State of Ohio,)
) ss:
County of Cuyahoga.)

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IN THE COURT OF COMMON PLEAS

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Tracy Ann Smith, etc., Plaintiff, vs. University Hospitals of Cleveland, et al., Defendants.	Case No. 327828 Judge Fuerst

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DEPOSITION OF MICHAEL ROWANE, D.O

MONDAY, NOVEMBER 30, 1998

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The deposition of Michael Rowane, D.O., a Defendant herein, called by the Plaintiff for examination under the Ohio Rules of Civil Procedure, taken before me, Ivy J. Gantverg, Registered Professional Reporter and Notary Public in and for the State of Ohio, by agreement of counsel and without further notice or other legal formalities, at the offices of Becker & Mishkind, Skylight Office Tower - Suite 660, Cleveland, Ohio, commencing at 9:45 a.m., on the day and date above set forth.

APPEARANCES:

On Behalf of the Plaintiff:

Jeanne M. Tosti, Esq.
Becker & Mishkind
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Cleveland, Ohio 44113

On Behalf of Defendant Michael Rowane, D.O.:

Thomas E. Betz, Esq.
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On Behalf of Defendants Mary Louise Hlavin, M.D. and Stephen D. Collins, M.D.:

Colleen H. Petrello, Esq.
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On Behalf of Defendant University Hospitals of Cleveland:

Patricia Casey Cuthbertson, Esq.
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On Behalf of Defendant Lee Brooks, M.D.:

(No Appearance)

(Thereupon, Plaintiff's Exhibit 1 (Rowane) was marked for identification.)

MICHAEL ROWANE, D.O.

a defendant herein, called by the plaintiff for examination under the Rules, having been first duly sworn, as hereinafter certified, was deposed and said as follows:

CROSS EXAMINATION

BY MS. TOSTI:

Q. Good morning, Doctor. I introduced myself previously to you. My name is Jeanne Tosti, and I am here representing the plaintiff in this case.

Would you please state your full name for us?

A. Yes. Michael Patrick Rowane.

Q. And your home address?

A. 2937 Legend Lane, L-E-G-E-N-D, Lane, Willoughby Hills, Ohio, 44092.

Q. And what is your current business address?

A. It would be 11100 Euclid Avenue, Cleveland, Ohio, 44106.

Q. And at the time that you rendered care to Patricia Smith, was that your business address, also?

A. Yes.

Q. Are you currently an employee of a

professional medical group practice?
A. I am an employee of Case Western Reserve University.
Q. Are you a member of a professional medical group practice?
A. I am also in practice at the Family Practice Center of University Hospitals of Cleveland.
Q. Do you have any association with University Family Medicine Foundation?
A. Yes, I do.
Q. What is your association with them?
A. It is the group that oversees all the physicians in the department, and I am also on the Board of that group.
Q. And is that a professional medical group that is incorporated?
A. I believe so.
Q. And you are a member of that group?
A. Yes.
Q. Are you an employee of that group, do you receive any type of a salary through that group?
A. A portion of a salary, yes.
Q. And who else pays your salary?
A. The vast majority of my salary is from Case Western Reserve University.

Q. What portion is from Case Western Reserve and what portion comes from University Family Medicine Foundation?

MR. BETZ: You are asking about percentages?

MS. TOSTI: Yes, just approximate.

A. Oh, maybe 15 percent from University Family Medicine Foundation.

Q. I am sorry, you said 15 percent?

A. Fifteen, just estimating off the top of my head.

Q. Other than Case Western Reserve University and the University Family Medicine Foundation, are you employed by anyone else at the present time, do you receive any type of reimbursement from anyone else for professional services?

A. Not at this time.

Q. At the time that you first rendered care to Patricia Smith, who was your employer?

A. The same.

Q. So Case Western Reserve University --

A. Case Western Reserve University.

Q. -- and the University Family Medicine Foundation?

A. Yes.

Q. And would that be, when you first rendered care, would that be in December of 1993, approximately?

A. December 9th, 1993.

Q. And at the time that you rendered care to Patricia Smith, were you employed by anyone e se other than Case Western Reserve or the University Family Practice Foundation?

A. I did moonlight at an urgent care center in my home town, Erie, Pennsylvania.

Q. How often were you doing that?

A. Maybe, gosh, one weekend a month or so.

Q. Doctor, when did you become an employee of Case Western Reserve?

A. I believe in July, 1993.

Q. Have you ever had your deposition taken before?

A. Never.

Q. I want to review a few things in regard to depositions. I am sure your attorney has spoken with you. But this is a question and answer session under oath, and it is important that you understand the question that I ask you.

And if a question is unclear or you don't understand it, I would be happy to restate it or to

rephrase it. Otherwise, I am going to assume that you understood the question that I asked you, and that you are able to answer it, okay?

A. Okay.

Q. I would also ask that you give all of your answers verbally, because our court reporter cannot take down head nods or hand motions.

If at any time you would like to refer to the medical records of Patricia Smith, please feel free to do so.

And at some point during the deposition, your attorney or one of the other attorneys may choose to enter an objection. You are still required to answer my question, unless your attorney specifically tells you not to, okay?

A. Yes.

Q. Now, the clinic area where Patricia Smith was treated, what is the name of that area?

A. Family Practice Center.

Q. And at any time during the time that you treated Patricia Smith, were you a Fellow in family practice?

A. No, I was an attending.

Q. What does the term, Fellow, mean?

A. A Fellow is someone who takes additional

training after their residency, typically in a specialized area.

Q. Is this usually after a residency has been completed?

A. Yes.

Q. Have you ever been named as a defendant in a medical negligence suit, other than in this one?

MR. BETZ: Objection.

Go ahead.

A. No.

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

MR. BETZ: Objection.

Go ahead.

A. No.

Q. And have you ever acted as an expert in a medical-legal proceeding?

A. No.

Q. Now, Doctor, your attorney provided me with a copy of your curriculum vitae, and I have a copy of it.

I would like you to just look it over and tell me if it is up-to-date, if it is current, if there are any corrections or additions that you would like to make to it?

A. This is in December of '97, and it is not current.

Q. This has been marked as Plaintiff's Exhibit Number 1, and I would like you to just go through and tell me what additions or corrections you would like to make to it?

A. In January of 1998, I became the residency director of the University Hospitals of Cleveland - Mt. Sinai family practice residency program. Essentially I was still maintaining the role I described under acting residency director, but I took the full position.

In education, I am presently attending a Fellowship for program directors with the National Institute of Program Directors.

Other honors, I was listed in Best Physicians of America and listed in the Cleveland Magazine under best docs.

Let's see. I have a number of other publications that are not published, but they are in transit, so I don't think I have to go through those.

I have presented more lectures and taught other CME courses, both locally and nationally.

Q. Let me just ask you there, in regard to the

publications that are currently in the process of publication, do any of them deal with the subject matter of sleep apnea or coronary artery disease?

A. No, they do not.

Q. And in regard to any additional lectures that you have given that are not represented on this CV, do any of those deal with those two subject areas?

A. Possibly -- I have already demonstrated that, it was just a lecture again on electrocardiographic interpretation, it is an annual workshop that I do.

I believe that is -- other than other hospital committees, I think that is pretty up-to-date, that I can they think of off the top of my head.

Q. You may keep that copy for now, because I have some additional questions with regard to your background.

A. Certainly.

Q. Doctor, according to your CV, you graduated from your undergraduate in 1983?

A. Yes.

Q. When did you start medical school?

A. I started medical school -- let's see, I entered my -- you mean the school I graduated with in Des Moines? I entered that in the fall of 19 --

I am sorry -- 1984, I graduated in 1989.
Q. So you were in medical school for approximately five years, then?
A. Five years.
I should also note, I did have one year at the Philadelphia College of Osteopathic Medicine, prior to that, and I transferred to Des Moines.
Q. When were you at the Philadelphia school?
A. I think it was August of 1983 until June of 1994 -- 1984, I am sorry.
Q. And why did you make the transfer from the one school to the other?
A. I was asked to retake that year, and I opted to go to Des Moines to do that.
Also, I had some personal family issues at that time, that I felt it was best for me to go to Des Moines.
Q. What were the reasons that they wanted you to retake that year?
A. I had some academic deficiencies that year.
Q. And Doctor, I don't mean to be insensitive, but I do have to ask these questions. In regard to the personal issues, the family issues, would you just elaborate briefly as to what those were?
A. Certainly. It was my first time away from

home, and I had a brother with paranoid schizophrenia who had a major psychotic break. The only facility to help him was in Philadelphia where I was in school, it was a major distraction.

And I am very close to my brother, from a large family, very close, and during that year it affected my ability to perform in medical school, and I recognized that it was necessary for me to go to another school.

And because of that, I transferred to Des Moines, where I successfully completed my studies and also was asked to do a predoctoral Fellowship.

Q. Now, you did a family medicine residency at Hamot Medical Center; is that correct?

A. Yes, that is correct.

Q. How many year residency was that?

A. It is a three year residency.

Q. And did you complete that residency?

A. Yes, I did.

Q. And then from there you went to University of North Carolina for a faculty development Fellowship?

A. I really went to Case Western Reserve University for family medicine. At the same time, I partook in a faculty development Fellowship at

University of North Carolina, at Chapel Hill. During that time, they had an away Fellowship, where junior faculty from a number of positions throughout the country would come, and would partake in a Fellowship, would meet a number of weeks throughout the year and dedicate time at their home bases to faculty development projects.

Q. So these two Fellowships ran concurrently?

A. Yes, they did.

Q. Would you briefly tell me what a faculty development Fellowship is?

A. When I was in Des Moines, in medical school, I was asked to do a predoctoral Fellowship, which involved teaching and research, and I really enjoyed teaching. So when I had the opportunity to do a postdoc -- I mean, post residency Fellowship, I chose to really develop my skills in teaching to try to develop some expertise in that area, and this dedication of time to help me with that.

Q. Now, in regard to the Case Western Reserve department of family medicine Fellowship, that also had a component that dealt with family medicine; is that correct?

A. I also did some additional training in clinical family medicine and an interest in womens

health. I did a month of high risk obstetrics on an Indian reservation, and I also worked in a procedural skill development in family medicine.

Q. You hold Board certification in several areas; is that correct?

A. Yes, I do.

Q. Those include family practice?

A. Yes, both the Boards designated from the American Medical Association and the American Osteopathic Association.

Q. And then in addition, you also hold a certification in osteopathic manipulative medicine?

A. In osteopathic manipulative medicine, yes, I do.

Q. And did you have to take some type of examination to receive that certification for all three of those?

A. Yes, all three did require a test, an examination.

Q. Did you pass all three of those on the first try?

A. Yes, I did.

Q. And are you currently licensed in the State of Ohio to practice medicine?

A. Yes, I am.

Q. And at the time that you cared for Patricia Smith, were you licensed in Ohio?
A. Yes, I was.
Q. Do you currently have an active license in any other state?
A. Pennsylvania.
Q. Has your license ever been called into question in the State of Ohio?
A. Never.
Q. How about in the State of Pennsylvania?
A. Never.
Q. Doctor, there are a number of articles that are on your curriculum vitae. Do any of these articles deal with the subject matter of coronary artery disease?
A. No, they do not.
Q. Any on the subject of sleep apnea?
A. No, they do not.
Q. Have you ever taught or given a formal presentation on the subject of coronary artery disease or sleep apnea, with the exception of the electrophysiology one that you have already pointed out?
A. No. And that was on electrocardiography.
Q. Now, Doctor, in regard to the two

publications -- let me find them -- on your curriculum vitae entitled Case Histories in Electrocardiography and Advanced Case Histories in Electrocardiography -- do you see those? I think they are about halfway down in the middle of page seven of your curriculum vitae.

A. Yes.

Q. Have either of these lectures been reduced to any videotape, audiotape or written basis?

A. I don't believe so. And I have not published any formal dissertation of them for publication, or I did not have any formal handout for them.

Q. You don't have a written syllabus for either of those presentations?

A. I do have slides that I use for that.

Q. Would I be able to obtain copies of those slides?

MR. BETZ: After discussion with me, if you request them.

MS. TOSTI: I would like to make a request for those.

Q. (Continuing) The individual that is named in the first of those two articles, Case Histories in Electrocardiography, it says, Workshop with William A. Rowane. Is that a relative?

A. That is my father.
Q. And does he have any particular specialty area that he practices in?
A. My father is retired. He is Board certified in internal medicine and Board eligible in cardiology.
Q. I see from your curriculum vitae that your wife is also a physician?
A. Yes, she is.
Q. And does she have a particular area of specialty?
A. Pediatrics.
Q. Would you tell me what you have reviewed for this deposition?
A. I have essentially reviewed the chart of the patient.
Q. And by that you are referring to the clinical notes from the Family Practice Center?
A. Yes.
Q. Have you reviewed any textbooks or any articles?
A. No.
Q. Have you reviewed any additional medical records, other than the Family Practice Center? And by that I am speaking of the University Sleep Center

records.
A. The primary ones I have dealt with have been here (indicating).
Q. Have you, at any time, seen the University Sleep Center records?
A. I have seen what we have here. I have not had full disclosure to look at the other complete records.
Q. Well, what I would like to know is, other than what is contained in the records that are currently sitting in front of you, have you reviewed any additional records from the University Sleep Center?
MR. BETZ: What you recall.
A. There was a -- I only briefly saw one other sheet from the sleep study, that was not part of this, just recently.
Q. And what was that document that you are referring to?
A. I am not even certain. It was a sheet from the sleep lab, I believe.
Q. How is it that you came to see that particular document, who gave it to you?
A. My attorney and I had a discussion on that.
Q. Do you know what the source of that material

was?
A. No, I do not.
Q. Do you know what the title of it was?
A. Not offhand, no.
MS. TOSTI: I would like to make a request for whatever that document is.
BY MS. TOSTI:
Q. What was the content of that particular document, what was on it?
A. I have to apologize, because I only saw it briefly. But I know it described the patient's -- it was kind of, I think, a preliminary report of the sleep study, which also acknowledged the diagnosis of sleep apnea, I believe that was part of that.
Q. Doctor, I am going to show you a copy of a document from the University Sleep Center, and I would like to ask you -- it is entitled the Overnight Polysomnogram Report, and I am going to ask you if this is the document that you are referring to?
A. No, this was part of my records. I already had this one. It was another sheet.
Q. In addition to this particular document, you saw another document?
A. Yes.

Q. Have you seen any of the records of Dr. Collins, Dr. Hlavin or Dr. Brooks, any of the clinical medical records that they kept on Patricia Smith?
A. I have not seen Dr. Hlavin's, I have not seen Dr. Brooks'. I did see some of Dr. Collins'.
Q. Was that just recently?
A. Recently.
Q. Have you reviewed the death certificate or the autopsy of Patricia Smith?
A. Yes.
Q. Doctor, are you currently or have you in the past been involved in any research studies dealing with sleep apnea or coronary artery disease?
A. No, I have not.
Q. And since the filing of this case, have you discussed this case with any physicians?
A. No.
Q. Have you at any time talked to Dr. Collins or Dr. Hlavin or Dr. Brooks or Dr. Martin about this case, since it has been filed?
A. No.
Q. Other than with counsel, have you discussed this case with anyone else?
A. No.

Q. Other than the Family Practice notes that you currently have in front of you, do you have any personal notes or a personal file on this case?
A. No.
Q. And have you ever generated any personal notes or a personal file on this case?
A. No.
Q. Is there a textbook in your field of practice, family practice, that you consider to be the best or the most reliable?
A. Not really.
Q. Is there a particular book that you use in the residency program that you currently are director of?
A. There are a number of texts that we utilize, for example, Harrison's on internal medicine may be a reference, as well as Williams in obstetrics, for example. So there are some major texts we may refer to.
Q. Do you refer to them in your clinical practice?
A. Yes.
Q. Do you consider either of those texts to be authoritative?
A. You have to recognize, a text, when

published, can still not be completely current. But they have general guidelines.

Q. So is that a yes or a no to my question?

MR. BETZ: I am not sure the question can be answered yes or no.

Q. (Continuing) Are there any particular publications that you believe have particular relevance to the issues in this case?

A. Not in particular.

Do you mean publications that are dealing with these topics? Can you be more specific?

Q. Yes, I am interested in knowing whether, at the present time, there is any particular publication that you feel has particular relevance to any of the issues in this case? And if there aren't any, you know, tell me that.

A. Not that I am aware of.

Q. Doctor, in your clinical practice, just generally, what type of patient population do you see, in regard to the age range?

A. Family medicine encompasses birth through the geriatric population, and also my practice includes low risk obstetrics.

Q. And in regard to the types of patients, are there any particular types that you don't see on a

regular basis, that you refer out of your clinical practice?

A. Family medicine usually encompasses a lot of general problems, and there are a number of times where I may need specific consult that I will utilize a specialist.

Q. In your clinical practice, do you evaluate patients with coronary artery disease?

A. Yes.

Q. And in 1995 and '96, were you doing that in your clinical practice?

A. Yes.

Q. And do you provide continued management for patients with coronary artery disease?

A. I do, but some cases I also do in conjunction with a specialist.

Q. A cardiologist?

A. Yes.

Q. And in what circumstances would you be working with a cardiologist with your patients in coronary artery disease?

A. Any patient that would require a more thorough testing, any patient that I am uncertain of the etiology, a patient who is having an acute myocardial infarction, a patient who is to be

admitted with a cardiac complaint to the telemetry floor or the intensive care unit at University Hospitals.

Q. And in 1995 and 1996, that time period, could you tell me just approximately, in the patient population that you were seeing, how many of those patients you were seeing specifically for coronary artery disease related problems? I am just looking for a ballpark percentage or a number.

A. There is -- again, I am just -- I don't know if I could pull the exact number, but I can say that I have a significant geriatric population that has cardiovascular disease. Gosh, I don't know, 20 percent of my -- 25 percent. Honestly, I don't know if that is accurate, but I have --

Q. Would it be fair to say that you see a fair number of patients with coronary artery disease in your clinical practice?

A. I have a fair number of patients who have cardiovascular disease.

Q. And that would have been true also in 1995 and 1996?

A. Yes.

Q. In 1995 and 1996, did patients in the Family Practice Center have an attending physician who was

responsible for following their care?
A. We have a unique practice, it is a residency training practice. So we are involved in teaching of residents and medical students.

The residents and attending physicians each has a panel of patients that they cover. And the primary care physician may be an attending, or it may be a resident physician.

Q. So I want to be clear on this.

Patients that were being seen in the Family Practice Center would not necessarily have an attending physician following them?

A. Every patient -- if a resident physician sees a patient, their case must be reviewed by an attending physician, so an attending physician is involved in all cases of patients at our Family Practice Center.

Q. Now, you have responsibilities for supervising some of the medical staff in the Family Practice Center; is that correct?

A. Yes.

Q. And in 1995 and 1996, were you also supervising some of the medical staff in the Family Practice Center?

A. Yes.

Q. And if --
A. I am sorry. Just to clarify, you mean in relation -- you are referring to the resident physicians and the medical students?
Q. The medical staff, not the nursing staff and other personnel.
A. Okay.
Q. What level of personnel in 1995 and '96 were you actually supervising in the Family Practice Center?
A. Resident physicians and medical students.
Q. So the medical students would be before graduation?
A. Yes.
Q. And the residents, would those all be students that had already graduated from medical school?
A. We have a unique program called an accelerated residency program, and there are a small subset of residents that are found to be exceptional medical students, that their fourth year of medical school is considered their internship. It is one of only, I believe, about a dozen programs allowed by the American Academy of Family Practice.
And the other resident physicians have

completed their professional degree, which is the M.D.

(Thereupon, Ms. Cuthbertson entered the room.)

Q. So some of the residents that were seeing patients in the Family Practice Center --

A. Yes.

Q. -- were unlicensed physicians who had not, at the point in time that they were delivering care, graduated from the medical school; is that correct?

A. I am sorry, could you repeat that question?

MS. CUTHBERTSON: Let me just object for the record.

MS. TOSTI: Ivy, can you read my question back.

(Record read.)

A. (Continuing) We have medical students seeing patients every day in our practice that are supervised by attending physicians.

Q. And in those instances, there would be an attending that would be supervising the care?

A. Yes.

Q. When you were supervising the various residents and the medical students, were you ultimately responsible for overseeing the care of

those patients?
A. Yes.
Q. During the 1995 - '96 time period -- would it be appropriate to use the word, precepting?
A. Yes, it is.
Q. When you were precepting the various medical personnel in the Family Practice Center, besides yourself, and the personnel that you were precepting, were there other attending physicians there on the days that you were there?
A. Yes, there are. We always have attending physicians that act as preceptors during every patient care encounter.
Q. And on any given day, what would be the average of attending physicians that would be in the Family Practice Center in that time period, '95 - '96?
A. It is proportional to the amount of resident physicians and medical students in the practice.

The residency review committee makes guidelines, has recommendations that they expect you to adhere to, and we adhere to those. Typically we have two to three preceptors present in the Family Practice Center, but it can be more if required.
Q. And how many individuals on any given day would you normally be precepting? And I am speaking

again in 1995 or '96.
A. It can truly vary from a session having only a few resident physicians, to having possibly eight. But then there would be more preceptors present, if that was the case.
Q. Were the family practice residents permitted to see patients independently, in other words, conduct the history and the medical exam, without an attending present?
A. Yes.
Q. Did it matter whether the individual was a medical student or whether they had completed medical school and were a resident, as to whether they could conduct that part of the clinic visit independently?
A. The more training a physician had, the level of training, the more autonomy they may have. A medical student, in their first two years of medical school, would be very much guided completely with the attending physician, whereas one in their fourth year of medical school would still have a physician present and evaluating the patient, but it may not be the same level as a first year medical student who has very little medical knowledge.
Q. Would an attending be in the room with the

medical student?
A. Yes, the attending has to come in the room, although he may allow the student to come in first to obtain the history and physical exam, then present it, and then subsequently come back in to reassess the situation and fully examine the patient.
Q. And in regard to the resident who has completed medical school, would the attending have to be in the room with the resident?
A. They did not have to, but they had to review the case with the preceptors.
Q. Now, were residents permitted to order therapeutic interventions for patients independently, such as drugs and tests?
A. They would have to be reviewed by an attending physician.
Q. Did the attending physician review all of those types of orders for people that were medical students, up through the time that they graduated, as well as the residents that were practicing in the clinic, that had already graduated?
A. All charts in our Family Practice Center have been -- have to be reviewed by an attending physician.
Q. And so would it be fair to say that before

any plan of care was implemented for a particular patient, it would have been discussed with an attending physician?

A. With any medical student, someone early in their training, yes. A more senior resident may institute therapy, but it will be reviewed by an attending physician afterwards.

Q. Would an attending physician in the Family Practice Center be responsible for following up on tests that were ordered on patients? Whose responsibility would that be?

A. The following up on tests is the physician who ordered the tests.

Q. And what about consults that were ordered for patients, who would be responsible for following up on the consults?

A. I am not certain what you mean. You mean if we -- if I have a consult that I request on a patient, a lot of times I will either contact the consultant, present a request to the patient, then allow the patient to set a time to see the consultant as they know their schedule, and then get a consult report back from the consultant concerning that case.

Q. But if you are precepting medical students or

residents, and in the course of care that is being delivered to a patient, it is determined that a consult is to be done, would you, as the attending physician that is precepting these individuals, be the one to follow up on the consult, or would that fall to the person who had actually done the initial contact with the patient?

A. The attending physicians are required to sign all consulting forms that go out. Usually then the consultant's information will come back to the primary physician who has initiated that, but many times they also come back to the attending physician, as well.

Q. But would the medical student be required to bring that information back to an attending?

A. All consultants generated from a medical student will go back to the attending.

Q. And how about if they are generated by a resident that has completed medical school?

A. They will probably come back to that resident who is following the patient, but they may also come back to the attending, as well.

Q. Doctor, what are some of the risk factors for coronary artery disease?

A. Age, sex and family history are the primary

risk factors associated with coronary artery disease.

Q. Would high cholesterol be a risk factor?

A. There are also modified risk factors, which include high blood pressure, elevated cholesterol, lifestyle, tobacco use.

Q. Obesity?

A. Yes.

Q. And what would be some of the signs or symptoms that would alert you to the fact that a patient was having problems with coronary artery disease?

A. Usually a patient may describe shortness of breath on exertion. A patient may also discuss having chest pain.

Q. What about heart irregularities?

A. They may possibly be associated.

Q. Complaints of indigestion?

A. There are a myriad of different complaints that can also be associated with that, and that would include indigestion.

Q. Aching in the shoulder?

A. Not typically. More of a numbness that usually occurs.

Q. You haven't seen any patients that have

complained of aching in the shoulder as a result of coronary artery disease?

A. It can occur. It can occur.

Q. How about complaints of chest tightness, is that associated with complaints of coronary artery disease?

A. It can be.

Q. Changes in the electrocardiogram?

A. Electrocardiogram changes can be associated with that.

Q. And Doctor, from the perspective of a family practice physician, how do you diagnose coronary artery disease in a patient?

A. Coronary artery disease diagnosis, like any disease diagnosis, requires a history, physical exam, and once those initial steps have been used, then you can evaluate with other laboratory tools to assess risk factors associated with coronary artery disease.

Q. And what other laboratory tools are we talking about here?

A. A lot of times you can evaluate with chemistries, including serum cholesterol, and more specifically, a complete profile which can ascertain the better risk stratification with that. You may

also want to check a serum glucose associated with that, complete blood count can be associated with that, electrolytes can be helpful, and usually an electrocardiogram.

Q. What would be the indicators for ordering a cardiac stress test on a patient?

A. A cardiac stress test, if you had a patient that you felt the history and physical exam and the use of laboratory tools suggested a high probability of underlying coronary artery disease, then you may request it.

Q. If a patient presents with several episodes of chest tightness and has risk factors that include obesity and borderline hypertension and high cholesterol, smoking, and is over the age of 40, would that warrant a stress test?

A. It would really depend upon the history and the physical exam of that specific patient, because the description of chest discomfort can have multiple implications, and also depends on the patient's other medical problems, and some of those symptoms can be associated with the other areas of pathology that they have.

Q. If, in addition to those things that I just mentioned, a patient has ST and T wave changes on

the EKG, would that, in addition to what I previously mentioned, warrant a stress test in a patient?

A. An EKG is simply measuring the electrical activity of the heart, and it can only be taken in the context of how it relates to the history and the physical exam of the patient, and it may warrant further interventions.

Q. You are not in a position to say that a stress test would be warranted, though, based on the information that I provided you with?

A. I would probably need more specific information to really try to tease out better the -- for example, if you have someone with chest discomfort, there are a multitude of possible etiologies with that. And you would have to tease through all the signs and symptoms associated with that, and also demand to get a better character of the chest pain, of all the associated medical problems the patient has, what it is attributed to. And so all those factors determine it, to really determine whether or not a further intervention is needed.

Q. And even with the addition of ST and T wave changes on an EKG, that wouldn't be sufficient to

warrant stress testing?
A. It all depends upon the association of the history and the physical exam in relation to that.
Q. Doctor, if a patient has what is considered to be significant coronary artery disease, what are the possible treatment options that the patient has?
A. If a patient has diagnosis of coronary artery disease, they can be treated with medical management, they can also be treated with surgical interventions. That can include doing a coronary by-pass surgery, if found to be appropriate, as well as non -- some less invasive procedures utilizing a cardiologist to do angioplasty.

So there are a number of treatment modalities in a patient with documented coronary artery disease.
Q. If a 41 year old obese patient with high cholesterol, female, family history of coronary artery disease and smoking comes into the clinic and has concerns about past irregular heartbeats, is that something that a physician should investigate?
A. Anytime any patient comes to the office and has complaints, they should all be evaluated thoroughly through the history and the physical exam to try to delineate what the etiology is of their

complaint.
Q. And how should that particular complaint be investigated, what should a family practice physician do?
A. I think you require they do a thorough history to evaluate that, a physical exam that assesses the patient's -- all areas of concern, and then order appropriate tests that may be helpful with that. That includes tests, depending upon the situation, and then taking that to try to create a differential diagnosis of what the possible etiology is of that, and from there, make a decision what is your highest probability of what is going on, and if there are other things that are in your differential but not as high, you will follow them clinically and see if they become more apparent at a later time.
Q. Would it be important to know when those irregular heartbeats occurred, would that be something that you would ask the patient?
A. Yes, it may be helpful.
Q. And would it be important to know how often it was occurring?
A. Yes, it would be helpful.
Q. And would it be important to know under what circumstances it was occurring, what the patient was

doing at the time that they occurred?
A. Yes.
Q. And would it also be important to know if anything seemed to increase or decrease the frequency of those irregular heartbeats?
A. Yes.
Q. And would it also be important to know how long those episodes were lasting?
A. Yes.
Q. And those would all be important things for a physician to ask when they were taking a history of a patient that was complaining of irregular heartbeats, correct?
A. Those are reasonable things to ask if a patient presents with that complaint.
Q. So your answer is yes?
A. Yes.
Q. How does a physician determine whether complaints of irregular heartbeats is something significant or not?
A. If someone is, for example, in more significant -- if someone is describing irregular heartbeats and passing out, versus someone who says, 1 drink a lot of coffee and I feel some fluttering in my chest.

Q. Anything else that would tell you that these irregular heartbeats were significant, other than a complaint by the patient that they were passing out, anything else that would be important?

A. If the patient had associated shortness of breath, if they had associated diaphoresis with that, and associated chest pain with that.

Q. Would it be important to identify what was causing the irregular heartbeats in a patient that had that type of complaint?

A. It would, I think, depend upon the situation, the patient either describing what they perceive as irregular heart rate, and it may warrant a test, such as electrocardiogram or further interventions.

Q. So I don't want to misunderstand you. Sometimes it is important to find out why a person is having irregular heartbeats, and sometimes it is not?

A. No. I am saying that it is important with all complaints to do a thorough history to determine the etiology of that to determine whether it is a more concerning or a more benign matter.

Q. I am not sure that I understand your answer.

It is important to find out what is causing the problem, the irregular heartbeats?

A. It is important to find out what is causing all problems, yes.
Q. Because in some instances, it could be a benign problem, and in other instances, it could be a very serious problem; would that be correct?
A. That would be correct.
Q. Now, if a patient was having irregular heartbeats caused by premature ventricular contractions, that would be a cause for heightened concern, correct?
A. Well, it depends. A lot of people, most all of us, have premature ventricular contractions that are asymptomatic. And that usually does not require any intervention.
Q. At what point would irregular heartbeats caused by premature ventricular contractions become a concern that would require some type of treatment?
A. When a patient becomes symptomatic with that, or there are prolonged episodes of that occurring.
Q. What about frequency of ventricular premature contractions, is there any particular level that you would begin to treat a patient for premature ventricular contractions?
A. It usually is dependent upon how significant it is, because some of the medications that they

have found them to be controlled with sometimes have caused more problems, so we are always cautious in utilizing medications. In many cases where I have a patient who has multiple -- to the point where I am questioning treatment of someone with symptomatic arrhythmias, I usually have consulted a specialist to assist me with that.

Q. Are premature ventricular contractions more concerning if they are coupled?

A. It depends if the patient is more symptomatic with that, and how frequently they occur. But the more it occurs, the less benign it is.

Q. So the more often you see coupling of premature ventricular contractions, that would heighten your concern, as opposed to some isolated premature contractions?

A. Yes.

Q. Doctor, do premature ventricular contractions of the heart place a person at increased risk for lethal ventricular fibrillation and ventricular tachycardia, as compared to someone who doesn't have those types of arrhythmias?

A. I am sorry, could you repeat that question again?

MS. TOSTI: Would you read my question

back

(Record read.)

Q. Underlying premature ventricular contractions.

A. I think only if it was much more significant findings with that, if they had much more -- they occurred more frequently, more symptomatic, rather than an occasional PVC occurring, or premature ventricular contraction occurring.

Q. So the risk for someone without premature ventricular contractions, as compared to somebody with them, for ventricular fibrillation or tachycardia, is the same?

A. No, if the person -- well, pretty much we all have isolated premature ventricular contractions at one point or another, but someone who would have more significant premature ventricular contractions, were symptomatic, would be at higher risk for a lethal arrhythmia.

Q. What does the term coronary ischemia mean?

A. Coronary ischemia refers to the coronary arteries themselves, which supply the blood to the heart, may be compromised by a number of mechanisms which decrease the ability of the heart to receive oxygen. And when they don't receive the oxygen, it

decreases the function of the heart, and because of this lack of oxygen -- which is necessary to perform its physiological task.

Q. And can coronary atherosclerosis cause coronary ischemia?

A. It can be associated with that.

Q. So the answer is yes?

A. Yes.

MR. BETZ: No, the answer isn't yes, the answer is, it is associated with it.

Q. Doctor, I want to ask my question again. Can coronary atherosclerosis cause coronary ischernia?

A. It can be associated with that.

Q. Is there a high incidence of coronary ischemia associated with coronary atherosclerosis?

A. The more significant the atherosclerosis is, the higher the risk of ischemia occurring.

Q. Can coronary ischemia cause a patient to have premature ventricular contractions?

A. I believe it may have some association, but I am not certain of the full literature with that.

Q. Would you agree that coronary ischemia increases the risk for lethal ventricular arrhythmias?

A. In a patient that -- well, it may have -- I am sorry, could you repeat that question again.

MS. TOSTI: *Go* ahead.

(Record read.)

A. (Continuing) It can have an association with. that.

a. The more significant the coronary ischemia, the higher the risk for lethal arrhythmias, ventricular arrhythmias; would you agree with that?

A. Possibly.

Q. Doctor, what does the term hypoxia mean?

A. Hypoxia refers to a decreased amount of oxygen in the circulation.

Q. And would you agree that in a patient with coronary artery disease, hypoxia increases the risk for cardiac ischemia?

MR. BETZ: I am sorry, could I have that back, please.

(Record read.)

A. It can have association with that.

Q. In a patient with significant coronary artery disease, the risk for hypoxia is -- I am sorry, strike that. Let's let that go for a minute.

Would you agree that in a patient with coronary artery disease, hypoxia increases the risk

for cardiac irritability?
A. Hypoxia can be associated with irritability of the heart.
Q. And if a patient has coronary artery disease, there may be a risk of having less oxygen getting to the heart muscle, correct?
A. Yes.
Q. And in a patient that has hypoxia, if you add coronary artery disease to the mix, you would even have a higher concern that that patient may develop cardiac irritability, correct?
A. Possibly.
Q. In a patient with significant coronary artery disease, would you agree that hypoxia increases the risk for cardiac arrhythmias?
A. It is possible.
Q. And if a patient has severe coronary artery disease and suffers from hypoxia with oxyhemoglobin desaturations falling to 60 percent, would you agree that the patient would be at increased risk for cardiac arrhythmias?
A. Could you repeat the question?
MS. TOSTI: Go ahead.
(Record read.)
MR. BETZ: Increased risk over what?

Q. (Continuing) As compared to a patient with normal oxyhemoglobin saturations.
A. I am uncertain what level of desaturation may put the patient, that patient, at risk.
Q. Would you have a heightened concern for a patient that had oxyhemoglobin desaturation to 60 percent, and also had coronary artery disease, as compared to someone who did not have those levels?
A. I probably would be involving a specialist to help me manage that situation.
Q. So you are not in a position to know whether or not that would be an increased risk for the patient?
A. It is an area that is beyond my expertise, and I would probably employ a specialist to assist me with that.
Q. In October of '95 when an adult patient presented with new onset of seizures in the Family Practice Center, how would that patient be worked up?
A. A patient typically would have a series of chemistries done, usually looking at serum glucose, electrolytes, including magnesium, calcium, phosphorus, sodium, potassium, to look for any metabolic association with that. They may also have

a complete blood count that would be done, and probably an imaging study may be warranted, as well.

Q. What type of an imaging study?

A. Usually a CAT scan.

Q. A CT of the brain?

A. Yes.

Q. How about an EEG?

A. That is something that is also considered useful, but that is not my area of expertise, and usually I would employ a consultant to assist me with that.

Q. Is it important to take a thorough history on a patient with a new onset of seizures?

A. Yes.

Q. And would a prudent physician want to know under what circumstances the seizures occurred?

A. Yes.

Q. And would a physician also want to know what physically occurred during the seizure episode, what was observed?

A. Yes.

Q. And the reason that that is important is because there may be clues to the cause of the seizure in the history, correct?

A. That is correct.

Q. And the reason that a prudent physician would want to determine the cause of the seizure is because you can't determine proper treatment until you know what is causing it; would that be a correct statement?

A. The etiology -- finding the underlying etiology does assist in the management, as well. But in the process of that workup, which may take a while, the patient may be put on anti-seizure medications.

But again, if I would be in that situation, and when I have been in that situation, I have called a specialist, a neurologist, to assist me with that management decision.

Q. But you would agree that effective treatment of seizures is dependent on finding out what is causing the seizures, correct?

MR. BETZ: If possible.

A. Not all seizures -- we do not find the underlying etiology in a number of seizures. So sometimes we may not -- all tests may come back, and be negative, they may not show that, but the patient may still have seizures.

Q. But generally speaking, Doctor, as a physician, you would want to know, if possible, what

was causing the seizures in order to determine what the effective treatment was, correct?
A. If I could find the etiology, it would be beneficial in treating the patient.
Q. Because, Doctor, if you have an infection that is causing seizures, it would be important to know that, correct, because you would then treat the infection, correct?
A. Correct.
Q. Or if there was some type of a toxic chemical that was causing it, it would be important for you to know that, so that that particular chemical could be withdrawn, correct?
A. Very much, in most cases, when patients present with first time seizures, a toxicology screen is usually employed, as well, to determine that, as well as serum alcohol level.
Q. And so you would agree that it is important to find out what the etiology is, if that is possible?
A. If it is possible, it would assist in the management.
Q. Doctor, when a person experiences a generalized grand mal type seizure, what are some of the things that are observed with that type of

seizure?
A. The patient generally refers to seeing signs that occur throughout the body, so the patient may shake all extremities, may be unconscious and not responsive during that period of time, may foam at the mouth, eyes may roll to the back of the head. The patient will have a period afterwards, called a postictal state, where the patient may not be responsive after this event.
Q. Is there a loss of bowel or bladder control sometimes?
A. Yes, there is.
Q. What happens to a person's breathing pattern during a generalized grand mal type seizure?
A. Depending upon the situation, a patient may -- it varies -- but a patient may breathe more or less during that time.
Q. In some instances, is there no breathing that occurs during a grand mal seizure?
A. Some patients have been known to choke during that time, and that may occur.
Q. Doctor, can generalized grand mal type seizures in some instances be life-threatening?
A. Yes, if they become intractable.
Q. If a person's brain does not get enough

oxygen, it may, in some instances, cause a seizure to occur, correct?

A. That is correct.

Q. And Doctor, you would agree that sustained ventricular arrhythmias can, in some instances, result in a lack of oxygenated blood getting to the brain, correct?

A. That had to be a pretty prolonged ventricular arrhythmia.

Q. You have seen patients with ventricular fibrillation or ventricular tachycardia who have suffered hypoxic ischemic brain injury, correct?

A. Yes.

Q. And Doctor, if a patient's brain is not getting enough oxygen because they are in a sustained ventricular fibrillation or ventricular tachycardia, you would agree that that may cause them to have a seizure, correct?

A. It could be possible.

Q. In some instances?

A. Maybe.

Q. What is obstructive sleep apnea?

A. Certain individuals, the process of sleeping may have a period of time where, due to a mechanically -- the way the mouth and throat work,

may be closed for a period of time, that may cause an absence of breathing for a prolonged period of time.

Q. Would it be correct to say that it is an upper airway occlusion that occurs during sleep?

A. It may be. That is probably more common.

Q. And would it be fair to say that there is often oxygen desaturations that are seen with obstructive sleep apnea?

A. It can be.

Q. What are the risk factors for obstructive sleep apnea?

A. Obesity, snoring, kind of -- I think if someone has a large neck, it has been associated with that.

Q. What about an enlarged tongue?

A. I believe that may be associated with that.

Q. Do you know whether hypertension or cardiovascular disease is associated with sleep apnea?

A. I know that patients who have high blood pressure and coronary disease have a higher amount -- it is more prevalent in that population to have sleep apnea.

Q. And Doctor, in taking a history on a patient

in which you may be suspicious of obstructive sleep apnea, what are some of the things that you would want to inquire about?

A. The sleeping pattern of the patient themselves, whether they have witnessed periods where they are not breathing, or snoring associated with that, that may be helpful.

Q. Would excessive daytime sleepiness be something that might key you in to the possibility of obstructive sleep apnea as a problem?

A. It does have an association.

Q. How about complaints of disrupted sleep?

A. It could possibly be associated with that.

Q. How about depression, would that be something that is associated with obstructive sleep apnea?

A. I am not certain if that is a direct association or not.

Q. Doctor, would you agree that severe obstructive sleep apnea may, in some cases, cause a patient to experience episodes of severe hypoxia during sleep?

A. I am not a sleep specialist. If there is a patient where there is a suggestion of possible sleep apnea, I have utilized a specialist in that area to assist me.

Q. Are you aware of whether life-threatening complications are associated with severe obstructive sleep apnea?

A. I know that the association increased the amount of automobile accidents that are associated with that, but the full ramifications I am not well versed on.

Q. Do you know whether sudden death is associated with severe obstructive sleep apnea?

A. I believe it is not.

Q. Do you know whether lethal arrhythmia is associated with severe obstructive sleep apnea?

A. I am uncertain. I believe there is some association, but I am not certain.

Q. Lethal arrhythmia would result in a sudden death, wouldn't it, Doctor?

A. Well, I guess I should clarify that, that it may lead to some irritability, but I am not an expert in this area.

Q. So you would defer to someone that was an expert on sleep apnea in regard to whether or not severe obstructive sleep apnea is associated with sudden death or lethal arrhythmia?

A. It is one area where I don't independently manage.

Q. So you would defer to an expert in that area, correct?
A. Yes.
Q. Doctor, have you, in the course of your practice, treated patients with obstructive sleep apnea?
A. In the course of my practice where I teach residents and medical students, there have been some cases, not a lot of cases, with some of my colleagues, but they have been managed by a specialist.
Q. Prior to the time that Patricia Smith was diagnosed with severe obstructive sleep apnea, how many patients had you, personally, seen, treated, taken care of, with obstructive sleep apnea? And I am speaking of adult patients.
A. I have not had any private patient of mine where I managed for that disorder. And I am -- there may have been a few patients, from some of my colleagues, but they were all managed by a specialist.
Q. What is a polysomnogram?
A. I understand it is a test that evaluates an individual's sleeping pattern, and it helps evaluate the level of oxygen that occurs during sleep, the

type of sleep the patient has, I think it also evaluates the cardiac rhythm during that time. I have had no formal training in that area, so I would defer to a specialist.

Q. And prior to the one that was ordered on Patricia Smith, had you ever ordered a polysomnogram for one of your patients?

MS. PETRELLO: Let me object to the extent that question implied that he ordered a polysomnogram.

Q. (Continuing) Did you order a polysomnogram on Patricia Smith?

A. It was requested by a specialist I was working with.

Q. Did you make the request for the polysomnogram?

A. I made it after the specialist requested me to do so.

Q. But you actually made the arrangements to have the test done, correct?

A. Because of the way managed care works, the primary care physician has to request a test.

Q. And prior to the time that you made the request on Patricia Smith, had you ever made a request for polysomnogram for any other of your

patients?
A. I believe only a few times, but usually I have consulted with a specialist throughout my training.
Q. Doctor, do you know how severe obstructive sleep apnea is treated?
A. There are certain measures depending upon it. From what I understand, a lot of it is some lifestyle behavior modifications that are requested. Sometimes there is the use of appliances to assist with the opening of the mouth. There is also the use of so-called CPAP, which is continuous air pressure. In severe cases, they have a tracheostomy performed. Most of the cases, especially more mild forms, it is usually doing more conservative things, such as weight loss.

But again, this is an area where I imagine it would be decided by the specialist that I would utilize.
Q. Have you ever ordered CPAP for a patient of yours?
A. No.
Q. And that is an area that you would defer to an expert in that area?
A. That is correct.

Q. In 1995 and '96, how many days a week were you in the Family Practice Center?
A. Pretty much, I would say, every day. I, as a physician who is also an academic and a clinical, sometimes I would be assigned times to be in the hospital, other times I would be in the practice, and other times may be involved in teaching.
Q. But physically in the Family Practice Center, were you there on a daily basis, usually?
A. Yes.
Q. Were there any set hours that you were there?
A. It would vary how my schedule would occur. There were some half days. I don't recall exactly which were half days at that time that I would be there. But usually a majority of my time would be in the Family Practice Center seeing patients or precepting.
Q. And if you weren't there, you might be in the hospital somewhere?
A. The hospital, or administrative office.
Q. And were you reachable by pager or some other method, if you weren't in the Family Practice Center?
A. I usually carry a beeper, especially since I do obstetrics, as well, to be available.

Q. And in regard to the time period of 1995 and 1996, would you just describe what your duties and responsibilities as an attending physician in the Family Practice Center would be?

A. My duties are to evaluate and treat my panel of patients, and if there is an additional sick patient that needs to be seen, to precept medical students and residents and oversee their care of the patients of the Family Practice Center.

Q. Doctor, you would agree that as an attending physician in the Family Practice Center, you had a duty to be aware of the clinical history and the other information available in the Family Practice Center chart of the patients that you were treating, correct?

A. Yes, though it also depends -- how rigorous you evaluate the chart depends upon the case and situation. For example, a one year old with a fever and pulling at their ears may not require as much of an investigation as someone coming in with abdominal pain, who has had previous surgeries, requires a more thorough evaluation.

Q. Was Patricia Smith assigned to your panel of patients?

A. Yes, she was.

Q. And would you agree that in regard to the information that was contained in her chart, that you, as an attending physician, had a duty to be aware of the information that was contained in her chart?

A. I reviewed the case of the patient, and I saw her, and discussed with her. I would say **I** reviewed those, and determined my management and care of the patient based on that.

Q. So would that be a yes to my question, that you have a duty to be aware of the information contained in Patricia Smith's chart, because she was a patient assigned to your panel?

A. Yes,

Q. When your patients were being seen by the medical students or the residents, and then on a follow-up visit you saw the patient, did you go back and take a look at those notes that occurred prior to the time that you cared for the patient? And I am speaking of a patient that was on your panel.

A. I typically do review everything. I can't remember the exact particulars, but usually I review the general -- what I can take from the chart to assist me in my management. But a lot of times, when I first see a patient, I will start from

scratch and really ask them a lot of questions.

For example, my first visit with the patient, I had two and a half pages worth of notes, because I tried to go through issues the patient was concerned with, but also to look more thoroughly through the patient's family history, and how those things may affect the patient so I can assist in the management from that point on.

Q. As we sit here today, do you have an independent recollection of Patricia Smith?

MR. BETZ: She means by that, apart from what you recall after looking at the chart.

A. I mean, very much, I remember the patient, if that is what you are asking.

Q. Yes.

A. Yes, I do remember the patient.

Q. And we spoke earlier, we said that the first time that you rendered care to Patricia Smith, I believe, was in December of 1993; is that correct?

A. That is correct.

Q. And at that time, you were her attending physician; is that correct?

A. Yes.

Q. How is it that Patricia Smith came to be

under your care, how was that assignment made?
A. All patients who come to the Family Practice Center choose to follow up with a number of primary care physicians there, including attendings and residents, to follow them.
In her specific case, she had been previously followed by one of my colleagues, Dr. John Sebas. Dr. Sebas had left town to go back to his family's -- be with his family, and I took over his panel of patients.
Q. So Pat Smith didn't specifically choose you, she was assigned to your care; would that be fair?
A. I am not certain. I think patients of Dr. Sebas were informed that I was taking over his patients, but if they had another physician that they had seen, they definitely would be permitted to follow up with that physician.
Q. Now, Doctor, I would like you to take a look at the note that I believe is written on December 9th of 1993.
A. Yes.
Q. Was that a visit that you saw Patricia Smith?
A. Yes, it was.
Q. And those notes are in your handwriting; is that correct?

A. Yes, it is.
Q. And one of the complaints that Patricia Smith had at that particular visit was poor sleep; is that correct?
A. She did mention that.
Q. And at that visit, did you determine what was causing her poor sleep?
A. She had a rather positive depression inventory that I obtained. She described a tremendous amount of stress, both mentally and physically. She had some structural problems that are described with her shoulders and her foot.

She talked about a tremendous amount of stress that she had. She talked about stresses she had with her family. And because of that, I also took the time to thoroughly look at her family, and see the medical problems associated with that, and the stresses she incurred, for example, with the problems with alcohol in the family, and how this is impacting upon her and her children.

And from that, I created a depression inventory that described poor sleep, along with changes in her diet, increased eating secondary to stress, she had a blues feeling, and periods where she was rather tearful.

Q. And from what you just told me, were you attributing her poor sleep to the symptoms of depression that you saw?
A. I felt that she -- it was in line with the other symptoms, and I felt that she had some level of depression associated with a tremendous amount of stress that she was describing.
Q. Well, Doctor, I am trying to get at what was causing the poor sleep?
A. My feeling at that time was that that was associated, at that visit, my first time seeing her, I felt it was associated with the fact that she was depressed and had a lot of stress --
Q. Thank you.
A. -- which can affect sleep.
Q. Did she have any signs or symptoms that would put her at increased risk for obstructive sleep apnea at that time?
A. The patient was obese, and did have a suddenly elevated blood pressure. But in each of those areas I also was dealing with a decrease in those risks, that, and other concerns, by trying to get her to go through dietary changes, exercise and to change these lifestyle concerns.
Q. Did you take any history to rule out

obstructive sleep apnea as the cause of her poor sleep at the December 9th, '93 visit?

A. At that time, the patient did not describe, or based on the note I have here, did not describe any extra characters of her sleep that would lead me in that direction.

Q. So the answer is no, you did not take any history to rule out obstructive sleep apnea; is that correct?

MR. BETZ: I don't think that is the import of his testimony, but go ahead.

MS. TOSTI: That is what I am asking him.

A. At that time, it was not something that was apparent on history.

Q. So you did not take any specific history to rule out obstructive sleep apnea because you did not see any indicators for it; is that a correct statement?

A. That would be correct.

MS. CUTHBERTSON: Can we take a break in a couple minutes, please?

MS. TOSTI: Sure. Now would be fine, if you would like to.

MS. PETRELLO: That would be great.

(Short recess had.)

BY MS. TOSTI:

Q. Doctor, would you agree that obstructive sleep apnea could have been the cause of her poor sleep?

A. Based upon what I have ascertained here, I can't really assess that.

Q. But you know later she was diagnosed with severe obstructive sleep apnea?

A. Uh-huh.

Q. And retrospectively, although you didn't have the information at the time, wouldn't you agree that it is possible that her poor sleep could have been the result of obstructive sleep apnea?

MR. BETZ: I am going to object to questions in terms of possibilities, but go ahead and answer.

A. It is always possible, but didn't seem apparent at that time.

Q. And I appreciate that, Doctor, because you didn't have the information from the polysomnogram at that time.

Her blood pressure was 140/92 at the December --

A. 9th.

Q. -- 9th visit. Did that raise any concern in your mind?
A. Well, there were a whole series of things that were going on.
Q. I would like to speak to the blood pressure.
A. And that led to risk modification immediately, with that.
Q. So would it be fair to say that it did raise a concern to you?
A. It was something that I noted and was following with that, and wanted to see the patient in several weeks to follow up on that.
Q. Okay.
And I believe you said previously, Doctor, that you were aware that hypertension is associated with obstructive sleep apnea; is that correct?
A. Yes, I know now that hypertension has an association with obstructive sleep apnea.
Q. Doctor, I would like you to refer to the clinic notes of January 27th, 1994 which I believe were written by a Doctor -- and I hope I say his name correctly -- Whitley?
A. Dr. Whiting.
Q. I am sorry?
A. Whiting.

Q. Whiting?
A. Yes.
Q. If you take a look at item Number 7 that Dr. Whiting has recorded here, I believe it says, concern about past irregular heartbeats; do you see that entry under Number 7?
A. Yes.
Q. Did Dr. Whiting discuss these findings with you on the day of that visit?
A. I do not believe so.
Q. Was Dr. Whiting a resident or a medical student at the time that he saw Pat Smith on this day?
A. He was a resident.
Q. And would he be required to discuss that particular visit with an attending physician?
A. Yes, he should have, or if -- well, he also, I believe on that date, would be reviewed -- all the charts are reviewed by attending physicians.
Q. And she was on your panel of patients?
A. Correct.
Q. So would you have been the attending physician to review this particular visit note?
A. Not necessarily. If someone came in by a sick visit, it would be reviewed by the attending

physician who was there at that time.
Q. And you don't have any recollection of specifically talking with Dr. Whiting about concerns that Pat Smith had in regard to past irregular heartbeats, correct?
A. I do not remember that.
Q. You have indicated to me that as an attending, you have a duty to know the information that is in your patient's chart. Are you aware of any follow-up that was done regarding Pat Smith's complaints about irregular heartbeats?
A. I do not believe that that is a complaint that she, on follow-up visits to myself, discussed.
Q. Would you agree that complaints of irregular heartbeats in a patient such as Pat Smith should be investigated?
A. If the patient discussed with me that she had irregular heartbeats, and that was persisting, then that would require follow-up.
Q. And you did not specifically do any follow-up because she didn't complain to you specifically about past irregular heartbeats; would that be fair?
MS. CUTHBERTSON: Are we talking about this visit?
MS. TOSTI: I am talking about

anytime.

Q. (Continuing) Did you ever do any follow-up for her complaints of past irregular heartbeats, at any point in time?

A. She had no subsequent complaints of irregular heartbeats after that.

Q. Did you make any inquiry in regard to whether she had any complaints of irregular heartbeats, at any time?

A. I can only base it on my record, and I don't see any mention or discussion of that.

Q. When a patient complains of past irregular heartbeats, what type of follow-up would be warranted?

A. It depends completely upon the history, physical examination, to determine appropriate tests to be done.

Q. Doctor, would you agree that that type of a complaint would warrant at least an electrocardiogram?

MS. CUTHBERTSON: Object.

Just for the record, you can answer, if I put an objection on.

A. It again really depends upon the history and the physical exam that go along with that. Not

everyone who has chest discomfort, or has -- their interpretation of, you know, irregularity, a lot of people with anxiety have associated kind of feelings in their chest. I mean, there are numerous etiologies that may not require subsequent further evaluation, other than a good history and physical exam.

Q. But in a patient such as this, Patricia Smith, with her history that you are aware of, and the complaint of concerns about past irregular heartbeats, should an EKG have been done at that visit?

A. I wasn't the treating physician at that time, so I cannot make a decision based upon the information in front of me.

Q. But Doctor, you are her attending physician, and you were overseeing her care, perhaps not at this particular visit, but based on what you knew about Pat Smith up to that point in time, the higher blood pressure that you noted previously, all of the cardiac risk factors that this lady had, would you agree that an EKG should have been done at this visit, with a complaint of concerns about past irregular heartbeats?

A. It is really difficult to comment on that,

because also on my previous visit I noticed some level of anxiety and some other factors, and I honestly can't tease that out.

Q. Wouldn't an EKG have been helpful in determining whether there was a specific cardiac problem?

A. Like I said, looking at this chart in relation to a multitude of complaints, you know, I cannot really make a full opinion upon that, or what she meant by that.

Q. Would you agree that follow-up should have been done on a complaint like that, some type of follow-up?

A. A lot of times we do follow patients to see if they have persistent symptoms that go on. If someone described to me that they had had -- felt an irregular heartbeat ten years ago, but had not described any subsequent discomfort, I don't, you know, think further workup would be required or does not require electrocardiogram or further tests at that time.

Q. But in this particular instance, we have a patient coming in and saying that she is concerned about past irregular heartbeats. I don't know that that would have occurred ten years before, Doctor.

A. Yes. I am just saying, too, that I am uncertain about the character of that, and what it requires. And I noticed that it was not a subsequent complaint of hers, so it is hard for me to decide whether or not an electrocardiogram was required at that visit or subsequently.

Q. Now, Doctor, after that visit that we were just speaking about, which is dated January 27th of 1994, when is the next time that you saw the patient?

A. Let's see. I saw the patient December, '93. Then I saw her -- she did not follow up with me until August of '94, though I wanted to see her three to four weeks after I saw her in December of '93. So she didn't come back until August 19th of 1994.

Q. Well, she was seen before that, wasn't she, in June of '94?

A. Uh-huh.

Q. You just didn't see her, correct?

A. No, I did not.

Q. Dr. Whiting saw her, correct?

A. Uh-huh.

Q. And the time that you saw her was August 19th of 1994; is that correct?

A. Yes, it is.
Q. And why was she at the clinic that day?
A. She was in for a checkup, they described here. At that visit she came in describing an overwhelming feeling that she gets --
Q. Just because it is a little difficult to read, if you could just read the beginning part of your note, so that I can --
A. Sure. This 40 year old black female with complaints of, quote unquote, overwhelming feeling, comes on fast and resolves rapidly. Talked to us about this occurring over the past seven to eight months. She described increased amount of stresses, describes the stress with raising her kids, there are too many people. The family that they are living with, the brother was drinking and, quote, gets on my nerves, end of quote.

She works as a school bus driver, quote, I am running all the time, end of quote.

Her kids and mother -- I guess she is running all the time for her kids and her mother and, quote unquote, has no time for myself.
Q. Okay, that is fine.

Now, at this visit, did you review the notes from the previous visits that Pat Smith had had that

you were not in attendance, the notes of January 27th, '94 and June 3rd, '94?

A. I might have. I did not make any notation of that.

Q. Wouldn't it be important to determine if there were any continuing problems that you needed to know about?

A. Yes.

Q. Now, if you look at the notes of January 27th and June 3rd, you will note that Patricia Smith complained of fatigue at both of those visits. And I will give you a minute just to look at those.

On June 3rd, it is done under the A of the SOAP note.

A. Okay.

Q. And on the 27th, it was item Number 6.

So when you saw her on August 19th of 1994, did you make any inquiry as to how she was sleeping when you saw her?

A. I don't see any notation to that.

Q. Wouldn't that be something that a reasonably prudent physician would want to follow up, if that was a continuing problem she was having?

A. She obviously had some more concerning problems with this overwhelming feeling that she was

describing, and it looks like on this visit it was so significant that she had multiple concerns I spent time working with her on, that I focused on that, and dealing with that.

Q. So you did not specifically make inquiry as to how she was sleeping, based on the notes that you have there, correct?

A. That is correct.

Q. When you saw her on August 19th, did you ask her whether she had any more irregular heartbeats?

A. That is not something that came up in our encounter.

Q. She didn't volunteer any information in regard to her heartbeats, and you didn't ask her any specific questions that you recall?

A. It appears that way.

Q. Do you know what caused her irregular heartbeats?

A. I cannot say.

Q. Doctor, patients can have intermittent episodes of cardiac arrhythmia, correct?

A. That is correct.

Q. And if you take an apical rate at a particular time on a patient, you may or may not catch a cardiac arrhythmia if the patient isn't

having it at that particular point in time, correct?
A. That is correct.
Q. Doctor, I would like you to take a look at the notes of February 14th, 1994.
A. Okay.
Q. I am sorry, '95.
A. (Witness complies).
Q. Were you in attendance during this particular clinic visit?
A. I was not.
Q. If you look down at the bottom of the note, do you recognize who wrote this particular note?
A. Yes, it was Warren Wong, M.D.
Q. If you look down at the bottom of the note, under the A --
A. That is Dr. Ann Witherspoon.
Q. It indicates, follow-up with Dr. Rowane for WAC; do you see that?
A. Well adult care.
Q. And then on the next line, I believe it says, will need EKG, and then --
A. Baseline.
Q. -- baseline is written in above that, next visit; do you see that?
A. Uh-huh.

Q. Do you know why an EKG was done on Patricia Smith on this particular visit?
A. At this time, her blood pressure became more significant, that it was considered a baseline study for someone now who is demonstrating true hypertension.
Q. I think I misspoke here, because it says, baseline at the next visit.
Did Doctor -- I am sorry, who did you say wrote this note, Doctor --
A. Wong.
Q. Dr. Wong.
Did Dr. Wong discuss this particular visit with you?
A. I don't remember.
Q. And it is your belief that the reason that they were going to do an EKG on her was because of the hypertension that she was exhibiting; is that correct?
A. Yes.
Q. The next visit is on February 21st, 1995; do you see that?
A. Yes.
Q. Were you precepting Dr. Leventhal at that visit?

A. Dr. Leventhal does note that he has discussed the case with me, so I probably did precept the case or he got in touch with me concerning that.

Q. Do you know whether or not you actually saw Patricia Smith at that visit?

A. I do not remember.

Q. But it is likely that at least the information from that visit was discussed with you; is that correct?

A. Correct.

Q. The last part of the note says, discussed with Dr. Rowane.

Do you have any recollection as to what Dr. Leventhal discussed with you at that visit?

A. Not off the top of my head. I am sure he probably presented the case to me about the patient, and may have informed me that he needed to increase her antihypertensive medicine.

Q. Would that be the usual scenario when you were precepting a physician on a visit such as this, that you would sit down and discuss their findings?

A. Yes. In some cases, though, they may even page us or get in touch with us and talk to us about a case, and may present that.

Q. Now, there was an EKG that was done at this

visit, correct?
A. That is correct.
Q. Did you interpret the EKG that was done at this February 21st, 1995 visit?
MR. BETZ: At that time, or any time?
MS. TOSTI: At the time of the visit, let's start with that.
A. I don't believe so, because I did not sign the EKG.
Q. If you were precepting Dr. Leventhal and an EKG was done, if he was doing a presentation to you, would he present to you that EKG, usually?
A. Typically. But in this case, I can't remember if he presented to me in person or discussed with me over the phone, I am not certain.
Q. If it was in fact over the phone, would anyone, besides Dr. Leventhal, be looking at that EKG? Did he have anyone else that would be responsible for interpreting it at the time of the visit?
A. Typically, EKGs are reviewed with the attending that is there, but I know that I did not sign this, so I may not have been there at that time, and he may have just gotten in touch with me by phone.

Q. What level medical personnel was Dr. Leventhal at the time of this particular visit? And by that I mean, what year in school or --

A. He was a resident physician, and I believe he may have been a senior resident at that time, a third year resident, second or third year resident. I think he was a third year resident at that time.

Q. So if he was in fact in contact with you, would he be required to take that EKG to anyone else to have them look at it, if you in fact were not available?

MS. CUTHBERTSON: Object.

Go ahead.

A. It depends. He may have described the situation to me and based it on that. I really can't make a full comment on that.

Q. Now, Doctor, you saw Patricia Smith, I believe, at the next visit, correct?

A. Yes, I did.

Q. And another EKG was done at that visit, correct?

A. Yes, it was

Q. And at that point in time, you did have an opportunity to look at both the EKG that was done on the 21st --

A. Yes.
Q. -- February 21st, as well as an electrocardiogram that was done on March 13th, when you saw her, correct?
A. That is correct.
Q. And you had an opportunity to compare the two?
A. That is correct.
Q. The EKG of February 21st, 1995, would you agree that that was an abnormal EKG?
A. It had some nonspecific findings in a certain number of the leads.
Q. I would like you to describe anything that you deem to be a significant deviation from normal?
A. Looking at --
Q. And you are looking at, I believe, the February 21st EKG, correct?
A. February 21st.
I think there was a question on the ST segment on V3 to V6.
Q. What was the question?
A. Well, she had a nonspecific change in the T wave.
Q. Can I see the copy that you are looking at?
A. (Witness complies).

Q. Is there anything else that you see that you would deem to be a deviation from normal on that February 21st EKG?
A. There are some slight nonspecific T wave findings in leads 2 and AVF.
Q. And what specific T wave findings are we talking about?
MS. CUTHBERTSON: Pardon me, did you say nonspecific?
THE WITNESS: Yes, nonspecific. Nonspecific.
Q. (Continuing)What are you seeing?
A. The T wave has some mild inversion.
Q. And which lead is that again?
A. 2, AVF.
Q. Now, I believe that Dr. Leventhal described peak T waves in the anterior leads. Are there peak T waves in the anterior leads?
A. If he was looking at V2 and V3, and I think he was questioning that.
Q. Now, there is a circle that is drawn around a complex in V2 and a complex in V3?
A. Yes.
Q. Do you see that on your copy?
A. Yes, I do.

Q. Do you know who drew those circles on the EKG?
A. I do not.
Q. To your knowledge, did you do that?
A. I do not believe so.
Q. Doctor, what would cause a patient to have peak T waves in the anterior leads?
A. There are a number of possibilities, but it has to be taken in context with the history and the physical exam. Some patients have some variation to their EKG where they may have some nonspecific findings. There also is association with possibly some underlying problems and metabolic problems that can also be attributed to that.
Q. Do you have an opinion as to what was causing Patricia Smith's peak T waves in the anterior leads?
A. I wasn't certain. I think that is why I repeated the EKG.
Q. And I will ask you again, do you have an opinion as to what was causing her peak T waves in the anterior leads?
A. At this time, no.
Q. Did you consider the EKG of February 21st to be a normal EKG, after you had an opportunity to repeat it at the March 13th visit?

A. I saw some variation between the EKGs, and some variations can occur with lead placement. And I was also uncertain of the fact that I didn't feel she had, based upon the history, a more -- as a primary etiology, a cardiac etiology.

And because of that, I made a note of that in my chart. I thought there were some mild changes, but that at that point the patient was clinically stable. And I was going to continue to follow the patient clinically, because I wasn't convinced that that primary etiology was that of cardiac in nature. And I also noted that I was going to consider doing a stress test to check for ischemia with exercise if her etiology became more apparent.

Q. Doctor, would you agree that the EKG of February 21st of '95, taken together with the EKG of March 13th of '95, should have raised a concern for cardiac ischemia in Patricia Smith?

A. It was something that I mentioned in my note, that I noted some changes, but based upon a history and physical exam, I felt that was in the differential, but I had a series of problems, the patient had a series of medical problems. And according to my differential diagnosis, I didn't feel that was as likely, but it was something that I

put on my differential and wanted to watch for and was going to consider.

Q. Well, what, other than cardiac ischemia in Patricia Smith, would have caused the differences between the two EKGs that you saw?

A. Sometimes lead placement can show a bit of a change with that. T waves can also be very -- sometimes can respond to a number of different situations.

Even cases of anxiety and other areas, it is very nonspecific, the changes that can occur, so there is a multitude of different etiologies that can cause some changes with that.

And I relooked into both of those, and in a comparison with my evaluation on March 13th, it was on my differential, but it wasn't high enough to require an immediate workup of that at the time.

Q. Did you believe that the differences between the February 21st and the March 13th EKG was due to inappropriate lead placement?

A. I didn't make a note of that at that time, but I did make a note demonstrating there were some mild changes with that, and described the fact the patient was clinically stable, and I need to clinically follow up on that to consider further

testing if warranted.

Q. Now, Doctor, at the March 13th, '95 visit, Patricia Smith had complaints in regard to some chest discomfort, correct?

A. Yes.

Q. If you could look down, I believe it is in the middle of the page, could you read us what you wrote in regard to that complaint?

A. Yes, I can.

Described chest discomfort in the right chest. I put a question mark by tight, and that I wasn't -- I put a question mark by that, it probably means that I wasn't convinced --

Q. Doctor, I would just like you to read what you wrote there, not interpret it at this point in time.

A. Okay.

Question mark by tight two weeks ago and one week ago, lasting only a few minutes. Then she also describes a feeling in the right side of the back and a question of the neck.

Q. Now, Doctor, you had an EKG that had some changes on it from the previous visit, that then -- and correct me if I am wrong -- normalized at this visit, in a patient that was complaining of two

episodes of possibly chest tightness. Did that raise a high concern for cardiac ischemia in Patricia Smith?

A. The patient had a multitude of medical problems, including very well documented problems with peptic ulcer disease and multiple other structural problems, and based upon the other symptoms the patient had, I wasn't convinced that this was coronary in nature.

Q. Doctor, did you take a thorough history in regard to this chest discomfort that she was having?

A. Yes.

Q. And was this pain radiating?

A. She described some discomfort she had in the right side of her back and the neck, but I did not note it as radiating. But there were other symptoms that she had, and she had these complaints, well documented structural problems in these areas, as well.

Q. What was she doing when this particular pain occurred in those two episodes that you have recorded?

A. I am not certain.

Q. Do you know when she had the pain?

A. I know she had had it two weeks and one week

prior to this.
Q. Wouldn't you agree that those questions as to what she was doing would be an important piece of information in diagnosing the cause of the chest pain or the chest discomfort?
A. Possibly.
Q. Did Patricia Smith have any risk factors for coronary artery disease at the time that you saw her on March 13th, '95?
A. Patricia Smith had a series of risk factors in that her blood pressure was elevated, she was obese, she was smoking, she had a borderline elevation of cholesterol from the first day I saw her. I was working on risk reduction in all of these matters.
Q. In regard to her chest complaints, what was within your differential diagnosis?
A. A lot of -- she had structural problems, she had well documented structural problems, including multiple joints that were bothering her that could be attributed to this, as well. Since this is in the right side, rather than the left, it is known as being typical of someone having a cardiac problem.
She also had problems with peptic ulcer disease, and just basing it on my note here, I

described most of the structural problems that she has had associated with that.

Q. Did you take any action to rule out coronary ischemia as the cause of this chest discomfort at that March 13th, '95 visit?

A. I had obtained the EKG at that time, in conjunction with my history and physical examination.

Q. And Doctor, correct me if I misstate what I believe you said previously, that you included coronary artery disease within your differential diagnosis, but you didn't believe that it was a high priority?

A. What I stated was that I saw some mild changes, but I noted the patient was clinically stable. I mentioned that I was going to clinically follow that, and I also mentioned that I was going to consider a stress test to check for ischemia, if they had further clinical indication, and that that may be an underlying etiology.

Q. Why did you do an EKG on March 13th?

A. Because the patient described some chest discomfort.

Q. And the EKG that you did on -- or you had done on March 13th, did you consider that EKG to be

normal, or within normal limits for this patient?
A. I made a note that there was some mild flattening of the T waves themselves before V6 -- in V3 to V6, but at that time I felt that the patient was clinically stable, and was going to continue to follow. I was going to follow her clinically for that.
Q. What would cause a patient's T waves to flatten in V4 through 6?
A. There are multiple etiologies that can -- it can be a variation, let's say normal variation for that patient.

There is the possibility of ischemia, and that is why I noted that those -- that it can be a multiple -- there are sometimes electrolyte disturbances and other things that can cause changes.
Q. What, in your opinion, was the cause of the differences between Pat Smith's February EKG and the one that was done in March?
A. The time that I -- based on my notes at this time, I didn't elaborate on that as much, except to note that I saw some mild changes that I had noted, but I again felt the patient was clinically stable, I didn't feel the full constellation of symptoms

pointing to that as being cardiac in nature at that time.

Q. Did you ever ask a cardiologist to take a look at these two EKGs?

A. No.

Q. Was a cardiologist available to you in the Family Practice Center, or was there one available to you for consultation if you chose to do that for a patient?

A. Yes.

MR. BETZ: It was a two part question. I am not sure which of the parts that the witness is answering.

A. (Continuing) We do not have a cardiologist within the Family Practice Center. We do have the availability to seek a consult with a cardiologist.

Q. Doctor, in regard to your notes from the March 13th visit, I would like you to take a look at the very last portion of them.

A. (Witness complies).

Q. There is a word in a circle there, about three lines from the bottom. What is that word?

MR. BETZ: On the left-hand column?

MS. TOSTI: Yes.

A. Note.

Q. It says, note?
A. Yes.
Q. What does the check mark in front of the word EKG mean?
A. I probably was annotating that I was referring to this portion of the note, looking at the EKG. I wrote it to myself, that there were some mild changes that I wanted to follow.
Q. I am sorry, that there was what?
A. As I say, there were some mild changes, that I felt the patient was clinically stable, but I wanted to continue to follow that.
Q. And would you just read that note from the point where the word "note" is circled?
A. Certainly.

Check EKG. Mild changes in T waves/ST complex, V3 to V6, flattening.

Next line, patient is clinically -- patient is clinically stable, but will require clinical follow-up.

To consider stress test to check ischemia with exercise.

Q. Now, at the time that you had this EKG done, she was not having any clinical symptoms of chest tightness or anything associated with that; is that

correct?
A. Not at that visit, nor at subsequent visits.
Q. And you would agree that cardiac ischemia was within your differential diagnosis at that particular visit, correct?
A. Yes.
Q. And you had indicated from what you just read that you were considering doing stress testing on her to check for cardiac ischemia with exercise, correct?
A. I noted that at that visit, she was clinically stable, but it would require clinical follow-up, and based upon that, I would consider utilizing a stress test.
Q. And the reason that you were considering cardiac stress testing was because you were concerned that Patricia Smith may be experiencing cardiac ischemia from coronary artery disease, correct?
A. The differential of chest discomfort is very large, so there are a lot of etiologies. And a lot of times I write down multiple etiologies on my notes, with some recommendations for myself, or if a subsequent physician picks up the chart, to think about if she had any symptoms that may point to that

more.
Q. And again, the reason that you were considering stress testing in Patricia Smith's case was because you had some concern that this chest discomfort and what you saw on the EKG may be related to cardiac ischemia, correct?
A. It was on my differential diagnosis, but upon my history and exam at that time, I didn't feel that it was high enough to require that test to be done, or that I felt that the complete etiology was ischemia, but I felt there were other reasons associated with that. But, I left a note that in subsequent visits, as we are following the patient clinically, that I would consider doing that.
Q. Doctor, cardiac stress testing, the reason it would be done would be to check a patient for cardiac ischemia; is that correct?
A. That is correct.
Q. And the reason that you were considering it or even thinking about it in Pat Smith's case was because within your differential, cardiac ischemia was a possibility, correct?
A. It was in my differential.
Q. Correct.
And the reason that you considered it in Pat

Smith's case was because it was possible that she had cardiac ischemia?

MS. CUTHBERTSON: Object to form.

Go ahead.

A. I didn't feel at that visit that she had ischemic chest pain, but if chest pain persists, or if it became more typical in its presentation, then I would consider following up with a stress test.

Q. Did you ever order follow-up cardiac stress testing for Patricia Smith?

A. I do not believe she had any further complaint of any chest discomfort.

Q. Doctor, I would appreciate it if you would answer my question.

Did you ever order follow-up cardiac stress testing for Patricia Smith?

A. I am sorry, I didn't understand your question.

No.

Q. And the reason why you did not order follow-up cardiac stress testing, if you would please tell me the basis for that decision?

A. Because I did not feel, based upon my history and exam at that point, and looking at the tests, that she had ischemic cardiac disease at that time.

Q. Now, Doctor, during this visit, you noted a murmur on Patricia Smith; is that correct?
A. Yes.
Q. And that was a Grade I to II over VI murmur?
A. That is a very, very light murmur.
Q. Was that a new finding?
A. I believe it may be. But it is also a very light murmur with that.
Q. What was the likely cause of that murmur?
A. It may have been just some variation. Sometimes such a low grade murmur like that can be physiologic.
Q. And in her case, did you consider this to be a significant finding?
A. No.

(Thereupon, Plaintiff's Exhibit 2 (Rowane) was marked for identification.)

BY MS. TOSTI:
Q. Doctor, I am going to hand you what has been marked as Plaintiff's Exhibit Number 2, and I am going to ask you if you could please identify this for me? I believe you probably have the original in your medical records.

MS. CUTHBERTSON: I think it is in the miscellaneous section.

MS. PETRELLO: Jeanne, what is the date on that, 8-3?

MS. TOSTI: Yes.

A. Here it is.

MR. BETZ: The question is, what is it?

MS. TOSTI: I would just like him to identify that for me.

A. (Continuing) Yes, we have telephone triage slips. So the patients have problems, they would give a call concerning that.

Q. And the date on that particular document, that is August 3rd; is that correct?

A. Yes.

Q. Are those your initials in the lower right-hand corner of the document?

A. Yes.

Q. And is this a phone message that you received?

A. No. The phone message -- the phone message was -- one of the resident physicians obtained that, but I reviewed that afterwards.

Q. And in regard to these types of phone messages, how much after they come in would you, as an attending, normally review these messages?

A. Usually within a day or two. It depends. If there is more of a concern, then we will be reviewing it that morning.

Typically, they hand all the slips from the telephone triage to the attending physician on the inpatient service or the service there, so the next day, they are reviewed.

Q. So likely in this case, you saw this phone message within a day or so of the time that it was taken in, correct?

A. Yes.

Q. Doctor, after you saw this particular message, did you take any action in regard to Patricia Smith?

A. I must have asked the patient to come in to see me, because I saw her within the next few weeks after that.

Q. Did you call her, or talk to her, or anything?

A. I have no record that shows that I talked with her, so I can't speculate.

Q. Normally if you called a patient at home and wanted to talk with them about something that was written up on one of these phone messages, would you make a notation in the clinical notes?

A. I typically do, but sometimes I may have a -- maybe on the way home, I call the patient, and do that. But I do not have an additional note here to acknowledge that.

Q. Now, Doctor, contained in this August 3rd phone message, about in the middle of the paragraph, I believe it says, strange episode of unresponsive sleep, suddenly awoke when EMS sternal rubbed her.

Do you see that?

A. Yes.

Q. Doctor, wouldn't this be an episode which a reasonably prudent physician would want to have the patient come in and be followed up on?

A. Yes, and I saw the patient within a few weeks after that.

Q. This is not something that you would think that a patient should be seen soon after the episode occurred, that it would be okay to wait three weeks to see the patient, or several weeks?

A. I probably would -- it is difficult to say at this time. I would probably need to talk to the patient to determine what was surrounding that unresponsive episode.

Q. And Doctor, you have no recollection of talking with the patient, and you made no clinical

note that you talked with the patient soon after this episode occurred, correct?

A. That is correct.

Q. And at the time that you saw that note, you had no idea what caused that episode, correct?

A. I am uncertain.

Q. But you felt that it was okay to wait three weeks to see her, after seeing that note?

A. I am uncertain whether I asked the patient to come in sooner or not, and that is when the patient came in. I am uncertain, I can't truly comment on that.

Q. Okay, Doctor, I would like you to refer to the clinical notes of August 22nd, 1995.

A. Correct.

Q. The bottom portion of that note, there is a notation, addendum, and then there is writing that comes after that?

A. Correct.

Q. Is that your note?

A. Yes, it is.

Q. Was that particular addendum note written on August 22nd of '95?

A. Yes.

Q. Under item Number 2 of your note, would you

please read that for us?
A. Certainly.
Patient had episode where she couldn't wake up, parenthesis, did have some alcohol with cold medication, end of parenthesis. Paramedics came over and were able to wake patient up with deep pain. Checked blood pressure, was within normal limits.
Q. Now, that notation that you just read to us, does that refer back to the telephone note that we just looked at as Plaintiff's Exhibit Number 2, is that the episode?
A. I believe so.
Q. Doctor, at the time of that particular episode that is described in the telephone note as well as your clinical note, do you know whether Patricia Smith was lying down for a nap prior to the episode?
A. I am uncertain.
Q. So you wouldn't disagree with the family if that was their testimony, correct?
A. I made comment on what I have kind of written down here at this time, so I didn't comment on that, except she was in a period of time where she was obviously lying down and couldn't wake up, so I

don't know the particulars of that.
Q. What was within your differential diagnosis regarding this episode, when you saw her on August 22nd of '95?
A. At this time, I did a neurologic exam, found her to be completely normal, and I also noted the association of this episode was she had some alcohol use and mixed it with cold medication, which I felt that that combination probably accounted for the fact that she had difficulty waking up, and that in my assessment/plan Section Number 2, I felt I would monitor that, I was monitoring her status, and that I had a negative neurologic exam.
Q. Do you know how much before this episode the consumption of the alcohol and cough medicine occurred, how much time span there was?
A. No, I do not.
Q. Doctor, when you saw her on the 22nd, did you have any plan for continued follow-up in regard to this particular episode?
A. Yes, I acknowledged in my assessment and plan that I was going to monitor this, that means I would follow it up subsequently.
Q. Did you consider sleep apnea within your differential diagnosis at this particular visit?

A. No, I did not.
Q. And did you take any history in regard to sleep apnea during this particular visit?
A. No.
Q. Now, Doctor, Patricia Smith was seen again in the clinic on October 5th of 1995, correct?
A. Yes.
Q. And on that visit, did you see Patricia Smith with Dr. Kevin Martin?
A. Yes.
Q. And you were acting as Dr. Martin's preceptor at that time?
A. Yes, I was.
Q. And did anyone, to your recollection, accompany Patricia Smith on this visit?
A. I do not see a notation of another family member there, nor do I see a notation of history obtained by anyone other than the patient.
Q. And you have no specific memory of anyone else coming with her?
A. I honestly don't remember.
Q. She described something that had occurred that morning, correct?
A. Yes.
Q. And was she the one that provided the

information that is contained in that note?
A. It said here, patient reports -- yes, it must have been her giving the report, because it states, patient reports family saw her foaming at the mouth and shaking. So she is reporting.
Q. Did you, personally, take a history, or did Dr. Kevin Martin take the history on this patient?
A. Dr. Martin would have done the initial history and physical exam, and then I would have come back over and probably requestioned the elements of that to ascertain the accuracy of the information so we would both be agreeing on our common assessment and plan.
Q. And you were in the room with Dr. Martin while he was talking with the patient?
A. I am not certain what portion of that, but there definitely was a portion, because I noted there clearly, patient seen with Dr. Martin.
Q. And there may have been some portion of time when it was just Dr. Martin in the room with the patient; is that correct?
A. That is a possibility. I can't remember exactly.
Q. Doctor, what time did this episode occur, that Patricia Smith described?

A. 4:00 a.m.
Q. Do you know whether she was in bed at the time, whether she had been sleeping?
A. She must have been in bed, because the note says she was shaking, which woke up her eleven year old daughter.
Q. And the note also indicates that there was a similar witnessed episode two months ago, correct?
A. Similar to one about a month ago.
Q. But I believe there is also a notation in here, it says, patient describes -- let's see -- further down, similar witnessed episode two months ago, vital signs above.
A. Oh, I see, patient describes being swept by quote -- yes, one to two months, about a month -- okay, that had not been reported to me as the first time it was reported to us.
Q. It does say, similar witnessed episode two months ago, though, correct?
A. One to two months ago, yes.
Q. Further down in the note, do you see where it says, similar witnessed episode two months ago?
MR. BETZ: Where are you?
A. I am sorry.
Q. (Indicating).

MR. BETZ: Right here (indicating).

A. Oh, okay, yes, I see that.

Q. And that would correspond to the episode that was described in the phone message in August, correct?

MS. CUTHRERTSON: Object.

Go ahead.

Q. (Continuing) Approximately, as far as the time is concerned, it would coincide with the August 3rd phone message that you received?

A. It may.

Q. Doctor, are you aware of any differences that occurred between the episode that is described here in the October 5th note, and the one that was described to you in the phone message and at the August 22nd, 1995 visit?

A. No elements of this history were described in the phone message nor were they described in my note, and those would be pretty important features that I believe I would have written down.

Q. Well, maybe my question isn't clear.

I am asking you whether you are aware of any differences between the episode that was described in the August 22nd note as compared to what is described here in the October 5th note?

And if you are not aware of any differences, then just tell me that. But if you are, I would like to know what those are.

MR. BETZ: That is precisely what the witness answered. Why don't you read that last answer back.

(Record read.)

Q. (Continuing) So if you would tell me, then, what was your knowledge of the episode that occurred in August as compared to your knowledge of the episode that occurred in October, as to what differences you are aware of?

A. Significant differences. This describes -- the note of 10-5-95 describes an episode, shaking to the point that would wake up her daughter, loss of bladder control, at this period she did not use any alcohol, foaming at the mouth, eyes rolling back followed by confusion. None of those elements were present in the previous phone message nor were they present in my visit of 8-22-95.

Q. At the time that you saw her on October 5th, did you think that there was any relationship between the August episode and the one that was being described to you in October?

A. It is difficult to say. They were completely

different presentations
Q. In the October visit, was there anything that you found to have precipitated this -- would it be appropriate to call it seizure activity?
A. Yes.
Q. Was there anything that you found to have precipitated it?
A. At this time, there was, on all the evaluations, to review through that, there was -- the neurologic exam appeared to be ultimately normal, there were no striking abnormalities in the lab work that was obtained, there was no evidence of any problem with the toxicology report, and her CAT scan that she received did not show any pathologic finding.
Q. So Doctor, were you able to identify what precipitated her seizure on October 5th?
A. No. And that is also why the patient was referred to a neurologist.
Q. At this visit, did she describe what occurred or what she was doing prior to the time that this episode occurred?
MR. BETZ: We are talking about October 5?
MS. TOSTI: Yes.

A. I don't see an exact mention of that. I can only assume that she must have been -- it was at 4:00 a.m., but again, it is not written down here that she must have been sleeping by her daughter to wake her up with this seizure activity.

Q. Now, you did do a toxicology screen and a drug screen at this visit, correct?

A. I believe that those were laboratories that were taken at the St. Luke's Emergency Room.

Q. And you received reports from those screens, though, correct?

A. The reports of those are documented by Dr. Martin. I do not believe I have any record from the emergency room directly.

Q. But based on the information that you had available, you did not find that this episode had been precipitated by any alcohol or medications, correct, you had no reason to believe that that was the cause of this particular episode?

A. The evaluation we did, did not demonstrate any etiology, and again, that is why I referred her to a neurologist for that.

Q. And at this visit, October 5th, what was within your differential diagnosis in regard to this episode?

A. At that time, I was uncertain of the full etiology of that. Seizures is honestly something that I do not manage, that I require a consultant to assist me with, and thus the most apparent concerns for this would be trauma, metabolic disturbance, like low blood sugar, electrolyte disturbance, or a structural lesion in the brain, as well as any evidence of drugs or alcohol were not evident, and so our first line of evaluating things did not point to anything specifically, but it gives information we need to present to the neurologist.

Q. You didn't have any indications that she had suffered any trauma when you saw her at this visit, did you?

A. It did not describe, in effect -- Dr. Martin made it clear there was no history of any trauma.

Q. And you didn't find any evidence of metabolic imbalances at this particular visit?

A. All the laboratory results were essentially within normal limits.

Q. And your neurological exam was normal, too, correct?

A. Yes, it was.

Q. Was sleep apnea within your differential diagnosis at the time that you saw her on October

5th?
A. It was not.
Q. Doctor, if both of these episodes occurred when the patient was sleeping or napping, wouldn't that raise a suspicion for sleep apnea?
MR. BETZ: Wouldn't it or did it?
MS. TOSTI: I am asking if it would.
A. There are multiple findings that could lead to a seizure. Sleep apnea could be associated, but I really required the expertise of a specialist to help tease that out.
Q. That would be included, though, in a differential diagnosis, if both episodes occurred when the patient had been napping or sleeping, correct?
A. It may be.
Q. At this October 5th visit, you didn't take any history to assist in ruling out obstructive sleep apnea as a cause of the episode, did you?
A. No, there is no -- it is a pretty thorough discussion of the case, but there is nothing in the differential that we discussed as sleep apnea.
Q. And you and Dr. Martin didn't discuss the possibility that her seizures may have been caused by obstructive sleep apnea, correct?

A. It does not appear that we did.
Q. Now, Doctor, we had mentioned some of the characteristics that Patricia Smith had that would place her at greater risk for obstructive sleep apnea, and you had, I believe, mentioned obesity, and that there was an association with hypertension, correct?
A. That is correct.
Q. If you note at the bottom of Dr. Martin's notation, on the first page of that visit, I believe he has written out, tongue protrudes; do you see that?
A. Uh-huh -- no.
Q. Do you see it?
A. Yes.
Q. Was there any significance to the fact that he noted that her tongue was protruding?
A. He is acknowledging that the cranial nerve 12 was intact.
Q. So you think that that was part of the physical --
A. It is part of his neurologic exam.
Q. And that she was able to extend her tongue during the physical exam, okay.
A. Yes.

And that was under the section of cranial nerves, also, if you will note that.

Q. On the second page of the note from that October 5th visit, if you would look at that, please.

A. Certainly.

Q. That note indicates that the Patricia Smith case was discussed with Dr. Collins; is that correct?

A. That is correct.

Q. Did you speak to Dr. Collins directly?

A. I do not believe so.

Q. Well, is that in your handwriting, or is that in Dr. Martin's handwriting?

A. Dr. Martin's handwriting.

Q. Would Dr. Martin have been the one that would have discussed this case with Dr. Collins, then?

A. Yes.

Q. Do you know when Dr. Martin talked with Dr. Collins?

A. He would have discussed it with that -- I believe at that visit, at that time.

Q. Would Dr. Martin have come back to you with the information that Dr. Collins had provided to him, to discuss that with you?

MR. BETZ: You are asking, did he?
Q. (Continuing) Yes, did Dr. Martin do that, did he come back and talk with you in regard to the information that was transmitted in that conversation with Dr. Collins?
A. Yes.
Q. Why was it that Dr. Martin consulted with Dr. Collins?
A. The patient had an apparent seizure, and it is a condition which I, personally, don't have expertise in, and I refer patients with conditions such as seizures to a specialist, such as a neurologist, to assist and to manage that problem. And Dr. Collins also provided us with the appropriate treatment.
Q. Now, Dr. Martin has written further down in his notes, follow-up with Dr. Collins ASAP, as soon as possible, correct?
A. Uh-huh.
Q. And did you concur with that entry that Dr. Martin made in that notation, that Pat Smith should follow up with Dr. Collins as soon as possible?
A. Yes.
Q. Did Dr. Martin discuss with you what

Dr. Collins said in regard to Patricia Smith? And I am speaking of the point in time when Dr. Martin talked with Dr. Collins, that is noted here in this note (indicating).

A. Dr. Martin made it clear that Dr. Collins stated to him that the patient gave him a good history for seizure, possibly a previous event, we also discussed the questions, also acknowledging there is no metabolic or structural etiology identified, and the treatment plan that was recommended by Dr. Collins and the follow-up with him.

Q. Obviously Dr. Collins made some recommendations for treatment for Pat Smith; is that correct?

A. The management decisions were based upon his recommendations.

Q. And what recommendations did Dr. Collins make in regard to her care?

A. He recommended the patient be loaded with Dilantin, anti-seizure medicine, and to receive an electroencephalogram the next day, and to follow up with him in the near future.

Q. And the Dilantin that was ordered, was that ordered prophylactically to control seizures in this

case until the etiology could be determined?

MS. PETRELLO: Objection.

A. I believe the reason for the Dilantin was to protect the patient from having any recurrent seizures, but it is -- but that therapy is something, again, I am going with the recommendation.

Q. Doctor, do you know if Dilantin would have any effect on preventing hypoxic seizures?

MR. BETZ: For the record, is the distinction you are making between hypoxic seizures and general seizures?

MS. TOSTI: Seizures caused by hypoxia.

A. It is not in my level of expertise, but I believe that any medication that could help prevent a seizure may also decrease the incidence of other seizure activity. I am honestly not certain about this.

Q. Why was an electroencephalogram ordered?

MS. PETRELLO: Objection.

Go ahead. I just raised an objection

MR. BETZ: I will object to the form of the question, if you are asking this witness what Dr. Collins' reason or thought

processes were, other than what he knows.

Go ahead and answer.

Q. (Continuing) At this point, Doctor, you did write an order for an electroencephalogram; is that correct?

A. That is correct.

Q. And do you know the reason why that electroencephalogram was ordered?

A. To look at brain wave information and determine if there was an abnormal focus or site that may cause a seizure.

Q. And was that ordered on the recommendation of Dr. Collins?

A. Yes.

Q. And do you know what the results of that electroencephalogram were?

A. I believe it was completely normal. I will have to make sure.

(Short recess had.)

BY MS. TOSTI:

Q. Doctor, we had reviewed the fact that Dr. Martin had written a note, follow-up with Dr. Collins as soon as possible --

A. Correct.

Q. -- and that you had concurred with that

particular notation, correct?
A. Correct.
Q. Do you know why it took almost a month to schedule a neurological evaluation with Dr. Collins?
A. Well, as soon as possible would require that the patient be seen by a physician within a reasonable period of time. It did not note it being urgent or immediate, which would require them to be seen within the next day or two. So at this point, I don't know if it would have changed the management much in the case.
Q. Doctor, you would agree, at the time you saw Patricia Smith on October 5th, you had no idea as to the etiology of her seizures, correct?
A. That is correct.
Q. So you had no way of knowing whether or not this was a serious problem that required immediate follow-up, or whether it was something that could be delayed as far as being evaluated by a neurologist, correct?
A. Well, I am not a neurologist, but I can state that the initial workup usually rules out major concerning things that can be associated with that, and the arrangements that Dr. Martin had with Dr. Collins implied a follow-up that he felt was

appropriate.

Q. And you were comfortable with her waiting a month to be seen by a neurologist, correct?

MR. BETZ: Well, I am going to object to the form of the question, because it assumes that Dr. Rowane necessarily knew the length of time it took to see Dr. Collins. I don't know that is the fact.

Q. (Continuing) Doctor, in the notation, I believe at the bottom, it says, EEG for October 9th, '95, and Dr. Collins, November 3rd of '95.

Were you aware of the scheduling of those appointments?

A. I have a co-sign underneath that area itself, and my next visit would be on October 30th.

Q. But Dr. Martin, at the time, was not a graduate from the medical school, and so you were required to precept all of his care for the patients, correct?

A. And I did.

Q. And wouldn't it be likely that you would also be made aware of anything that he was doing in regard to the patient care?

A. Yes.

Q. And isn't it likely that he informed you of

those particular scheduled appointments?
A. He may have.
Q. Now, Doctor, during the time that Patricia Smith was waiting to see Dr. Collins, you did two Dilantin levels on her, correct, I believe one on October 17th and another one on October 30th?
A. Yes, it appears that way, yes.
That is correct.
Q. And were Patricia Smith's blood levels for Dilantin within a therapeutic range on either of those two occasions?
A. They were not.
Q. Would you agree that Dilantin, to be effective, a patient's blood level should be within a therapeutic range?
A. Yes.
Q. Now, Doctor, you also informed Patricia Smith that she would have to give up driving her school bus, is that correct, at least until she underwent neurological evaluation?
A. Yes.
Q. And you also wrote a letter to this effect, I believe dated October 18th?
A. That is correct.
Q. Now, there are several letters that were also

written by Dr. Kevin Martin that essentially say pretty much the same thing, that she should stop driving her school bus.

Is there any particular reason why there is a letter from you, as well as several letters from Dr. Martin, on the same subject matter?

A. They may have required a letter from her primary care physician or the attending physician, and I am not certain, but I also obviously have a letter here to, again, verify that she cannot drive.

Q. You don't recall any particular reason why a letter was requested from you, specifically, do you?

A. Not off the top of my head.

Q. Now, Patricia Smith saw, I believe, Dr. Collins on November 3rd of 1995.

A. That is correct.

Q. Did you speak to Dr. Collins after his evaluation of Patricia Smith?

A. I know **I** discussed the case with Dr. Collins after he evaluated the patient. I don't know the exact date for that.

Q. After he had an opportunity to evaluate Patricia Smith, what did he tell you in regard to his findings?

A. I don't have anything documented to that, so

I can't speak to that. But I do believe he requested me to obtain a sleep study.

Q. So you believe that the sleep study request originated with Dr. Collins as a recommendation to you?

A. Yes.

Q. After Dr. Collins had an opportunity to see Patricia Smith on November 3rd, was he able to identify to you any cause of the seizures?

A. I do not have any letter from that visit, and I don't remember off the top of my head, nor have I written that down.

Q. And in addition to the recommendation for a sleep study, did he give you any other recommendations for her care?

A. I am afraid I cannot recall.

Q. Based on your conversation with him, what was the reason for ordering a sleep study, that you were aware of?

A. I believe that in his differential, he was considering sleep apnea.

Q. As an etiology for her seizures?

A. Possibly.

Q. Did he actually discuss that with you as a possibility?

A. I cannot remember off the top of my head, and I don't have a letter from him after that first visit.
Q. Now, you then referred Patricia Smith for a sleep study; is that correct?
A. That is correct.
Q. And you made that referral on November 3rd of '95, the same day that she saw Dr. Collins; is that correct?
A. It may be. It is not part of the chart.
Q. And one of the reasons you referred her for the study is you were concerned that she might have been having oxyhemoglobin desaturations during sleep that may have been the etiology of her seizure disorder; is that correct?
A. The reason is that he, as part of his differential, requested a sleep study.
(Thereupon, Plaintiff's Exhibit 3 (Rowane) was marked for identification.)
BY MS. TOSTI:
Q. Doctor, you have been handed what has been marked as Plaintiff's Exhibit Number 3.
A. Yes.
Q. And if you could just tell me what that is, if you would identify that document for me?

A. Yes. This is a referral form that we use when we refer a patient to a specialist, and in this referral, I referred the patient to Dr. Rosenberg, with the diagnosis of seizure disorder, and two is rule out nocturnal hypoxia.

Q. And you were the one that filled out the form?

A. Yes, it was me.

Q. And that is your signature under referring physician; is that correct?

A. Yes, it is.

Q. And Doctor, as you understand the reason for the referral, would you just read what you have written there?

A. This patient has been recently diagnosed with seizure disorder. Request evaluation for sleep study, as concerns patient may desaturate as etiology for seizure disorder. Workup requested. Dr. Stephen Collins.

Q. And the date that you made this particular referral, what is the date on this document?

A. 11-3-95.

MS. PETRELLO: Can we go off the record a minute here?

MS. TOSTI: Yes.

(Thereupon, a discussion was had off the record.)

(Short recess had.)

MS. TOSTI: What was the last question?

(Record read.)

BY MS. TOSTI:

Q. Doctor, would it be fair to say that the reason you were referring her for a sleep study is you were concerned that her seizures were being caused by sleep apnea?

A. There was a concern addressed from Dr. Collins that there may be desaturation as the etiology for sleep disorder.

Q. And were you aware as to what the basis for that particular concern was, what clinical data was there to support a concern that sleep apnea may be causing these seizures?

A. I believe it was from the evaluation from Dr. Collins.

Q. But did he share with you anything in particular as far as the clinical data to support that concern?

A. I am uncertain only because I did not formally have that written down, other than

immediately responding to his request to put a referral together for the patient to have a sleep study.

Q. Doctor, would you agree that if Patricia Smith was having seizures because of low oxyhemoglobin desaturations during sleep, that that could be life-threatening?

A. Possibly.

Q. And would you agree that if she was in fact having seizures due to low oxyhemoglobin desaturations during sleep, that this would require immediate treatment?

A. I am uncertain, I am not a sleep specialist, and I would have to defer those management decisions to a specialist.

Q. Now, Patricia Smith also saw Dr. Mary Louise Hlavin, a neurosurgeon; is that correct?

A. Yes, that is correct.

Q. And I believe that that visit occurred on December 7th of 1995.

Did you make the referral to Dr. Hlavin?

A. The referral was made from one of my colleagues.

Q. Who made the referral to Dr. Hlavin?

A. Dr. Brenda Crownover.

Q. And why is it that Dr. Crownover was involved in Patricia Smith's care, if you were the attending physician?
A. Sometimes a patient may call, there is a possibility that I may have been on vacation or inpatient attending or not available in the outpatient practice, and to not delay a patient being cared for, they will be put in with another physician to be seen.
Q. And do you know the reason Patricia Smith was referred to Dr. Hlavin, was that information ever provided to you?
A. It was apparent in Dr. Crownover's note that the patient had an MRI which showed a frontal meningioma, and there was concern that may be a cause of seizures, and thus Dr. Hlavin was consulted and Dr. Collins was informed.
Q. Now, after Dr. Hlavin had an opportunity to see Patricia Smith, did you speak with Dr. Hlavin about her evaluations?
A. I do not believe so, but I honestly cannot remember.
Q. I believe that Dr. Hlavin did write to you on two occasions, though, in regard to her evaluations; is that correct?

A. That is true.
Q. And you received correspondence dated December 7th of '95, as well as January 5th of '96 summarizing her findings; is that correct?
A. On December 7th and again on January 5th, that is correct.
Q. And in Dr. Hlavin's letters to you, she told you that she also was concerned that Patricia Smith might be suffering from sleep apnea, correct?
A. That is correct.
Q. And Dr. Hlavin also told you that based on the brain MRI scan with contrast, that there was a possibility that the area in question was nothing more than a variant of skull calcification, correct?
A. Correct.
Q. And you were aware of that three months before Patricia Smith died, correct?
A. Correct.
Q. And you also were aware of the fact that Patricia Smith's EEG was normal, correct?
A. That is correct.
Q. And that all of her neurological exams had been entirely normal, correct?
A. That is correct.
Q. Now, I believe Patricia Smith underwent a

sleep study at the University Sleep Center on February 7th of 1996.

A. February 6th.

Q. Okay.

Did you receive a letter from Dr. Lee Brooks dated February 7th of '96 telling you his evaluation, his preliminary evaluation of Patricia Smith?

A. Yes.

Q. And in that correspondence dated February 7th, did Dr. Brooks tell you that Patricia Smith had severe obstructive sleep apnea?

A. He did, and he also informed me that that was a brief preliminary review and was subject to revision once the events are more fully evaluated and tallied, and major clinical decisions should be deferred until the final official report has been prepared.

Q. Now, you received that letter two months before Patricia Smith died, correct?

A. I believe.

MR. BETZ: He answered, "I believe."

Q. Okay.

Doctor, at the time that you received that letter, you knew severe obstructive sleep apnea

could cause hypoxic seizures, correct?
A. I was not aware.
Q. One of the concerns that you had when you referred Patricia Smith to the sleep study, based on the referral form, was that you thought the etiology of the seizures could be due to oxyhemoglobin desaturations, correct?
MR. BETZ: Object to the form of the question. I think it misstates his testimony in terms of the source of that information.
Go ahead and answer.
A. I responded to the request based upon the recommendation of Dr. Collins, being a specialist in those areas, plus all the etiologies that could be associated with that.
Q. That information that is included on the referral form to the sleep study you received from Dr. Collins; is that correct?
A. That is correct.
Q. And he informed you that there was a possibility that the seizures that Patricia Smith was having could have been due to oxyhemoglobin desaturations caused by obstructive sleep apnea, correct?
A, I did not state that. I only stated in that,

from my correspondence with Dr. Collins, desaturation as an etiology for seizure disorder. It does not state obstructive sleep apnea on that referral.

Q. When you discussed Patricia Smith's case with Dr. Collins, though, wasn't one of the things that you spoke with him about the fact that she might have obstructive sleep apnea?

A. I honestly don't remember.

Q. And the information that you received from Dr. Hlavin, the letter, did she suggest that she might be having sleep apnea?

A. She acknowledged there that she may be suffering with sleep apnea, that is correct.

Q. So based on the information that you received from Dr. Collins and Dr. Hlavin, you were aware that Patricia Smith may have obstructive sleep apnea, correct?

A. I was aware that she may have sleep apnea, and she may have desaturation as a source of her seizure disorder.

Q. And that that may be related to the sleep apnea, did you know that, from what the doctors had told you, Dr. Collins and Dr. Hlavin?

A. I believe so.

Q. Doctor, you received the letter from Dr. Lee Brooks stating that the preliminary finding was that Patricia Smith had severe obstructive sleep apnea, in his correspondence dated February 7th of '96.

When you received that letter, did you contact Patricia Smith to inform her about the preliminary findings?

A. I do not see any documentation, but I do acknowledge that I was awaiting the final report.

Q. On February 7th, or any time in close proximity to February 7th, did you take any immediate steps to institute any treatment for Patricia Smith in regard to severe obstructive sleep apnea?

A. No.

I am sorry, maybe I should rephrase that.

You said, did I take any steps in response to that. In response to the preliminary report or the final report?

MR. BETZ: Preliminary report.

Q. Preliminary report.

A. No, I was just awaiting the final report, as recommended by Dr. Brooks.

Q. Did you eventually receive a final report?

A. Yes, I did.

Q. When did you receive that report?
A. Probably just prior to seeing the patient in the office on March 25th.
Q. And how do you know that?
A. Well, when I am out of town, someone else would cover for me, and I was out of town during that time. It was marked as 3-12.
Q. Now, Doctor, you are looking at a report, a printed report from the University Sleep Center; is that correct?
A. That is correct.
Q. And you have mentioned a date of 3-12; is that correct?
A. Yes, the 3-12 I noted before is when it must have been first received in our office.
Q. Now, is there a handwritten notation on the copy that you are referring to?
A. Right at the very bottom, there is a note that says, 3-12, so this implies when it was received in our office.
Q. Now, Doctor, I have a copy of that same report. Mine has no notation on it. I would appreciate a copy that has the notation that the doctor is referring to.
MR. BETZ: Do you want to make it

right now?

MS. TOSTI: We can get it after.

MR. BETZ: Okay.

Q. (Continuing) If you would just put a tab on that.

A. Sure.

Q. So the notation at the bottom -- may I just see it for a second?

A. Yes, you may.

Q. Who puts that notation at the bottom of the report when it comes in?

A. That was one of the other physicians who was covering for me.

Q. And that was -- I am sorry, I didn't hear who you said.

A. One of the other physicians who was covering for me at that time.

Q. What other physician was that?

A. That was Brian Stark.

Q. These reports, when they would come in, would they be provided to an attending in the Family Practice Center to look at, if you were not in attendance that day?

A. Possibly, but I am uncertain of that.

Q. I guess let me rephrase that question.

What was the normal procedure when a report like that would come in, how would that be transmitted to a physician?

A. It was received either by mail, or after it is reviewed by the physician it is addressed to, if there is a question concerning any abnormal test by a resident, then it is usually referred to an attending physician to discuss what to do with that.

Q. And this test was done on February 6th, and it took about five weeks for the final report to come into the clinic, based on that notation, correct?

A. It appears that way.

Q. To your knowledge, is that the usual time period to receive a polysomnogram study from the University Sleep Center, a five week interval?

MS. CUTHBERTSON: Objection.

MR. BETZ: Go ahead.

Q. (Continuing) Based on your experience?

A. I haven't ordered enough tests to make a determination on that.

Q. Do you have any other times that you have ordered a polysomnogram, any other times?

A. Usually they have been other patients that have either already had that test done, but I

can't -- I have had some other patients, but I really don't know the time sequence from order until I get the final reports, and I can't make a comment on that.

Q. When do you believe that you saw this final report?

A. Probably by the time I saw the patient. And I am not certain of how long I was out of town, but I know I was out of the office at that time.

Q. At the time on March 12th, you are saying, correct?

A. Yes.

Q. Now, you saw Patricia Smith on March 25th, correct?

A. Yes.

Q. So that particular finding was in the Family Practice Center for two weeks before you saw the patient again, correct?

A. It did come to us on the 12th, and I saw her on the 25th.

Q. And to your knowledge, prior to the time that you saw her on the 25th, had anyone contacted her to tell her that she had severe obstructive sleep apnea?

A. I am not certain.

Q. Well, to your knowledge, do you know of anyone that contacted her?
A. I know the report was -- no, I can't say that, no.
Q. Now, you saw the patient on March 25th.
A. Correct.
Q. And there is a notation at the top of the March 25th, 1996 note that says, here for test results from sleep test.
A. Correct.
Q. So she was specifically coming in to find out about her sleep test; is that correct?
A. Yes, that is correct.
Q. Did you tell her what the results were of the test at that visit?
A. I believe so.
Q. What did you tell her?
A. I believe I told her that the results demonstrated a severe obstructive sleep apnea, and that I was going to get through to my consultant to determine the management.
Q. Did you tell her about the complications associated with sleep apnea?
A. I am uncertain.
Q. Did you tell her that you had concerns or

that at least Dr. Collins had concerns that her seizures may have been related to oxyhemoglobin desaturations during sleep?

A. I know that when I received the results, that I discussed it with the patient, and that I was uncertain what to do with that, because it was out of my scope of care, and that I was referring to Dr. Collins for advice as to where to go with that.

Q. Doctor, when you received those sleep study results, did your concern that her seizures were due to severe obstructive sleep apnea heighten?

A. At that time, I can only comment on what I have written down through here, that acknowledged that there was seizure disorder, we were treating with that, I acknowledged the severe obstructive sleep apnea, and I acknowledged for management issues that I was going to discuss those with Dr. Collins.

Q. In your opinion, was Patricia Smith at risk for any complications with oxyhemoglobin desaturations as low as 60 percent during sleep?

A. I was uncertain, and that is why I proceeded with the management I stated to you.

Q. Doctor, would you agree that a patient with severe coronary artery disease would be at increased

risk for ventricular arrhythmias with desaturations as low as 60 percent?

MR. BETZ: I am going to object. It seems to me we have been through this once. I am not going to permit the witness to go back through everything we went through initially before we began going through the chart.

MS. TOSTI: Your objection is noted, but I have a right to --

MR. BETZ: You don't have a right to repeat questions, and you can answer this question, but there will be a limit to the repetition.

Go ahead and answer.

THE WITNESS: Sorry, would you please repeat the question.

(Record read.)

A. Patients with severe coronary artery disease do have risks for arrhythmias, and having elements of hypoxia with that may increase that.

Q. And in Patricia Smith's case, would you agree that she would be at increased risk for seizures with oxyhemoglobin levels of 60 percent?

A. I was uncertain. That is why I had a

consultant.
Q. Doctor, whose responsibility was it to establish a treatment plan for Patricia Smith's severe obstructive sleep apnea?
A. The issues with seizure and associated concerns of sleep apnea were issues raised from my consultants, required their input and management of those issues. But I also try to be diligent to follow those up to ensure they would be taken care of, because I did not have expertise in this area, nor did I feel comfortable initiating a plan for an area that I had not had sufficient training.
Q. Was it your understanding that Dr. Collins would be the one to determine what care or treatment would be appropriate in relationship to the sleep study?
A. I depended on his expertise for that, because he assisted with the care of the patient, and requested the study to be done, and had -- the main reason she was referred to have the test done, and that is why I was making calls to his office, because I didn't -- I needed to find out what to do with this.
Q. So you were looking to Dr. Collins to be the person to determine whether treatment was necessary,

and as to what treatment would be necessary, if indeed it was needed?

MS. PETRELLO: Objection.

A. Yes.

Q. Was Dr. Hlavin involved in any way, from your perspective, in the plan of care related to the severe obstructive sleep apnea?

A. Not really.

Q. So it was your plan, then, to consult with Dr. Collins and to have him recommend to you what steps would be appropriate in regard to Pat Smith's severe obstructive sleep apnea?

MS. PETRELLO: Objection.

A. Yes.

Q. Now, Doctor, under your March 25th, 1995 note, you have several items that are numbered there, and I wish you would read what you have written under item Number 2?

A. Certainly. Severe obstructive sleep apnea, parenthesis, minimal O_2 sat of 50 percent, end of parenthesis. Called Dr. Collins' office, parenthesis, extension 43192, end of parenthesis. To call back and discuss results.

Q. When you called Dr. Collins' office, did you speak to anyone in particular in his office?

A. I did not document an individual I talked with.
Q. You talked to a person, though?
A. Yes.
Q. You didn't leave a voice mail?
A. I don't believe so.
Q. And do you recall the information that you provided to that person when you called?
A. I am uncertain.
Q. Your note says, to call back and discuss results.

Is it likely that you asked that individual to have Dr. Collins call you back specifically for the purpose of discussing the test results?
A. Yes.
Q. Did Dr. Collins ever call you back?
A. No.
Q. Did you try to contact him again after this particular attempt that is noted in item Number 2?
A. 4-1-96, I have a chart note -- do you want me to read the chart note?
Q. Not at this time.

Between March 25th, '96 and April lst, did you make any attempts to contact Dr. Collins again?
A. I am uncertain. I do not believe so, but I

am not certain.
Q. You didn't document any attempts, correct?
A. That is correct.
Q. And you have no specific recollection of any attempts that you made between March 25th and April 1st, correct?
A. That is correct.
Q. Now, when you saw Patricia Smith on the 25th of March, what did you tell her regarding your plan of care as it relates to the severe obstructive sleep apnea?
A. That I would have to make a management decision based upon my discussion with Dr. Collins.
Q. And you didn't discuss with her the various options for treatment at that point, did you?
A. It was an area of expertise that I do not have, and so I -- and I did not document that.
Q. So would it be fair to say that on the March 25th visit, that in regard to the severe obstructive sleep apnea, you did not institute any specific plan, other than to contact Dr. Collins and discuss what should be done about her care?
A. I am sorry, could you repeat that question?
Q. Let me rephrase it, because I think it was probably poorly put.

On March 25th of '96 when you saw Patricia Smith, other than your plan to contact Dr. Collins, you had no other interventions that you were going to institute in regard to Patricia Smith's severe obstructive sleep apnea; is that correct?

A. That is correct.

Q. You next saw her on March 1st of '96, correct?

A. I saw her on April 1st of '96.

Q. I am sorry, April 1st of '96.

A. I did not see the patient. This was a chart note that I put.

Q. This was a clinical note that you wrote?

A. That is a clinical note that I wrote in.

Q. Doctor, let me back you up for just a minute to the March 25th mote. You have a note at item Number 6.

A. Correct.

Q. What does that say?

A. Return to the office in the next few months.

Q. You had no plans on seeing Patricia Smith in the near future, then, is that correct, at the time that you concluded the March 25th visit?

A. I wasn't going to manage the area of sleep apnea, and thus my follow-up was for her other

problems.
Q. So it was your plan, then, to turn over the management of any sleep apnea problems to Dr. Collins, then?
A. Or his recommendation where to go with that.
Q. But you weren't going to provide any further treatment for it?
A. I have no expertise in that area.
Q. Now, Doctor, the note that you have written on March 1st of '96, would you please read that to us?
A. April 1st of '96.
Q. I am sorry.
A. That is okay.
Q. I made a mistake again, it is April 1st of 1996.
A. Okay.
A. Called Dr. Collins again, parentheses, 43192, end of parentheses.
Next line, regarding sleep study with severe obstructive sleep apnea, arousal and oxyhemoglobin desaturation as low as 60 percent, Dr. Collins given my beeper numbers and will call back. Called patient at sister's, 475-5716, left message at home, 229-8643, no answer. Await response from

Dr. Collins and then will discuss options with patient.

Q. By April lst, 1996, then, you hadn't discussed any options with Patricia Smith with regard to her obstructive sleep apnea?

A. I had tried to get through to the patient, left a message for that, but had not been able to connect with the patient, even though I tried to get her at her sister's.

Q. Now, you didn't have any additional information about her obstructive sleep apnea on April 1st of '96, as compared to what you had March 25th of '96, did you?

A. No, I was basing it on the same information.

Q. Why is it that you were trying to contact the patient on April 1st of 1996?

A. Probably to let the patient know that I was still following this up. I am pretty compulsive in following my patients and making sure that all issues are settled.

Q. Now, Doctor, were you concerned about the fact that this patient had oxyhemoglobin desaturations as low as 60 percent?

A. I had concerns, but I did not have expertise in that area, and was trying to get information to

decide how to manage that, and that is why I was getting in touch with the patient and my specialist.

Q. Had you left any messages for Dr. Collins informing him that this patient had been found to have severe obstructive sleep apnea with desaturations to 60 percent, had that information been left for Dr. Collins, even though you hadn't had a chance to talk with him?

A. I am honestly uncertain. I didn't write here whether I left that or not. I typically do, but I did not document that as such.

Q. Why, in your note of April lst, do you have severe obstructive sleep apnea underlined?

A. Well, it was a condition that I did not have expertise in, and I had concerns, and I also sometimes, when I do a long note, will underline the major problem. That way, when you are looking at the note, you can go right to the main issue that you are dealing with.

Q. And in this particular note of April lst, you have underlined the numbers, 60 percent, with two lines; is that correct?

A. That is correct.

Q. Why did you underscore that particular item with two lines?

A. Because I was uncertain of the finding with that, and wanted to make sure that that was important information to transmit to Dr. Collins concerning the report on the severe obstructive sleep apnea.

Q. Did Dr. Collins ever return your call?

A. No.

Q. Did you continue to attempt to contact him after this notation on April 1st of '96?

A. I am uncertain.

Q. Do you have any specific recollection of trying to contact him after you attempted on April 1st of '96?

A. I did not document anything from that. I cannot say.

Q. Why did you wait a week between March 25th of '96 and April 1st of '96 to attempt to contact him again?

A. If I have things that don't respond, I usually follow up within a week or so to make sure that all issues are settled. As far as that timeline, I am not certain exactly why that is, but I try within several days to a week or so to make a follow-up on any unsettled matters.

Q. Now, Doctor, you said that you do not have

particular expertise in the area of severe obstructive sleep apnea; is that correct?

A. That is correct.

Q. And you are not familiar with the various interventions to the point where you would be comfortable in managing a patient's care, correct?

A. Well, I don't prescribe areas like CPAP or other things that I am not familiar with the levels that would require those interventions.

Q. And you have also told me, I believe, that you are not extremely expertise -- I am sorry -- don't have extreme expertise in being able to discern the complications that may arise in a patient that has the type of sleep study results that Patricia Smith has; is that correct?

A. I didn't feel comfortable managing the findings that she had on her test.

Q. So in regard to Patricia Smith, you were not in a position to evaluate her to determine whether she was in a position to suffer life-threatening complications from sleep apnea, because that isn't an area of your expertise, correct?

A. It is an area that I would have to defer management issues of that and complications thereof to a specialist.

Q. Now, the final results of this particular polysomnogram was available in the Family Practice Center from at least March 12th of '96. And you have indicated that you do not have an expertise to determine the implications of those results for the patient, yet Doctor, you have waited until here, April 1st of '96, and still have not gotten in contact with Dr. Collins in regard to the care and treatment.

Is that a reasonably prudent way for a physician to provide care to a patient?

MR. BETZ: I am going to object to the form of the question. It seems to me, one, it perhaps borders on unintelligible, and two, misstates his testimony.

He didn't testify that he saw that result until on or about the visit on March 25.

Q. (Continuing) Let me withdraw the question, and I will rephrase it.

Doctor, on March 25th of '96, you were aware that Patricia Smith had severe obstructive sleep apnea with oxyhemoglobin desaturations to 60 percent, correct?

A. That is correct.

Q. And you have stated that you do not have the expertise to evaluate the implications of those particular results for the patient, is that correct, you would defer to a sleep apnea expert, or, in this case, a neurologist; is that correct?

A. That is correct.

Q. And even though you were unaware of the implications for the patient, you did not contact Dr. Collins and make sure that you imparted the information about the sleep study to him anytime prior to Patricia Smith's death, correct?

MR. BETZ: Objection. That has been asked and answered.

You can answer it again.

A. I have two accounts here documenting that I have talked to Dr. Collins' office. I am uncertain what message I left with them at that time, because I can only speak from the record, and I don't have any recollection.

Q. Well, Doctor, you have documented two attempts to contact Dr. Collins --

A. That is correct.

Q. -- between March 25th of '96 and the notation of Pat Smith's death on April 9th; is that correct?

A. That is correct.

Q. At any point in time prior to Pat Smith's death, did Dr. Collins ever contact you?
A. He did not.
Q. Do you find fault with Dr. Collins for not returning your calls regarding Patricia Smith's sleep study?
MS. PETRELLO: Objection.
A. No, Dr. Collins was very helpful in assisting the management of this case. I cannot speculate, you know, why there was a delay, so I can't speculate on that. But he was assisting us with the management of this patient and steering us in the direction, since he was involved.
Q. What management did Patricia Smith receive in regard to her severe obstructive sleep apnea, other than the polysomnogram?
MR. BETZ: I am going to object. He didn't say that she did.
Subject to that, go ahead.
A. Dr. Collins assisted in her care, assisted our ability to manage her seizures, and also assisted in the management to obtain a sleep study.
So those are areas he assisted to help diagnose the case, and I was following up to try to get through to him for the tests that he recommended

for me to get.
Q. But Patricia Smith received no treatments anytime before her death for her severe obstructive sleep apnea, correct?
A. That is correct.
Q. And you never discussed at any point in time her treatment options regarding severe obstructive sleep apnea, correct?
A. I am uncertain, because I did acknowledge that in my assessment and plan on March 25th, '96, and I did not make a notation to the extent that I discussed it with the patient.
Q. In your note of April lst, 1996, Doctor, I believe you read that to us, and you said, await response of Dr. Collins and then will discuss options with the patient, correct?
A. Correct.
Q. So isn't it likely that you had not, at least up to that point, discussed any options with Patricia Smith?
A. I am uncertain. I may have -- I may have discussed the results with that. I don't remember what specific items I might have discussed, but I definitely let her know that I was depending upon further input to make a decision on the management.

Q. Did you see or talk to Patricia Smith at any point in time after March 25th of 1996?
A. No, I tried to call her on April lst, '96, as I documented here.
Q. And were you ever able to get in contact with her?
A. I left a message at her sister's for her to call me, and I also tried calling her at her home, there was no answer. I do not have a documentation of her calling me back, nor a recollection of that.
Q. Do you have an opinion as to whether treatment for severe obstructive sleep apnea would have changed the outcome of this case?
MS. PETRELLO: Objection.
MS. CUTHBERTSON: Object.
A. I do not know.
Q. How is it that you were informed of Patricia Smith's death?
A. There was a call to the practice which I documented on the note, chart note of 4-9-96, where they requested me to sign the death certificate. I, at that time, was uncertain what the cause of death would be for the patient, and as you read from the note, I informed the officer that the coroner would have to sign the death certificate, as I was not

able to explain the cause of death.
Q. Did you talk to the coroner's office regarding Patricia Smith?
A. Yes, I did.
Q. Do you know who you talked to?
A. I made a note, today called coroner's office, parentheses, Dr. Bal --
MS. CUTHBERTSON: Balraj.
A. -- Balraj, thank you -- to perform autopsy today and will inform me of results.
And there is also a mention of a Mr. Allison, that I must have also discussed.
Q. Do you know who Mr. Allison is, what category of personnel he is?
A. I do not know.
Q. Did you provide the coroner with any clinical information about Patricia Smith?
A. I believe that -- I believe that -- I am trying to remember. I am not certain, but I believe there is a question the patient died of a brain tumor, and that was a suggestion, and I disagreed with that, and felt that based upon what had been done with the patient, was not sufficient to explain her cause of death.
Q. This was prior to the time that the autopsy

was performed?
A. Yes.
Q. Did you receive a copy of the autopsy report when it was completed?
A. I did not.
Q. Since the autopsy has been done, have you had an opportunity to take a look at the autopsy?
A. Recently, I was able to look at the autopsy report.
Q. Did you receive any calls from the coroner's office after the completion of the autopsy to tell you what was found on the autopsy?
A. I cannot remember, because **I** did not document it.
Q. Do you have an opinion as to what was the likely cause of the seizure episodes that Patricia Smith had?
A. I am uncertain of the exact etiology.
Q. Doctor, are you aware that no calcified meningioma or other lesions were found on autopsy of Patricia Smith?
A. I would probably have to look at the autopsy report to validate those findings.
Q. Do you have an opinion as to whether obstructive sleep apnea contributed in any way to

Patricia Smith's death?

A. I note that there is no direct association of sleep apnea with sudden death, but I am totally uncertain what the -- how that would correlate with it completely.

Q. Do you have an opinion as to whether Patricia Smith's seizure episodes were likely caused by obstructive sleep apnea?

A. I am uncertain.

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

A. I am uncertain.

Q. Do you have an opinion as to whether it is likely low oxyhemoglobin desaturations played a role in Patricia Smith's death?

A. I am uncertain.

Q. Patricia Smith was found to have severe coronary artery disease in her left anterior descending coronary artery.

Assuming that had been diagnosed and treated before her death, do you have an opinion as to whether she would be alive today?

A. It is very unpredictable, the causes of sudden death, so I cannot speculate.

Q. Do you have an opinion as to whether undiagnosed coronary artery disease contributed in any way to her death?
A. It is difficult to speculate on that.
Q. Do you have an opinion as to whether Patricia Smith's death was preventable?
A. I can say that from the time I first saw the patient, and most every visit, that I discussed matters of healthy living with the patient, and lifestyle modification, repeatedly. It is -- you know, many of those factors may have made a difference. But it is very difficult to say completely.
Q. Do you blame Patricia Smith in any way for her own death?
A. I cannot give a clear reason for all the factors that would have led to her final demise. I do know, though, that of all the lifestyle modifications that I did talk with her about repeatedly, that it probably would have assisted in her survival.
Q. And what are we talking about in particular?
A. We spent a tremendous amount of time discussing about diet, maintaining a low fat, low cholesterol diet, we discussed exercise, we talked

about stress management, and reviewed all of those at almost every visit.

Q. Are you critical or do you find fault with anyone who rendered care to Patricia Smith?

A. No.

Q. After Patricia Smith's death, did you ever talk to Dr. Collins, Dr. Hlavin or Dr. Brooks about her death?

A. No.

Q. At any point in time, did Dr. Collins ever return a phone call to you in regard to the contacts that you made about the sleep study that was done on Patricia Smith?

A. I do not believe so.

Q. Doctor, have we discussed all the opinions that you presently hold relative to this case?

A. I believe so.

MS. TOSTI: If there are any opinions that you arrive at, that are new, between now and the time of trial, I would appreciate it if you would tell counsel, so that he can inform me about them, and then I would reserve a right to continue your deposition relative to any new opinions that you have.

I have no further questions, but I

believe defense counsel may have some for you.

MS. PETRELLO: I do have questions. Let's first take a short break.

(Short recess had.)

MR. BETZ: At the close of Jeanne's questions, she inquired or made a statement that she would expect to be advised if Dr. Rowane developed any different opinions.

Inasmuch as we have not been provided with any expert report or reports, it may well be that Dr. Rowane will have different opinions than expressed in his deposition today, depending on what some expert says.

I don't agree that we will produce Dr. Rowane for further deposition if that is the event, nor do I necessarily agree that we will produce him if there are any additional opinions developed during the course of this litigation.

CROSS EXAMINATION

BY MS. PETRELLO:

Q. Dr. Rowane, several hours ago, I introduced myself, so let me do it again. I am Colleen Petrello, and I represent Dr. Collins and

Dr. Hlavin.

I am going to try not to repeat anything that has already been asked, and if I bounce all over the place, I apologize. Some of the questions I had in advance, but some of the others are in response to some of the testimony you have given today.

Let me begin by asking you, in October of '95, specifically the 5th, I believe you testified it was Dr. Martin, the resident, that discussed the case with Dr. Collins. Is that correct, it was Dr. Martin?

A. Yes, it was.

Q. Do you know why Dr. Collins was chosen as the consult in this for Patricia Smith?

A. I am uncertain whether he was on call or whether or not it was because he has expertise in the area of seizures.

Q. So you were aware that Dr. Collins had a particular expertise as a neurologist in the field of seizure disorder, as opposed to other areas of neurology?

A. I honestly am not familiar with his curriculum vitae and all of his areas of expertise.

Q. How well did you know Dr. Collins at this time?

A. Honestly, it was my first encounter with Dr. Collins.

Q. Prior to that, you were aware that he treated seizure disorders, though?

A. Honestly, I did not -- honestly, I had not been familiar with Dr. Collins prior to this event.

Q. Were you familiar with any other neurologists at University?

A. Yes, there have been some neurologists our department has utilized. In the department, I am trying to think of people.

Do you want me to go through different ones?

Q. No, I am not looking for neurologists that you knew.

But as I understand your testimony, your department has used other neurologists for referrals in the past, prior to this time?

A. Yes.

Q. Any particular reason why one of those neurologists wasn't consulted, as opposed to Dr. Collins?

A. Honestly, I am uncertain of why. Maybe Dr. Collins was on call that day. I know our department works where we rotate call at different times, and I am honestly uncertain exactly why

Dr. Collins was picked that day.

Q. Just give me a moment. I just don't want to repeat what you have already been asked.

A. That is okay.

(Pause)

Q. When Dr. Brooks wrote to you -- Dr. Brooks wrote you a letter, I believe it was on February 7th, 1996. And in that letter -- I will give you a minute to get to it. It is the letter relative to the preliminary review of the sleep study.

A. Here it is. I am sorry.

Q. Now, first of all, just on the corner of that letter, does that say, awaiting final results, is that what it says?

A. It says, await final report.

Q. Report.

And is that you?

A. Yes, it is.

Q. Now, you were aware that Dr. Brooks did not copy Dr. Collins or Dr. Hlavin on this letter, correct?

A. I am uncertain of that.

Q. Well, the letter is written to you, correct?

A. Uh-huh.

Q. And it doesn't say a cc on it?

A. It doesn't say, cc, that is correct.
Q. All right.
Did University Hospitals, at this time, have a sleep center?
A. I believe so, since the official report says, University Sleep Center.
Q. Did they have sleep specialists, do you know?
A. I believe so.
Q. You had indicated earlier in your testimony that you have some patients that are family practice patients that have sleep apnea; is that not correct?
A. That is correct.
Q. But you also indicated that you are not necessarily treating them or managing the sleep apnea, correct?
A. That is correct.
Q. Do you know who does?
A. Honestly -- you mean, at that time, or presently?
Q. Well, let's talk about at that time, first.
A. Well, at that time I was uncertain of the exact consultants for that.
Q. Well, what about now?
A. Now I know some of the pulmonologists that work in that area. Other people that work in the

sleep study include some of the neurologists, as well.

Q. Neurologists that have a particular specialty in sleep apnea or sleep disorder?

A. That is correct.

Q. Now, you indicated that after you became aware of the final report, which was sometime after March 12th, somewhere between March 12th and March 25th when you saw Mrs. Smith, that you were attempting to contact Dr. Collins. I guess I am a little unclear as to why you were calling Dr. Collins.

And let me just back up, it is going to be kind of a long question here.

Now, I realize that he recommended to you that you might want to get a sleep study, because there was a question whether or not she had a sleep apnea because she had difficulty sleeping.

Dr. Collins also recommended an MRI. But when you got the results of that back, you made a consult to Dr. Hlavin, correct?

A. Well, Dr. Crownover saw it and she discussed it with Dr. Hlavin, and in her 11-27-95 note, she discusses with Dr. Collins and was referred to the neurosurgeon from there.

Q. So you were trying to get ahold of Dr. Collins so that he might be able to tell you who should manage this or look into this sleep apnea problem?
A. That is correct.
Q. Did you ever make any attempt to call someone from the sleep study -- I am sorry -- the Sleep Center?
A. I had not. It was Dr. Collins that initially requested that. She was referred for the test, and then I discussed it with him, because I didn't know where to go with that.
Q. Did you ever make any attempt to talk to Dr. Brooks?
A. No, I just made my attempts to talk to Dr. Collins.
Q. Doctor, you were aware that Dr. Collins was not the only neurologist at University?
A. That is correct.
Q. So when you were unable to get ahold of Dr. Collins, you could have called another neurologist, correct?
A. Dr. Collins is familiar with the case. He was the one who had assisted in my management of the patient. The patient had multiple issues going on,

and it was the kind of case where I felt I really needed someone who had had some continuity with her, to discuss, and I felt comfortable with his management, his recommendations, and he had made recommendations all through the course.

Q. And I understand that. But you could have called someone else, correct?

A. There are other people that could be called, but I anticipated, since I had --

MR. BETZ: You answered the question.

THE WITNESS: Okay, thank you.

Q. Now, on February 8th, 1996, Dr. Collins sent you a letter, if you want to just take a minute.

A. Yes.

Q. And with that letter, I believe he sent to you a copy of his office notes.

A. Yes, he does.

Q. Now, you were aware, in that letter, February 8th, 1996, that Dr. Collins had no intention of following up with her again; is that correct?

A. He said that, I have not scheduled a follow-up with her since her seizures are controlled.

But many times, when a consultant finishes one task, as a primary care physician, especially in

areas where I need continued assistance, that I will follow back up with them, because they may -- I may need more of their management expertise, and he noted there that if you have any questions about her care or if I can be of any help, just give a call.

Q. Yes, I understand that. And you certainly could have consulted Dr. Collins again.

But based on this letter, you were aware that at least in Dr. Collins' mind, he was not going to follow up with her any more or do any, you know, continuing treatment or see her, based upon this letter?

A. He stated that there, but then also the test that he ordered with me, the overnight polysomnogram report, he would also be receiving that, because we both were referred for that test, and I called him because I wanted to discuss what to do with the results of that.

Q. What is the basis of your comment that he received the results of the polysomnogram?

A. When they have the report, whoever they refer it to, they are supposed to send a copy to, and they acknowledge on this that it is referred from me as well as Dr. Collins.

Q. Do you have any information that Dr. Collins

did in fact ever receive the results of the sleep study?

A. No.

Q. And you were not aware whether or not Dr. Collins was in fact the type of neurologist that he wouldn't even be involved with a sleep apnea, correct?

A. That is correct.

Q. You said you had discussed the case with Dr. Collins. I don't know if anyone ever asked you you when you and he discussed this case, at any time. Do you have any recollection?

A. I believe that I discussed it with him on the 3rd of November, and that is based on the fact that the note from Dr. Martin, 10-5-95, acknowledged that patient was to see Dr. Collins on 11-3-95, and that I have a referral that was made on 11-3-95, the same date, that Dr. Collins was seeing the patient.

Q. Refer me to where you are looking at? 11-3?

A. It is just at the end of the 10-5-95, there is an addendum.

Q. I am sorry, what note are you looking at?

A. 10-5-95, okay, and at the end there --

MR. BETZ: Just wait.

Q. Okay, I have got it. I am there.

A. So at the end, EEG for 10-9-95, underneath that, Dr. Collins, 11-3-95, 1600, and then so I note, patient was scheduled to see Dr. Collins on November 3rd, and on November 3rd I am filling out a referral to get the sleep study.

Q. Okay, so you think that the last -- well, first of all, was that the only conversation you had with Dr. Collins, was around this period of November 3rd, at any time?

A. I didn't document a further discussion, and I know I discussed the case with him, and I just can't remember, and I don't have a document to acknowledge that.

Q. Do you recall anything about the last time you talked to Dr. Collins, where you were with her, in terms of evaluation and workup?

A. I am uncertain.

Q. Do you recall any conversation with Dr. Collins after he suggested that you might want to get a sleep study?

A. I don't remember.

Q. You knew on February 8th, 1996, by virtue of the fact that Dr. Collins sent you his office note, that he had not seen the results of the sleep study, correct?

A. That is correct. And also the sleep study preliminarily was noted the 7th of February, so he wouldn't have received that in time to make a comment to that, with this note.

Q. And you believe that because you put Collins' and your name on the referral form, that Dr. Brooks would have sent this to Dr. Collins as well as yourself? And by this, I meant, the results.

MR. BETZ: I am going to object to the form of the question. I don't think he said he put Dr. Collins' name on the referral form, he was referring to the final polysomnogram result that I think showed Dr. Collins' name on top.

A. I acknowledged on the referral that Dr. Collins requested it, and then referred by, it is acknowledged at the top of the report, Dr. Rowane, Dr. Collins.

Q. Okay.

Well, let me follow up here and make sure I understand this.

A. Okay.

Q. This is the report -- I am sorry -- the form that you fill out for a consult, and in this particular case, it was for the sleep study,

correct?
A. That is correct.
Q. And when you say you acknowledge it, you are talking about this reference to Dr. Collins in the body of this, correct?
A. That is correct.
Q. And if this is a better question to ask Dr. Brooks, please let me know.

How does wherever this is going to be referred to in this particular case, a sleep study, how would that doctor know who to send the report to, but for the referring physician, which is down here, which I believe that is you?
A. I know when I got the final report, both my name and Dr. Collins' was there.
Q. And I have seen that.
A. Okay.

In the body, a lot of times, if I do referrals, because of managed care, and I have to initiate them, a lot of times I will note that the key physician is sometimes a specialist, and I will put them in the body of that, so that they make sure they get reports, because they are the primary person that is driving that workup and management of that.

Q. When you received the February 8th, 1996 correspondence with Dr. Collins, did you make any attempts to contact him then relative to the sleep study?

A. I am not certain when I received this in relation to receiving the other study, I don't know whether I received this first or that first. So I don't recall that.

Q. Are you aware now -- now, meaning today -- that Dr. Collins' specialty is -- well, at the time when he was at UH, was seizure disorders?

A. I am aware now.

MS. PETRELLO: I don't know if Patty has any questions. I am just going to look at my notes real quick, just in the interest of time, because we have been here a long time.

CROSS EXAMINATION

BY MS. CUTHBERTSON:

Q. Dr. Rowane, I represent University Hospitals of Cleveland. I have a couple of questions for you.

When you assumed Dr. Sebas' case load, at that time could patients choose their own primary care physician?

A. Yes.

Q. Did you tell patients that, for example, when you assumed Dr. Sebas' case load?
A. I believe that Dr. Sebas sent a letter to all of his patients explaining that he was leaving to spend more time closer to his family, and that he acknowledged that I was the physician that was primarily stepping into his shoes. I don't have a copy of that letter, so I don't know exactly what it stated. But we have a lot of flexibility with the office for people to go to who they would like to.
Q. And for example, you were Ms. Smith's primary care physician, right?
A. Yes.
Q. There were others for her to choose from?
A. Yes.
Q. Did you at any time speak with anybody in the sleep lab, before or after the sleep study?
A. No.
Q. I assume you didn't send them anything in writing?
A. No, other than --
Q. Just the reports we have already talked about?
A. That is correct.
Q. I understand that you testified that

basically you are ultimately responsible for overseeing these patients in the family practice clinic that are also seen by the residents and medical students?

A. That is correct.

Q. And you testified you have no criticisms of any other providers, and specifically from the hospital's perspective, Dr. Whiting, Dr. Leventhal, Dr. Martin?

A. I am not critical of any of my residents.

Q. Let me ask you, would you expect a resident or a medical student to order a test like a stress test, independent of consultation with you?

A. They may recommend a test to be done.

Q. But ultimately, that has got to be run by you, for your patients, I mean?

A. Well, patients themselves are patients of the practice, and any provider that is seeing them can make decisions what they feel the best management is, but usually if a consult is required, usually that is run by an attending, for that to occur.

Q. Let me ask you, when you saw Ms. Smith on various occasions, you did H and Ps. During those physical exams, did she ever have an irregular heartbeat?

A. That was never documented.
Q. Would that be something you would have documented?
A. Very much so.
Q. Did those EKGs show that she had an irregular heartbeat?
A. I believe both demonstrated she had normal sinus rhythm.

MS. CUTHBERTSON: I guess that is all I have. Thank you.

MS. PETRELLO: Actually, just a couple.

RECROSS EXAMINATION

BY MS. PETRELLO:

Q. Do you recall how many times you actually spoke with Dr. Collins regarding Patricia Smith?
A. I know one. Dr. Kevin Martin had spoken to him. I honestly can't recall.
Q. Doctor, you were the physician that was responsible for obtaining consults regarding any problems that Ms. Smith may have had that was outside of your expertise, including sleep apnea, correct?
A. I am responsible for initiating all consults, the appropriate person.

Q. Do you have any criticism of Dr. Hlavin?
A. No.
MS. PETRELLO: Okay.
MS. TOSTI: I don't have further questions, but I would reiterate on the record that I reserve the right to continue this deposition as to any new opinions that you should have relative to this case.
I think plaintiff is entitled to discovery as to your opinions, and if there are any opinions that we have not delved into at this point in time, and you develop new ones prior to trial, I reiterate my request to continue your deposition relative to those new opinions.
MR. BETZ: I disagree for the reasons previously mentioned.
MS. TOSTI: Additionally on the record, Ken Torgerson, who is representing Dr. Lee Brooks in this case, received notice of this deposition from myself, Jeanne Tosti, as well as Attorney Tom Betz. We attempted to contact him by phone this morning, a message was left at his office.
At this point in time, I don't know

why he is not in attendance at the deposition, and Doctor, I would assume that he also has a right to depose you in regard to your opinions, if he so chooses to.

MR. BETZ: No, he doesn't. I disagree with that, as well.

We are done.

MS. TOSTI: We are done.

MR. BETZ: We will read.

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(DEPOSITION CONCLUDED)

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Michael Rowane, D.O.

CERTIFICATE

State of Ohio,)
) *ss:*
County of Cuyahoga.)

I, Ivy J. Gantverg, Registered Professional Reporter and Notary Public in and for the State of Ohio, duly commissioned and qualified, do hereby certify that the above-named MICHAEL ROWANE, D.O., was by me first duly sworn to testify to the truth, the whole truth, and nothing but the truth in the cause aforesaid; that the deposition as above set forth was reduced to writing by me, by means of stenotype, and was later transcribed into typewriting under my direction by computer-aided transcription; that I am not a relative or attorney of either party or otherwise interested in the event of this action.

IN WITNESS WHEREOF, I have hereunto set my hand and seal of office at Cleveland, Ohio, this 4th day of January, 1999.

Ivy J. Gantverg, Notary Public
in and for the State of Ohio.
Registered Professional Reporter
My commission expires November 5, 2003.