don't know.

Q. Doctor, are you familiar with any studies that have looked at the death

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rate of adult patients with untreated severe obstructive sleep apnea --

A. Yes.

Q. -- that die in their sleep?

A. I am familiar with studies that look at the death rates of patients with sleep apnea. I don't recall that they specified that the patients died in their sleep.

Q. If a patient has coronary artery disease and severe obstructive sleep apnea, are they at increased risk for sudden death during sleep?

MR. TORGERSON: Objection.

A. I don't know. I don't know of data to support that.

Q. Is it appropriate to describe obstructive sleep apnea as mild, moderate and severe? Is that an appropriate way to describe different levels of sleep apnea?

A. That's the way it's done.

Q. Okay. And what does it mean to have severe obstructive sleep apnea?

And what I'm asking for, are there parameters or criteria necessary to describe someone having severe obstructive sleep apnea? And then I'm going to ask what mild and moderate are.

A. There aren't strict criteria for that.

Q. All right. Tell me what criteria you use.

A. I generally look at, a respiratory disturbance index of 20 or more to call it severe.

Q. Do you use anything else to differentiate between those various levels other than the respiratory disturbance index?

A. I look at the oxygen desaturation. I look at the effect on sleep architecture.

Q. And in regard to the oxygen desaturation, is there a particular level or number of episodes that it drops that you're looking at?

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A. No, there isn't a strict number like that.

Q. Okay, Well, what level do you look at in regard to oxygen desaturation where you put the patient into the severe category as opposed to a mild or moderate?

A. I don't look at the oxygen saturation and isolation to determine that,

Q. So it would be in combination with the respiratory disturbance index and the other data?

A. Yes, that's right.

Q. And in regard to the sleep architecture, what specifically do you look at?

A. I look for the number of arousals, the number of awakenings, the quality of sleep, the stages of sleep.

Q. Do people that have severe obstructive sleep apnea, do they generally progress over time from mild to moderate and then eventually into severe?

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MR. TORGERSON: Objection. If you can answer that, go ahead.

A. You're talking about adults?

Q. I'm speaking about adults. All of my questions are in regards to adults.

A. I don't think anyone knows that,

Q. How is obstructive sleep apnea diagnosed? And again, all of these questions are in reference to an adult.

A. When a patient presents with a history and physical exam as a clinical presentation that is consistent with sleep apnea, they come to the polysomnography lab and the diagnosis is confirmed or not.

Q. So would the polysomnogram be the confirming piece of information once you've got a history and a physical that tells you that the person does or doesn't have obstructive sleep apnea?

A. Yes.

Q. What type of questions should

be asked in taking a history in a patient that is suspected of having obstructive sleep apnea?

A. Questions that I ask have to do with snoring. Whether the witness had respiratory pauses, whether the sleep is restful or restless, whether the person is sleepy during the daytime, performing well at work or school.

Q. Does obstructive sleep apnea have any effect on oxygen saturation levels during sleep?

A. When you are not breathing, your oxygen tends to drop,

Q. Are there any complications associated with low oxygen saturation levels during sleep?

A. You're referring to obstructive sleep apnea?

Q. Correct.

A. To the best of my knowledge, there haven't been specific studies that show that. That is directly related to

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the oxygen desaturation.

Q. What is a polysomnogram?

A. That's a multichannel study of the patient during sleep.

Q. And what information is collected?

A. We collect ECGs to look at the stages of sleep and arousals. We look at movement of the chest wall and the abdomen. We look at air flow at the nose and/or mouth. We look at the EMG of the leg, of the chin and often of the intercostal muscles. Sometimes we will do, we will measure exhaled CO2. Sometimes we will measure esophageal Ph.

Q. You do rhythm strips?

A. No.

Q. No?

A. Oh, ECG is on the polygraph, but it is not what anyone would consider a rhythm strip, at least not what I would consider a rhythm strip.

Q. Why wouldn't you consider that

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a rhythm strip, what lead are you monitoring on a polysomnogsam?

A. It's a modified lead two.

Q. And why would you not consider that a rhythm strip?

A. Well, because I consider a rhythm strip to be something done by a cardiologist where the ECG leads are put on with some care to location and they're going to be making certain measurements from that. Given the number of leads that are on a patient in the sleep lab, you can't always put the leads just where you'd like them. So it's as good as a rhythm strip.

Q. What's the purpose of monitoring the cardiac rhythm?

A. To identify arrhythmias.

Q. And is the polysomnogram able to do that when you utilize the various forms of data collection that you've just described?

A. Yes.

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Q. Now, once all of this information has been collected, the patient actually -- strike that.

The patient goes into the lab and actually goes to sleep for a period of time, is that correct?

A. That's correct.

Q. And is there a set number of hours that this polysomnogram runs over usually?

A. It runs overnight. We like to see six hours of sleep or eight hours in the lab.

Q. Okay. Once all of this data is collected, who interprets the raw data?

A. The raw data is looked at by a technician, and then reviewed by the physician.

Q. So the physician actually goes through all of the data that is collected?

A. No.

Q. Okay. What does the physician do then in regard to interpreting this?

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A. The physician -- well, I sit down with the technician, if possible, and review random epics, and to confirm the technician's impression. And the technician may bring specific items to my attention that he or she was concerned with, and we'll be sure to review those.

Q. Generally, how much of the raw data would you as a physician look at? You have six to eight hours of raw data. How much when you sit down with a technician do you actually look at?

A. My review generally takes 30 minutes to an hour.

Q. And what portion of the raw data would you be looking at in that 30 minutes to an hour?

A. I would look at some randomly selected epics. I would look at any areas that the technicians had concern about. I usually try to pick up and look over a segment of REM sleep.

Q. Doctor, in regard to portion,

I'm asking for a Eraction or a percentage of all of the raw data. What generally would you look at?

A. That's hard to say because it would vary from patient to patient. It could be anywhere from five percent perhaps to thirty percent of the record.

Q. And you would be relying then on the technician to point out any areas that they were concerned about, those are the ones -- let me rephrase that.

The five to thirty percent that you look at, is your attention directed to that portion by the technician?

A. In some -- part of it. I also review parts of the record that the technician didn't have questions over just to be sure that where he or she saw a lot of events or few events, that I agree with them in their characterization of the events.

Q. Once a polysomnogram is

finished, and I'm referring to the collection of the data, how long does it take for the technician to interpret the data?

A. Depending on how severe the problem, it can take anywhere from two hours to ten hours.

Q. And then normally once the technician finishes the initial interpretation, then you as the physician would take another 30 minutes to an hour to look over the data again?

A. That's right.

Q. So Doctor, once a pslysomnogram is completed, how long does it take from the point of completion to generate a final report on a polysomnogram?

A. That varies. I think in many instances it's not uncommon for that to take a couple weeks.

Q. And why would it take a couple of weeks?

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A. It depends on the staffing of the lab. It depends on the severity of the problem.

Q. In -- have you ever done split studies in which half of the study is diagnostic and the other half is done with a CPAP or bi-level therapy or titration?

A. I strongly discourage them.

Q. Okay, why is that?

A. Because the first night and the second night of sleep are not the same. And I don't think -- I would -- rather than wake someone up in the middle of the night and slap a mask on their nose, I would rather take the time to educate the patient on how to use the CPAP properly or why it's being used, let them choose the masks that are most comfortable for them. I think you get better patient compliance with the CPAP of you take the time and involve them in the decision to use it.

Q. Okay. Have you ever done

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split studies?

A. Not that I recall.

Q. Okay. Are you aware of anybody that was doing split studies at Rainbow Babies and Childrens in the sleep center, did you see anyone doing split studies there?

A. Yes.

Q. And do you know why they were doing it in a split study method?

A. I don't know why they as individuals chose to do that.

Q. How is severe obstructive sleep apnea treated?

A. Again, in adults?

Q. All of my questions are referring to adults, Doctor.

A. Okay. It can be treated with surgery, with nasal CPAP, with diet and behavioral modification or some combination of those.

Q. Okay. And in regard to severe obstructive sleep apnea, which form of

therapy is most frequently used?

A. Probably nasal CPAP.

Q. And what are the indications for treating someone for obstructive sleep apnea, how do you decide that a particular patient should receive treatment?

A. Well, presumably once you have decided to send the patient to the laboratory, you've decided that if the study is positive, then you would treat them. So the decision to treat becomes a combination of your history, physical and laboratory results, like any medical problem.

Q. Okay. After performing a sleep study evaluation if it's indicated, do you as a sleep specialist make recommendations as to how a problem should be treated?

A. Not if I haven't seen the patient.

Q. Okay. If you have done an evaluation on a patient, they've been

referred to you for a sleep problem and you've done an evaluation, and by that are we speaking of a history and a physical?

A. Right.

Q. And then a sleep study?

A. Right.

Q. Do you then make recommendations in regard to treatment?

A. Yes.

Q. Now, Doctor, in regard to the sleep center at University Hospitals, what duties or responsibilities did you have in the sleep center?

A. When a patient was referred to me for evaluation, I would see them in the office, I would do an exam, a physical exam, perhaps X-rays and a sleep study, if necessary.

Q. And then once a sleep study was done, would you be the physician then that would sit down with the technician and review portions of the raw data?

A. Generally, yes.

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Q. Were you involved in any way with the training of the personnel. in the sleep lab?

A. Yes.

Q. Okay. What responsibilities did you have for training the personnel?

A. I was responsible for their initial. training.

Q. And what did that involve?

A. They apprenticed for a time with an experienced technician, and I sat down and reviewed the data with them regularly. It was an ongoing education as we sat down and reviewed the data.

Q. Did you have any responsibilities Tor the policies and the procedures governing how the tests were carried out?

A. No.

Q. Okay, who had that responsibility?

A. Dr. Landis.

Q. Other than the orientation

that you were just describing or the initial training, did the technologists have any other training before they got to the point where they worked with you?

A. Could you be specific?

Q. All right. Were the people that scored the sleep studies in February of '96 registered technologists?

A. I don't recall.

Q. And when they came to work in the sleep lab before they started actually doing tests, did they come to you with any prior training?

A. Not as sleep technicians, no.

Q. Okay, were they trained as anything else?

A. One of the technicians was actually a physician. One of the technicians was -- had been a technician in another field. One of them had been an EEG technician.

Q. Okay. And when you did their initial training and they served this

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apprenticeship, how long would they be doing this apprenticeship?

A. I didn't train all of them, by the way.

Q. Okay. Well, the ones that you trained?

A. How long did they do the apprenticeship with the experienced technician?

Q. Yes.

A. To the best of my recollection, it was several months.

Q. Doctor, was there information that was available to patients as a handout in the sleep center?

A. In my clinic I had -- yes. Yes, there was.

Q. Doctor, I'm going to give you what has been marked as Plaintiff's Exhibit Number 2. Let me show it to counsel, which is a booklet titled Sleep Apnea that was provided by University Hospitals in a Request for Production of

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Documents. And it was indicated that this was available to patients that were in the sleep center.

And I would like to ask you if, to your knowledge, this was available to patients in the sleep center.

MS. CUTHBERTSON: I assume that you're talking about February of '96?

MS. TOSTI: That's correct.

MS. CUTHBERTSON: That was Patty Cuthbertson.

A. I don't know.

Q. Okay. Was that ever made available to your patients, did you ever give that to your patients?

A. I don't recall.

Q. You wouldn't disagree with University Wospitals if they said that that booklet was available to patients at the time that Patricia Smith had her sleep study though, would you?

MR. TORGERSON: Objection, foundation. I don't think he can agree or

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not agree, and I don't think it's been established. And furthermore, I'm not going to allow him to disagree. So don't answer that question.

BY MS. TOSTI:

Q. Do you know if Patricia Smith was ever given a copy of this booklet?

A. I don't know.

Q. Doctor, you're a member of the American Sleep Disorders Association, correct?

A. That's right.

Q. And they're a publisher of this particular booklet based on the front page of the booklet, correct?

A. That's right,

Q. Doctor, would you agree that CPAP is highly effective therapy for obstructive sleep apnea?

MR. TORGERSON: Well, note an objection to your characterization, but go ahead if you can answer.

MS. CUTHBERTSON: I'm going to

object. I'm wondering what are we talking about, now, then, when?

MS. TOSTI: Well, now. Let's talk about now first.

MS. CUTHBERTSON: Okay, '99.

BY MS. TOSTI:

Q. Is CPAP highly effective therapy for sleep apnea?

MR. TORGERSON: Same objection. Go ahead.

A. In most patients who will use it, yes.

Q. And in February of '96, did you also consider it highly effective therapy for obstructive sleep apnea?

MR. TORGERSON: Same objections. You can answer.

A. In most patients who would use it, yes.

Q. And would you agree that 80 to 90 percent of the adult patients trying CPAP for sleep apnea are able to continue using it?

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MR. TORGERSON: Objection, foundation. If you know.

MS. CUTHBERTSON: I'm going to object. Culbertson.

MS. PETRELLO: Petrello. I'll join.

MS. TOSTI: Could you repeat the question, please?

(The record is read back as requested.)

A. Over what period of time?

Q. You sound like there's a difference. Let's say initially.

MR. TORGERSON: Same objection.

MS. PETRELLO: Petrello. I'll join.

A. E believe that a high percentage of patients who were prescribed CPAP €or sleep apnea will try it.

Q. And are they able to successfully utilize it?

A. What do you mean by

successful?

Q. Will they continue to use it for a period of a year after they're diagnosed?

MR. TORGERSON: Objection, but if you know.

A. I don't think that the success rate is as high as you said after a year.

Q. When do you think there's a fall off then with regard to the use of CPAP?

A. I don't know of good data that describes that.

Q. Okay. Are you aware of any studies that describe the percentage of patients that continue to use CPAP once they have started on it successfully?

A. I believe there are studies out there in adults, but I don't recall the exact findings.

Q. Doctor, if there's a concern that a patient is having seizures during sleep due to oxygen desaturations, do you

have an opinion as to whether a sleep study is indicated?

MS. PETRELLO: Objection.

MR. O'DONNELL: Jack O'Donnell. I'll note an objection.

MR. TORGERSON:: Could you read the question back, please?

(The record is read back as requested,)

A. If one has any concerns about physiology during sleep, then a sleep study is indicated.

Q. One of the warning signs of obstructive sleep apnea may be when a person falls asleep at an inappropriate time, is that correct?

A. That's right.

Q. And people that have sleep apnea may have problems with concentrating and they may become unusually forgetful, is that correct?

A. That's right.

Q. And people with obstructive

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sleep apnea may seem uncharacteristically irritable, anxious or depressed, correct?

MS. PETRELLO: Objection. Petrello.

A. Yes.

Q. Doctor, isn't it true that in a patient with obstructive sleep apnea when oxygen levels fall in the blood, the heart must work harder to circulate the blood, and over time that might cause high blood pressure?

MR. TORGERSON: Objection.

MS. PETRELLO: Objection.

MR. O'DONNELL: This is Jack O'Donnell. I'll note an objection.

THE WITNESS: Could I hear the question again, please?

(The record is read back as requested.)

MS. PETRELLO: Hi, this is Petrello. I want to clarify whether the saturation levels were falling during sleep.

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MS. TOSTI: During sleep.

THE WITNESS: That that might cause high blood pressure -- I'm sorry, one more time, please.

(The record is read back as requested.)

A. I'm not sure that it has been shown that oxygen desaturations are a cause of prolonged high blood pressure.

Q. In a patient during sleep with obstructive sleep apnea, the heart can beat irregularly and may even pause for several seconds during sleep, is that correct?

A. That's correct.

Q. And would you agree that heart irregularities during sleep may account for some of the deaths of obstructive sleep apnea patients?

MR. TORGERSON: Objection.

MS. PETRELLO: Petrello. Objection.

MR. O'DONNELL: This is Jack

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O'Donnell. I'll note an objection to that last question.

A. That would be speculation,

Q. And alcohol taken before bed in a patient with obstructive sleep apnea would increase the risk for airway obstruction during sleep, correct?

A. Alcohol before bed will often make obstructive sleep apnea worse, yes. Well, let's say may make obstructive sleep apnea worse.

Q. Once the diagnosis of severe obstructive sleep apnea has been confirmed on a polysomnogram, are there any clinical reasons for delaying therapeutic evaluation with CPAP or bi-level. therapy?

MS. CUTHBERTSON: Cuthbertson, Object to form.

MS. PETRELLO: Petrello. Objection.

A. Say it again, please.

(The record is read back as requested.)

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A. That would be a decision made by the person who has seen the patient and evaluated him.

Q. Okay. But Doctor, if you're the clinical physician that sees the patients, and I'm just asking if there's a reason for delay once the diagnosis has been made, is there any usual reasons that the delay has been made?

MR. TORGERSON: Note an objection.

MS. CUTHBERTSON: Cuthbertson. Same objection.

MS. PETRELLO: Petrello. Objection.

A. One may be planning a different type of treatment. For example, if you're planning surgery, you may want to proceed with surgery rather than the CPAP,

Q. Okay, but other than if you're planning to do surgery rather than CPAP, is there any other usual reason for

delaying therapy for a patient that has been diagnosed from a polysomnogram with obstructive sleep apnea?

MR. TORGERSON: Objection.

MS. CUTHBERTSON: Cuthbertson. Objection.

MS. PETRELLO: Petrello. Objection.

A. Not that I can think of.

Q. How can you evaluate a patient for CPAP therapy if the decision is made that the patient needs treatment, how do you initiate that treatment?

A. I bring them into the sleep lab for a second night. We teach them about CPAP. We teach them how to use it, how to keep it clean. We let them choose the mask that feels most comfortable to them. And then during the night in the sleep lab, we adjust the pressure to optimize the patient's breathing. Then we would prescribe that level of CPAP and that mask to their home care company.

– LEE J. **BROOKS**, M.D.–

Q. And would that normally be a one night session that the patient would go through similar to what the original polysomnogram was, they would come in the night before and sleep and adjustments would be made during the night?

A. Yes.

Q. So they would actually sleep in the lab for this titration?

A. Exactly.

Q. In February of 1996, how would a referral be made to the sleep center for a sleep study?

A. If one wanted a sleep study, they would call up the laboratory and the secretary would schedule it.

Q. Okay. When a sleep study was being requested, would a written referral form usually come to the sleep center?

A. Sometimes.

Q. And how would this normally arrive at the sleep center, did it *go* through inter-hospital mail or did the

-LEE J. BROOKS, M.D.-

patient bring it or how did the referral form get to the sleep center?

MR. TORGERSON: I know you're asking in general. And do you understand that, Doctor? I believe, let me just object to the open-ended. aspect of the question which implies that there is one way.

MS. PETRELLO: Petrello. Objection also.

A. It might get there by any of those ways.

Q. So it may be a phone call from a physician?

A. Yes.

Q. It could be by a written referral?

A. Yes.

Q. And it might come through the inter-hospital mail or the patient might bring it?

A. Correct, after having scheduled it by phone, for example.

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Q. Okay. Who would do the scheduling by phone, would that be the patient or a physician that would do that?

MR. TORGERSON: Objection. If those -- objection to the limiting parameter of that question. But if you understand the question, answer it, if you know.

BY MS. **TOSTI:**

Q. Well, let me ask this, can a patient call up and schedule a sleep study, and I'm speaking in February of 19963

A. I don't know.

Q. Okay. Doctor, I'm going to hand you what's been marked as Plaintiff's Exhibit 3, Let counsel see it first. For other counsel, Plaintiff's Exhibit 3 is a referral form from the University Family Medicine Foundation.

I'll just give you a minute to take a look at that, Doctor.

Okay, Doctor, have you **seen**

– LEE J. BROOKS, M.D.–

this referral form before?

A. I saw this form in reviewing some of the materials for the deposition, yes.

Q. So just recently you saw this form?

A. Yes.

Q. Is this the type of form that would normally come to the sleep center requesting a sleep study?

MR. TORGERSON: Objection. If you know.

A. I don't think so.

Q. Okay. What if you got a written referral, what would it normally look like?

MR. TORGERSON: Objection. If you can describe it, go ahead.

A. I'm not sure I can describe any typical written referral.

Q. There wasn't a form that you used for the sleep center then for sleep studies?

A. No.

Q. So it would be whatever a particular doctor's office had in regard to a referral form. It might be different for each doctor?

A. I think so, yes.

Q. Okay. Okay, now, Doctor, this particular document you said was in the sleep center records that you reviewed. Did you at any time or would it be your usual manner in reviewing a polysomnogram to look over information that was provided to the sleep center on the patient?

MR. TORGERSON: Just a note of clarification, I believe that he said it was one of the documents that he looked over in preparation for his depositian.

MS. TOSTI: Correct.

MR. TORGERSON: I don't believe that he suggested that it was part of the records that he reviewed that were part of what you've represented were the sleep center records,

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MS. TOSTI: Well, all I can say is that in production of documents, these were provided from the sleep center as the records available on fat Smith.

BY MS. TOSTI:

Q. So I'm assuming that, Doctor, if they were in the sleep center records, that these would have been available at the time that. Pat Smith's polysomnogram were done. Now, Doctor, you did the final report on Patricia Smith's polysomnogram, correct?

A. Yes. Regarding your last question, excuse me, I don't remember ever seeing this form before it was made available tu me in reviewing the deposition.

Q. In regard to the sleep studies that were being done in February of '96, how was the scheduling of sleep studies prioritized?

A. I'm not sure of the question.

Q. How is it determined who would

get their study first and who would have to wait for their sleep study?

A. I believe that person would make a call to the secretary and they would be assigned time.

Q. Did a referring physician have an option to request a sleep study be done urgently?

A. They always had the option of calling one of the physicians and getting someone to the head of the line.

Q. And so arrangements could be made. If there were clinical reasons to do one early, they could get it done fairly quickly?

A. That's right.

Q. Do you know whether Patricia Smith's sleep study was given any priority in scheduling because there was concern she was having seizures during sleep which may have been due to oxygen desaturations?

MR. TORGERSON: You can answer it, if you know.

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A. I don't know if she was given any of if anyone requested priority for her.

Q. In 1996, in February, did you have a standby list of patients that would be given earlier appointments should there be a cancellation?

A. I don't recall.

Q. Were patients ever referred to another sleep clinic in the area that may have a shorter waiting list?

MR. TORGERSON: If you know, if you know.

A. Not to my knowledge.

Q. In February of '96, there were other accredited sleep labs in the Cleveland area. Were you aware of any of them?

MR. TORGERSON: Okay, are you asking him if he's aware of other accredited or are you representing that he was aware of them.

MS. TOSTI: Let me clarify my

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question. It was a bad question.

BY MS. TOSTI:

Q. In February of '96, were you aware of any other accredited sleep labs in the Cleveland area?

A. Yes,

Q. Wow many were they?

A. I only know of one for certain,

Q. Would that be a Cleveland clinic?

A. That's the one.

Q. Were you familiar with any that were at Pulmonary Medicine Associates?

A. I don't recall them, no.

Q. In February of '96, what was the typical period of time between the time that a request for a sleep study was received in the center and the time that the patient received the sleep study?

MR. TORGERSON: Objection. If you know.

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a. I don't remember.

MR. **O'DONNELL:** This is Jack O'Donnell. I'll object.

MS. CUTWBERTSON: Objection.

MS. PETRELLO: Objection. Petrello.

A. I don't remember.

Q. Doctor, at your lab here what's the typical time between the time that a request is provided to you and the time that a test is done?

MR. TORGERSON: Objection. You may answer.

MS. CUTHBERTSON: Same objection. Cuthbestson.

MS. PETRELLO: Same objection. Petrello.

A. We don't allow outside people to send patients in directly for a study.

a. Same question though, Doctor. From the time that you have a request that a study be done and the time that the study is actually done, what's the time

period?

MR. TORGERSON: Same objection.

A. No one but me can request a study.

Q. All sight. Doctor, then in the studies that you request, what's the time period from the time that you make the request for the study and the time that; the study is done?

MR. TORGERSON: same objection.

MS. CUTHBERTSON: Objection. Cuthbertson.

A. It could be anywhere from days to weeks.

Q. Now, if an adult patient was referred to the sleep center for obstructive sleep apnea in University Hospitals in February of '96 for testing, what evaluation would be done on that patient?

A. If they were referred to the

laboratory for testing alone?

Q. All right. Let's start with that.

A. They would have their test done and scored.

Q. No history or physical would be done on the patient?

A. Mot by the physicians, no.

Q. Okay. And if they were referred to the sleep center, would there be a different protocol that would be followed?

A. Yes, if -- yes.

Q. What would be the protocol for that?

A. If the patient were referred to me, then I would do a history, do a physical exam, any laboratory tests that were needed, including sometimes a sleep study.

Q. And over the course of time, did you have some patients that were referred only for sleep studies and others

that came in for a full evaluation?

A. Yes.

Q. Was it typical to refer a patient just for a sleep study?

MR. TORGERSOW: Objection.

BY MS. ***TOSTI:***

Q. Was that the norm?

MS. CUTHBERTSON: Objection. Cuthbertson?

A. In pediatrics it was not the norm at all.

Q. How about in regard to adults?

MR. TORGERSON: Same objection.

A. I don't know.

MS. CUTHBERTSON: Objection. Cuthbertson?

A. I don't know what their policy was with their patients.

Q. Doctor, were the technicians that were employed in the lab, were they employees of University Hospitals?

MR. TORGERSON: If you know.

A. I believe tkey were.

Q. And was University Hospitals' labs an accredited sleep lab?

A. It was an accredited sleep center.

Q. Sleep center in February of '96 I'm speaking of?

A. Yes.

Q. Who was the accrediting body?

A The American Sleep Disorders Association.

Q. And as an accredited lab, were you required to have protocols for emergency situations?

A. I believe so.

Q. Were these in writing?

A. I believe so.

Q. And in February of '96, was severe obstructive sleep apnea considered an emergency situation in your center?

A. No.

Q. Were there any protocols that addressed what should be done for a

patient whether they exhibited severe obstructive sleep apnea during the first half of a night during a sleep study?

MS. **CUTHBERTSON**: In February of '96 when she had hers done?

MS. **TOSTI**: Correct.

A. I believe they were.

Q. And what did that protocol entail?

A. If -- well, first, it did not apply to all patients. If the individual was felt to be a candidate for CPAP, and his physician wanted it, if they had clear uncomplicated obstructive sleep apnea with a respiratory disturbance index over 30, I believe it was, then the technician could start CPAP on the second half of the night.

Q. Was there a protocol which required that a physician be informed during the night if the patient's oxygen saturation level fell below a certain level during the study?

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A. I don't recall.

Q. In February of '96, was there protocol which required that treatment be initiated if a patient's oxygen saturations fell below a certain level during a sleep study?

A. I do not believe so.

Q. Did you *or* to your knowledge anyone else in the lab ever utilize emergency CPAP during the course of a sleep study on an adult?

A. Never did.

Q. To your knowledge, did anyone else?

A. Not to my knowledge.

Q. Now, Patricia Smith's sleep study, I believe, was completed on February 7th of '96, is that correct?

A. I don't remember actually completing this.

Q. Let me provide you with another exhibit just so we have something in front of you while we're talking. This

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is marked as Plaintiff's Exhibit Number 5, and it's a copy of the final report on the overnight polysomnogram.

And if you could take a look at that exhibit and tell me if that is indeed the final report that was generated on Patricia Smith?

A. It happens to be.

Q. And from that report, does it appear that her sleep study was completed on, I believe the date on this is February 6th? I'm not sure whether that was the beginning of the study or the end of the study.

A. That would Rave been the beginning. She would have left the lab on the morning of the 7th.

Q. Okay. Based on what you see in that final report then, her study was completed on February 7th of '96, correct?

A. Yes.

Q. How long did it take after her study was completed to generate this

-LEE J. BROOKS, M.D.-

report?

A. I don't recall.

Q. What was the usual time frame to provide a final report after a sleep study?

MS. CUTHBERTSON: Cuthbertson. Note an objection.

MR. TORGERSON: Note an objection.

A. Yes, as I said earlier, it could take days to weeks.

Q. How many times, how many weeks --

A. I don't know.

Q. -- to complete a sleep study?

A. I don't know.

Q. Why would it take weeks to produce a final report?

MR. TORGERSON: Objection, Asked and answered. Go ahead,

MS. CUTHBERTSON: Objection. Cuthbertson.

MR. **O'DONNELL**: This is Jack

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O'Donnell. I'll join in that objection. Thank you.

A. If the technicians had gotten backed up on their scoring, for example, if they were short of people to score, if the study were particularly difficult, all of those might delay it.

Q. Okay. Mow, Doctor, after Pat Smith completed her report, I believe you did a letter to Dr. Rowane. And I'm going to hand you what's been marked as Plaintiff's Exhibit Number 4, and just let counsel take a look at it.

MS. CUTKBERTSON: Jeanne, while everybody is looking, how long do you think you're going to go today?

MS. TOSTI: I've got maybe about another 20 minutes here.

MS. CUTHBERTSON: Can I just ask other counsel how long you all think you're going to go or if any of you guys have any questions?

MS. PETRELLO: This is

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Petrello. I might have a few questions.

MR. **O'DONNELL**: This is Jack O'Donnell in Cleveland. Very minimum.

MS. CUTHBERTSON: Cuthbertson. I may Rave to take a break in 15 minutes or so for about five minutes if nobody has a problem with that.

MS. PETRELLO: It's fine with me. I could use a little break.

THE WITNESS: We might need a break.

BY MS. TOSTI:

Q. Okay, Doctor, I've handed you Plaintiff's Exhibit Number **4**. And if you can just identify that document for us?

A. This is a form letter that we sent out the morning after the polysomnogram.

Q. And that is a letter that you wrote to Dr. Rowane, is that correct?

a. Yes.

Q. And that's your signature on that letter, correct?

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A. That was the secretary signing for me.

Q. Okay. Is that a preliminary report of the polysomnogram?

A. Yes.

Q. Now, was there a preliminary review done of Patricia Smith's pslysomnogram?

A. Yes.

Q. And were you the one that did. that preliminary review?

A. Yes.

Q. Okay. What data did you review?

A. I briefly looked over the raw data on the polysomnogram.

Q. And is it routine for you -- was that a routine thing to do, to give a preliminary report on the polysomnogram, was that usually done?

A. Yes, yes.

Q. And that particular report, who would that be provided to?

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A. It would be provided to the referring physician.

Q. Okay. And in this case, who did you send that report to?

A. It's addressed to Dr. Rowane, so I presume it was sent to him.

Q. Okay. Now, on the final report, which is Plaintiff's Exhibit Wumber 5, X believe at the top of the page it has referred by Dr. Rowane and Dr. Collins. Would this have been sent to Dr. Collins also?

A. Since his name is on there, I would assume that it was sent to him, yes.

Q. Would that be the normal standard practice to send it to the two physicians that would be listed on the final report?

A. Yes.

Q. Now, in the final -- in the preliminary report, you indicate that this was a brief preliminary review subject to revision. And you indicate that the

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patient showed severe obstructive sleep apnea, correct?

A. That's right.

Q. Okay. What led you in the preliminary review to say that Patricia Smith had severe obstructive sleep apnea?

A. I don't recall now specifically what I saw.

Q. And so at this time you can't tell me what you based your preliminary review on?

A. Not on this specific instance.

Q. Okay. Did you speak to Dr. Rowane or Dr. Collins in addition to sending this letter, did you give a preliminary report verbally to Dr. Rowane or Dr. Collins?

A. Not that I recall.

Q. Okay. Now, you indicate here that this was a brief preliminary review. Did you anticipate that the final report would show anything different?

MR. TORGERSON: Objection, but

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you can answer.

A. Grossly not.

Q. What type of things would change from a preliminary review to a final report?

MR. TORGERSON: Well, I'll note an objection. If you can answer that, go ahead.

A. The preliminary review just takes a few minutes. I'd look at it and say there are a lot of apneas here, and call it severe. There are no apneas here, call it normal. There's a couple of apneas here, and it would be they get an indeterminate type of letter.

Q. Okay. At the time that you would do these preliminary reports, had the raw data been already tabulated by a technician?

A. No.

Q. So this would be before the technician had physically gone through every page of the polysomnogram?

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A. Exactly.

Q. And it would be spot-checking or just doing a brief review in order to get the preliminary report?

A. That's right.

Q. Okay. Doctor, are you aware of any consultation or evaluation or care that Dr. Rosenberg may have given to Patricia Smith?

A. I'm not aware of any.

Q. Okay, did you ever have any contact with Dr. Rosenberg in regard to Patricia Smith?

A. No, not that I recall.

Q. Would the final copy of the sleep study report be sent out to the patient after the sleep study report was complete?

A. No.

Q. Would that generally go to the attending physician or the physician that ordered the test?

A. Yes.

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Q. In Patricia Smith's case the final report indicated that she did have severe obstructive sleep apnea, is that correct?

A. That's correct.

Q. And was CPAP the likely treatment option for Patricia Smith's obstructive sleep apnea?

MS. CUTHBERTSON: Objection. Cuthbertson.

MS. O'DONNELL: I'm going to join in that objection. This is Jack O'Donnell in Cleveland.

MS. PETRELLO: So is Petrello.

A. Not having seen the patient, I can't prescribe treatment.

Q. Now, Doctor, in regard to Patricia Smith, you never evaluated her, is that correct?

A. That's correct.

Q. Okay. Were you aware at the time that you were evaluating her polysomnogram of any of the clinical

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information available on Patricia Smith?

A. I don't recall any clinical information.

Q. Okay. So your evaluation was strictly on the results of the polysomnogram, was that correct?

A. That's correct.

Q. You said no information as to her history or physical that you recall?

A. None that I recall.

Q. Is that typical to evaluate a polysomnsgram without having the history or the physical information along with it?

MR. TORGERSON: Objection, but you can answer.

A. That was often the case.

Q. Okay. Now, Doctor, when a patient is being evaluated for obstructive sleep apnea, isn't the physical and the history also an important component as well as the polysomnogram?

MR. TQRGERSON: Objection. But you may answer,

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A. The history and the physical help you decide does this patient have a likelihood of sleep apnea, and therefore, requires a study. And the history and the physical and perhaps other labs help you decide what treatment would be best once you've gotten the results of the polysomnogram.

Q. So the **polysomnogram** is actually the definitive test that tells you whether or not the patient has the sleep apnea, isn't that correct?

A. Yes.

Q. Did you at any time make recommendations regarding sleep for Patricia Smith's severe obstructive sleep apnea?

A. No.

Q. When you are only evaluating the polysomnogram and not evaluating the total patient, was that typical just to provide the evaluation of the report and not make recommendations?

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MR. TORGERSON: Objection. You may answer.

A. Yes, I can't make recommendations on patients I haven't seen.

Q. Once the final report was produced, did you have any conversations with Dr. Rowane or Dr. Collins or any other treating physician in regard to Patricia Smith's sleep apnea?

A. Not that I recall.

Q. And so the only contact that you had with Patricia Smith then was in evaluating her polysomnogram. Did you ever meet with her, ever speak with her?

A. I don't believe so.

Q. Do you know if anyone in the sleep center ever discussed the findings of her polysomnogram with her?

A. I don't know.

Q. Were there any procedures in which patients would be contacted about the results?

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MS. **CUTHBERTSON:** From the sleep center?

MS. TOSTI: Yes.

A. The sleep lab would never contact the patient directly about the results. If I had seen a patient in the clinic and it was my patient, then of course, I would discuss the results with them.

Q. And I'm speaking aside from what you would normally do if you were doing the total evaluation, was there any procedures in once the test was done, information would be disseminated back to the patient in regard to the test?

A. No, it all went back to the referring physicians.

Q. When treatment is ordered, if -- strike that.

If you had not done the evaluation and treatment is to be ordered, it's done by the attending physician, would they send a request to the sleep lab

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for CPAP titration,

MR. TORGERSOFJ: Now, let me interpose an objection. Are you asking him if there is **some** specified method, some protocol? Are you asking him?

MS. TOSTI: Let me clarify my question.

BY MS. TOSTI:

Q. Doctor, if you have not done the evaluation on the patient and a physician wants to request titration with CPAP for therapy, how would they go about doing that?

A. The same way they went about requesting the test in the first place, by contacting the lab and scheduling the titration.

Q. Doctor, do you have an opinion whether Patricia Smith should have received treatment with CPAP for your severe obstructive sleep apnea?

MR. TORGERSOM: Objection. If you are able to answer that, you can.

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A. That was a Bwo-part question.

MR. TORGERSON: Why don't you read the question back.

(The record is read back as requested.)

A. Without having examined the patient, I can't determine whether I would have treated her with CPAP.

Q. Okay. Doctor, do you have an opinion as to whether Patricia Smith should have received treatment for her severe obstructive sleep apnea?

MR. TORGERSON: Same objection, but you can answer.

MS. CUTHBERTSON: Objection. Cuthbertson.

MS. O'DONNELL: Also here Jack O'Donnell. Objection.

MS. PETRELLO: Petrello. Same.

A. I think most people would treat this level of sleep apnea in some way.

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Q. Doctor, do you know if anyone else in the sleep center did an evaluation of Patricia Smith which included history and physical prior to the time that the polysomnogram was done?

A. I don't know.

Q. I'm editing questions here, so I just need a minute.

Doctor, would you agree that €or a normal forty-two year old woman, the lowest oxygen saturations during sleep would be in the low 90 range.

MS. CUTHBERTSON: Objection. Cuthbertson.

MS. PETRELLO: Petrello. Objection.

MR. O'DONMELL: This is Jack O'Donnell. I would like to also lodge an objection. Thank you.

THE WITNESS: May I answer?

MR. TORGERSOM: I'm going to object, but if you can agree with that.

THE WITMESS: Can I disagree?

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MR. TORGERSON: Yeah.

A. I disagree.

Q. Doctor, you participated in a study, I believe, called Normal Oxyhemoglobin Saturation During Sleep, is that correct?

A. That's correct.

Q. It was published in Chest Journal?

A. Yes.

Q. And what were your findings in regard to women in the forty age bracket in regard to lowest oxyhemoglobin saturation levels during sleep?

A. To the best of my recollection, the mean lowest saturation was about 90 percent, but the standard deviation was two or three percent. And if you take normal as being within two standard deviations, that means that a normal person would have an occasional desaturation to the 80's.

Q. Then someplace in the 80's was

-LEE J. BROOKS, M.D.-

probably the lowest level --

A. Yes.

Q. -- for a normal female?

A. Yes.

Q. Now, Patricia Smith's saturation levels fell as low as 60 percent during sleep, is that correct?

A. That's correct.

Q. Is a level of 60 percent cause for concern in a patient?

MS. CUTHBERTSON: I'll note an objection.

MR. O'DONNELL: This is Jack O'Donnell in Cleveland. Objection.

MS. PETRELEO: This is Petrello. Note an objection.

MS. CUTHBERTSON: Cuthbertson. Make sure you note an objection for Colleen. And note my objection for Cuthbertson.

MR. TORGERSON: Could you read back that question?

(The record is read back as

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requested.)

A. I've seen oxyhemoglobin levels much, much lower.

Q. In Patricia. Smith's case, was an oxyhemoglobin desaturation of 60 percent a cause for concern?

MR. TORGERSON: Objection. If you know enough to answer that question.

MS. PETRELLO: Objection. Petrello.

MR. O'DONNELL: Jack O'Donnell. Objection.

A. That's one of the factors that had us call it severe. That by itself doesn't cause concern. If you look at the graph, her saturation was greater than 90 percent for what looks to be over 90 percent of the time. So this suggests that there were rare desaturations that low. Perhaps only one.

Q. Was it cause for concern?

MR. TORGERSON: Same objection.

-LEE J. **BROOKS**, M.D.-

MS. O'DONNELL: Objection. **Sack** O'Donnell.

MS. PETRELLO: Petrello, Same objection.

A. Not undue concern.

Q. Do you know what time of night she had the 613 percent desaturation?

A. I don't know.

Q. Do you know if she had any levels below 75 percent during the first half of the night?

a. I don't know.

Q. Do you know if a physician was notified when she reached the 60 percent oxyhemoglobin reading?

A. I don't recall.

Q. Should a physician have been notified?

A. No, not for that alone.

Q. Okay. Were there any procedures that a technician was supposed to follow if a patient's oxyhemoglobin went down to 60 percent during the night?

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MR. TORGERSQN: And I'm going to object. I think that's been covered before.

MS. **CUTWBERTSON:** I'm going to object. Cuthbertson. Objection.

MS. PETRELLO: Petrello. The same.

A. There were not specific requirements that I recall. The technicians always had the option of calling us in time that they had concern. A brief desaturation to 60 percent in isolation probably did not cause them undue concern.

Q. Doctor, would you agree that **low** oxygen saturations can lower the threshold for seizures?

MS. CUTHBERTSOM: Objection.

MS. PETRELLO: Petrello. Objection.

MR. O'DONNELL: O'Donnell. Objection.

A. I don't know.

-LEE J. BROOKS, M.D.-

MS. CUTHBERTSON: I'm sorry, what was your answer?

THE WITNESS: I don't know of any. I don't know about that, no.

BY MS. TOSTI:

Q. When you were evaluating the raw data on this case, were you aware that one of the concerns was that she was having seizures due to oxyhemoglobin desaturation during sleep?

MS. CUTHBERTSON: Objection.

MS. PETRELLO: Petrello. Objection.

MR. O'DONNELL: O'Donnell. Objection.

MR. TORGERSON: I simply want to hear the question back as to what the predicate for the question was.

We are going to take a five-minute recess.

(Recess at 5:40 p.m.)

(Resumed at 5:45 p.m.)

(The record is read back as

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requested.)

MS. PETRELLO: Petrello. And I raised an objection, if that's not noted.

A. I don't recall.

Q. Doctor, you have in front of you a referral form from the Family Practice Center that's marked as Exhibit Number 3. Would that particular referral normally be available to you as a physician if it was in the records while you were doing a polysomnogram evaluation?

MR. TQRGERSON: Note an objection.

A. Probably not.

Q. Okay. When you were doing a polysomnogram evaluation and not doing a total evaluation on the patient, would you have any materials available to you on the patient?

A. Likely there would be whatever intake the secretary took down on scheduling the study.

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Q. Okay. Would there normally be anything in regard to records that the physicians would send over as far as information or that would be made available to you if you were doing the polysomnogram evaluation?

MR. TORGERSQN: Well, note an objection, but go ahead.

A, If they had sent it over, it might have been made available to me.

Q. Okay. Now, Doctor, in the records that were produced by the sleep center there was some clinical information from Dr. Collins and Dr. Rowane in the fife?

MS. PETRELLO: Petrello. Objection.

BY MS. **TOSTI:**

Q. Now, if those were the sleep center's records, would that information normally be available to the physician that was reviewing the polysomnogram?

MR. TORGERSON: Well, wait a

minute, note an objection. What are you referring to as clinical information that you believed was in the file that was sent over in the sleep center materials?

MS. TOSTI: Materials that were produced by University Hospital from the sleep center included an evaluation by Dr. Collins and a page of the records from Dr. Rowane. And those were in the University Sleep Center records that were produced in a Request for Production of the Documents.

MR. TORGERSON: Dr. Collins' November 16th, 1995 multi-page report, you are representing was sent to the sleep center?

MS. TOSTI: Yes.

MR. TORGERSON: Well, all you can represent is that those documents were produced by University Hospital in response to one of the Requests for Production of Documents that you earlier sent in.

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BY MS. TOSTI:

Q. Right, and what I'm asking, if they were in the records in the sleep center, would those records normally be given to you as a physician reading the polysomnogram?

MR. TORGERSON: Which I made my objection. Go ahead and answer.

MS. CUTHBERTSON: I'm going to object too. Cuthbertson.

MS. PETRELLO: Petrello, too.

A. Again, do you mean lab or center?

Q. Well, Doctor, you've told me that in Patricia Smith's case you only read the polysomnogram?

A. Correct.

Q. And that you never evaluated her in the center. And so my question is as a physician only evaluating the polysomnogram, would you be provided with whatever records were available in the sleep center on that patient when you were

interpreting the polysomnogram?

MR. TORGERSON: Note my objection.

A. If a patient were seen, for example, by Dr. Rosenberg in his sleep center, those records might not have been made available to the laboratory. Whatever was available to the laboratory at that time should have been available to me, but that's not necessarily everything that's available to the center.

Q. Okay. Now --

A. If you follow the distinction.

Q. Now, you know who Dr. Rosenberg is?

A. Yes.

Q. Did Dr. Rosenberg have any duties or responsibilities at the sleep center that you're aware of?

A. Dr. Rosenberg and I alternated months in interpreting sleep studies.

Q. Okay. Now, did Dr. Rosenberg have a practice similar to yours where he

saw patients and did evaluations and then also sometimes interpreted polysomnograms?

A. I believe he did.

Q. Did he have any other duties or responsibilities in the sleep center that were different from yours?

A. Mot that I can recall.

Q. And you've told me that you are not aware of any evaluation that Dr. Rosenberg did of Patricia Smith, is that correct?

A. I'm not aware of any evaluation anyone did.

Q. Okay. In February of '96 did you have the capability to do portable sleep studies in a patient's home?

A. No.

Q. If you were evaluating a patient and had determined from a polysomnogram that the patient had severe obstructive sleep apnea, how long would it be before you would be able to get a patient in to do CPAP titration?

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MR. TORGERSON: Note an objection.

MS. CUTHBERTSON: Note an objection. Cuthbertson.

MS. PETRELLO: Petrello. Objection.

BY MS. TOSTI:

Q. And I'm speaking in '96, February.

A. I don't recall what the wait was to get into the lab at that time.

Q. Was it a few days, weeks?

A. I honestly don't remember at all.

Q. When you were evaluating Patricia Smith's polysomnogram, did you review all of the cardiac ECG strips that were done?

A. All 1,000 pages?

Q. Sees.

A. I did not personally review all 1,000 pages.

Q. Was there a technician who

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would normally review that and give a report to you?

A. That's right.

Q. And during the polysomnogram, was it reported to you that she had any arrhythmias during sleep?

A. It was not.

Q. Do you recall doing any spot-checking in the actual raw data to see if she had any arrhythmias?

A. I don't recall this specific instance, but it is my practice to do so.

Q. Now, Doctor, on the final polysomnogram report there is some initials, I believe, of a technologist that are listed there, correct?

A. Yes.

Q. Okay. The initials are WL. Do you know whose name those initials stand for?

A. Yes.

Q. What is the name?

A. William Ladanyi.

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Q. Would you say that last name?

A. Ladanyi, L-a-d-a-n-y-i.

Q. Was William Ladanyi a certified technologist?

A. I don't recall if he was certified at this time.

Q. Now, you had mentioned that there was a physician that was a technologist. Was he a physician?

A. No.

Q. And would he have been the person that tabulated the data on Patricia Smith's polysomnogram?

MR. TORGERSON: Objection, but if you know.

A. Not necessarily.

Q. Okay. He would have been the physician that was present during the test?

A. The technician, yes.

Q. Okay, Would there be another person that would have had responsibility for reviewing the raw data?

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A. It might have been any of the technicians in the lab at that time.

Q. Not necessarily William though?

A. Correct.

Q. Would we have any way of knowing who did that?

A. I don't know.

Q. Now, what does normal sleep architecture mean, what does that term mean?

A. That means I look at the different stages of sleep and if they had a normal amount of the different stages, then that would be normal sleep architecture.

Q. What is the normal percentage for Stage 1?

A. Stage I is usually just a few percent.

Q. What's the normal range?

A. I would say less than 10 percent.

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Q. What about Stage 2?

A. Stage 2 is usually about 50 percent.

Q. And Stage 3?

A. Stage 3 and 4 usually combine for about a quarter.

Q. Okay. And in Patricia Smith's case, would the percentages that she has listed on this final report, did those conform to normal sleep architecture?

A. Yes.

Q. What does the term "partial obstruction" mean?

A. That's where there is a decreased amounts of airflow, but there is still some airflow present. It's generally not as severe as a full obstruction.

Q. Is that different from a hypopnea?

A Pes, a hypopnea you could think of as shallow breathing.

Q. And are partial obstructions

included in the respiratory disturbance index?

A. Yes.

Q. And in calculating the respiratory disturbance index, how do you come up with that number?

A. That's the total number of respiratory events, hypopnea, total obstructions and obstructions and non-obstructions per hour of sleep,

Q. So you would take all of those together and divide it by the total number of hours of sleep and come up with the index?

A. That's right.

Q. And in Patricia Smith's case, she had an average of 45.6 of these events every hour?

A. That's right.

Q. Did she have any seizure activity during the polysomnogram?

A. No.

Q. Doctor, when did you learn of

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Patricia Smith's death?,

Let me make it easier. Did you learn of her death before this case was filed?

A. No.

Q. So sometime after it was filed you learned of her death?

A. Yes.

Q. And I have a series of questions to ask you. And if your answer is no or you have no opinion, that's fine, but just tell me that.

Did you ever speak to any of the family members after her death?

A. No.

Q. And Doctor, are you aware that Patricia Smith died in her sleep?

A. I was not aware of that until you just told me.

Q. Do you have an opinion as to whether obstructive sleep apnea contributed in any way to Patricia Smith's death?

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MS. CUTHBERTSON: Objection. Cuthbertson.

MS. PETRELLO: Petrello. Same.

MR. O'DONNELL: And O'Donnell.

MR. TORGERSON: Note an objection.

A. No, I don't have an opinion based on the facts before me.

Q. Do you have an opinion as to what likely caused her death?

MR. TORGERSON: Same objection.

MS. CUTHBERTSON: Objection.

MS. PETRELLO: Petrello. Same thing.

MR. O'DONNELL: I'll make that unanimous. Objection. O'Donnell.

A. Same answer.

MS. CUTHBERTSON: Dr. Brooks, this is Patty Cuthbestson, and that's my daughter in the background.

THE WITNESS: I'm a

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pediatrician. I don't mind babies.

BY MS. TOSTI:

Q. Do you have an opinion as to whether Patricia Smith received appropriate follow-up for severe obstructive sleep apnea?

MR. TORGERSON: Objection.

MS. PETRELLO: Objection. Petrello.

MS. CUTHBERTSON: Same objection. Cuthbertson.

MR. O'DONNELL: I'm going in that.

A. No, I have no opinion.

Q. Do you have an opinion as to whether her death was preventable?

MR. TORGERSON: Objection.

MS. PETRELLO: Objection. Petrello.

MS. CUTHBERTSON: Same objection, Cuthbertson.

A. No, I have no opinion based on the information before me.

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Q. And are you critical of the care rendered to Patricia Smith by any health care person?

MR. TORGERSOM: Same objection.

MS. PETRELLO: Objection. Petrello.

A. No, I'm not.

MS. TOSTI: Okay. I don't have any more questions. So if any of defense counsel want to ask some questions, go ahead and take over.

EXAMINATION

BY MS. PETRELLO:

Q. Well, this is Petrello. I have some questions.

Doctor, I got off of the speaker phone, so hopefully you can hear me a little better. So if you're having any difficulty hearing me, I would appreciate if you would tell me,

Earlier on I told you I'm the attorney representing Dr. Collins and Dr.

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Hlavin in the lawsuit.

First of all, did you know Dr. Collins?

A. I don't recall meeting him.

Q. Okay. Were you aware that his specialty was epilepsy, the treatment of epilepsy?

A. I knew he was a neurologist. I did not know of any subspecialty.

Q. Okay, In a sleep study when desaturation levels go down, and in this case as low as 60 percent, how long does that occur for? I mean is that seconds or --

A. The 60 percent on the study is the single lowest point that the oxyhemoglobin saturation dropped to. So that would have been likely just a second.

Q. Is it, do I understand you correctly, you're saying one second? I just want to make sure I understood your answer.

A. Yes, yes.

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Q. So it's one second?

A. A very short period of time. That's the lowest that it dropped to, and it's unlikely that it stayed at that particular spot for a long period of time.

Q. Okay. Are you aware of seizures being associated with sleep apnea?

A. No, I'm not.

Q. You testified in reference to the final polysomnogram report that a report was sent to Dr. Collins. My question to you is you don't know, in fact, if a report was actually sent to him, do you?

a. All I know is that the report was given to the sleep lab secretary who is supposed to send copies to all of the physicians listed on the line.

Q. Okay. And if Dr. Collins has testified that he never received this report, and in fact, it's not in his record, you would have no reason to

disagree with his testimony, would you?

A. No, I wouldn't.

Q. And on the report, again, the final report, at the very bottom where it says summary, it says, Normal sleep architecture. And if you skip the second part then it says, No dysrhythmias note.

And I take that to mean that you testified earlier that there were no arrhythmias, is that correct?

A. That's correct.

Q. So then the finding that's in the middle where it says that the patient has frequent respiratory events, I'm not going to read that whole thing, where it says the levels went as low as SO percent, is that what you mean when you said a level of desaturation on the oxyhemoglobin level in isolation?

A. Could you repeat the question?

A. Okay. You had earlier testified, I believe, if I'm understanding your testimony correctly, that an

oxyhemoglobin desaturation level that dropped as low as 60 percent in isolation would not be of great concern to you, is that correct? Did I get that correct?

A. Essentially.

Q. Okay. And so my question to you is, when you have the summary, that middle section where it talks about the oxyhemoglobin levels, that seems to be the only abnormal finding, is that what you mean when you say it's in isolation because the normal sleep architecture was normal and she had no arrhythmias?

A. No, the abnormal findings in this case were the desaturations as well as a number of respiratory events.

Q. Okay. So it's both?

A. Yes.

Q. Okay. I'm sort of jumping around here. I know we went over this, but I just want to make sure I'm correct when you said you were Director of the Polysomnogram Lab that was at RB & C as

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opposed to UH. I know that RB & C was part of UH, but it was just for RB & C?

A. At that time it was true.

Q. And that was of the pediatric polysomnogram lab, correct?

A Yes.

MS. **PETRELLO**: That's it. No other questions for ne.

EXAMINATION

BY MS. CUTHBERTSON:

a. Doctor, this is Fatty Cuthbertson. I have a couple of questions. I represent University Hospitals.

Regarding that final report that Colleen was just asking you about, and we were talking about the RDI, et cetera, one of the phrases used is "resulting in arousal and oxyhemoglobin desaturation," is she waking up or kind of waking up?

A. Yes, that's right.

a. Bid that happen every time

basically or would you maybe need to look at those data?

A. Well, I have the report in front of me. And there were 350 arousals. And it looks like about 350 events. So it's likely that there was an arousal or so associated with most, if not all of the events.

Q. Okay. You talked a little about some protocols and some things that were in effect back in February of 1996. Is it possible that protocols you were talking about in terms of when to institute CPAP or that it could be instituted by post date February of '96?

A. That's possible.

Q. Okay. Let me ask you another question. If the technician in this case, let's just assume those protocols you were talking about were in effect and now it's possible that they were actually post date February '96 and some of those parameters you actually gave, say the RDI in excess

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of 30, you wouldn't criticize the technician if no **CPAP** had been ordered and none was used during a sleep study, would?

A. Never.

Q. And in fact, you don't have any criticisms of any of the technicians in this case, am I right?

A. No, I don't, that's right.

Q. And ultimately in terms of interpreting the sleep studies while the physicians may assist in the sleep study itself and do compilations and review of the data, ultimately you spend at least 30 minutes looking at the raw data, maybe up to an hour looking at the raw data itself in conjunction with some of the things that the technicians may point out?

A. Yes, that's right.

Q. And ultimately, you make the diagnosis, not the technician, that's a medical decision, right?

A. Right.

Q. And outside of the scope of

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the licensure or anything aside from the technician?

A. Right. We rely on the technicians who are observing the patient all night and going over each page to call our attention to anything important, but we also do our own review in addition to what they deem important.

Q. Okay. I'm going through my notes really quickly too, and I believe that's about all I wanted to ask.

And one last thing, I wanted to make sure you were not involved in doing the policies or protocols €or the polysomnogram lab or for the sleep study, that was outside of your area of responsibility?

A. That's correct,

MS. CUTHBERTSON: Okay, good. Thanks a lot, Doctor.

THE WITNESS: You're welcome.

MS. TOSTI: I have a couple follow-up, but do we have anybody else?

-LEE J. **BROOKS, M.D.**-

MS. CUTHBERTSON: Jack, do you want to ask anything right now?

MR. O'DONNELL: No, thank you, Go ahead, Jeanne.

FURTHER EXAMINATION

BY MS. TOSTI:

Q. Doctor, in regard to the raw data, you've indicated the raw data from a polysomnogram can be as much as 800 pages, is that correct?

A. More like 1,100 pages.

Q. 1,100 pages. And you rely on the technician to review each of those pages, correct?

A. That's right.

Q. And you rely on the technician to point out areas that may need a physician to take a look at, and in addition you do some spot-checking of those 1,100 pages, correct?

A. That's right.

Q. But you as a physician don't go through every single page on the

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polysomnogram, correct?

A. That's correct.

Q. And you have to rely on the expertise of the technician to do that?

A. That's right.

Q. Qkay, Now, in regard to the oxygen desaturations, you had mentioned that that 60 percent that appears on the final report may have only have occurred for a second or two. Do you know that for a fact, that that's what happened in this case?

A. It would seem reasonable that that's what happened. It would be hard to imagine a situation where it hit 60 and just stayed there for a period of time. Also, looking at the rest of the curve, the percentage that the saturation was less than 70 and even less than 80 was quite, quite small.

Q. Okay, but she was at a period of time at 60, maybe 61, 62, 63, 64 all of the way up through 70, 75, right?

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A. Correct, but --

Q. But there was a period of time --

ME. TORGERSQN: I don't think he finished his answer.

BY MS. TOSTI:

Q. Finish your answer, Doctor.

A. But looking at the graph, the saturation less than 70 appears to be an extremely small number as well.

Q. Do you have an opinion as to how much time she was below 75 percent during her sleep study?

A. Looking at this graph, it looks to be maybe one or two percent tops.

MS. TOSTI: Okay. I don't have any further follow-up questions.

EXAMINATION

BY MR. O'DONNELL:

Q. This is Jack O'Donnell. I have just have one or two questions now, if I may.

Dr. Brooks, would you consider

60 percent oxygen desaturation level to be a hypoxic state or an anoxic state or neither of those two things?

A. What do you mean hypoxic and anoxic?

Q. I guess that's what I want to know from you. We have some earlier material in the case, we have the earlier hypoxia. Do you think that hypoxia would result from a 60 percent desaturation level?

A. I don't think that there would be tissue hypoxia at a 60 percent level, which is what you're really concerned about. If you think about infants or children, for example, with cyanotic heart disease, they may have a saturation at that level or lower for years and they function pretty decently. So I would be surprised if there were any tissue hypoxia at 60 percent saturation.

Q. So at 60 percent, the tissues of the body and particularly of the brain

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are still getting oxygen?

A. Yes.

MR. O'DONHELL: That's the only questions I have for you. Thank you.

FURTHER EXAMINATION

BY MS. TOSTI:

Q. I have one more follow-up, Doctor.

Do you have an opinion as to whether a 60 percent oxyhemoglobin saturation would have any effect on the irritability of a patient's heart if they had coronary artery disease.

MR. TORGERSOW: Objection.

MR. O'DONNELL: O'Donnell. I'll also note an objection to that one.

MS. CUTHBERTSON: I will object to the same here. Cuthbertson.

MS. PETRELLO: Petrello.

A. I don't have an opinion on that.

Q. Would you deter to a

-LEE J. BROOKS, M.D.-

cardiologist on that?

A. That would be a better choice.

MS. TOSTI: I have no further follow-ups.

MS. CUTHBERTSON: Thanks very much, Dr. Brooks.

MR. TORGERSON: Thank you.

MR. O'DONNELL: Thank you.

MR. TORGERSON: We are going to sign off now, as long as that's okay with you guys.

(Discussion off the record.)

MS. CUTHBERTSON: This is Cuthbertson. I would like a copy.

MS. PETRELLO: Petrello. I would like a copy.

MR. O'DONNELL: This is Jack O'Donnell. No copy at this time.

(6:10 p.m.)

C E R T I F I C A T E

I, Denise M. Pitchford, a Certified Shorthand Reporter and Motary Public of the State of New Jersey, do hereby certify that prior to the commencement of the examination, the witness and/or witnesses were sworn by me to testify to the truth and nothing but the truth.

I do further certify that the foregoing is a true and accurate computer-aided transcript of the testimony as taken stenographically by and before me at the time, place and on the date hereinbefore set forth.

I do further certify that I am neither of counsel nor attorney for any party in this action, that I am not interested in the event nor outcome of this litigation.

Denise M. Pitchford

Certified Shorthand Reporter
XI01866
Notary Public of New Jersey
My Commission Expires June 30, 2000

Dated: 2-16-97