THE STATE of OHIO, :
: SS:
COUNTY of CUYAHOGA.:

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Dol. 404

IN THE COURT OF COMMON PLEAS

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KAITLIN STEVENS, et al., :
plaintiffs, :
vs. : Case No. 221097.
:
HURIKADALE SUNDARESH, M.D., :
et al., defendants. :

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Deposition of RAJA SHEKAR, M.D., a witness herein, called by the plaintiffs for the purpose of cross-examination pursuant to the Ohio Rules of Civil Procedure, taken before Frank P. Versagi, a Registered Professional Reporter, a Certified Legal Video Specialist, a Notary Public within and for the State of Ohio, at Saint Luke's Medical Building, 11201 Shaker Boulevard, Cleveland, Ohio, on Wednesday, the 24th day of June, 1992, commencing at 2:07 p.m., pursuant to notice.

APPEARANCES:

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WITNESS: RAJA SHEKAR, M.D.

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RAJA-SHEKAR, M.D.

of lawful age, a witness herein, called by the plaintiffs for the purpose of cross-examination pursuant to the Ohio Rules of Civil Procedure, being first duly sworn, as hereinafter certified, was examined and testified as follows:

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CROSS-EXAMINATION

BY MR. MELLINO:

Q. Would you state your full name, please, Doctor?

A. My name is Raja Shekar. I have change the name, as you can see from the copy of my CV.

My old name was Rajashekarajah.

Q. You changed your name to Raja Shekar?

A. Right.

Q. Sou were born in India?

A. That's right.

Q. And you received all your schooling in India?

A. Medical, up to medical college, right.

Q. Up through?

A. Medical college, right.

Q. Why don't you just, if you could, tell me how college and medical school works in India? What training you received over there?

A. You -- at the time I did finish high school, and

then you will have two years of University, following that you will have -- you will join the medical school, and from medical school you graduated in roughly five years.

You do a rotating internship, then you will graduate.

Q. Did you do a rotating internship?

A. That's correct.

Q From '68 to '69?

A That's correct.

Q. I take it then that was not in any particular specialty?

A, No.

Q Did you do any specialty internship in India?

A. I did. I was an instructor, lecturer in pathology in the medical school, and afterwards I did do, I join the postgraduate school in All India Institute in Deli.

I did six months of neurosurgery, then six months of medicine, and then I join M.D., and I came here. M.D. means that's postgraduate degree.

Q. Then you came to the United States?

A. That's correct.

Q Why did you come to the United States?

A. To -- I thought I would get better education,

and go -- my plan was to go back, then my plans change.

Q. What did you have to do to come from India to the United States?

A, I was to pass the ECFMG and then apply for various position.

Q. Did you have to obtain a position before you left India?

A. I believe so, yes.

Q. Was that the position at the Bronx-Lebanon Bospital?

A. Yes.

Q. And you did an internship there for one year in internal medicine?

A, That's correct,

Q. Then did you a three year residency in internal medicine at Beth-Israel Medical Center?

A. Two years, Total one year in straight medicine internship, plus two years of residency at Beth-Israel, would be three then,

Q. Your CV, it says -- do you have a copy? Do you have the CV with you?

It says '71 to '74 at Beth-Israel.

A. No. '72 to '74. This was '71 to '72, means it was actually from July to July. There was -- that's

incorrect. '72 to '74.

Q. Then you did a Fellowship in infectious disease from '74 to '76 at the Cook County Hospital in Chicago?

A. That's right.

Q And you are Boarded in Internal Medicine and Infectious Disease?

A. Correct.

Q. I take it that these are all the internships and residencies that you have undergone as part of your training --

A, Yes.

Q -- that are listed on your CV?

You've never done any residency or internship in the specialty of cardiology?

A. That's correct.

Q. Or pediatric cardiology?

A. That's correct.

Q. Says you're an assistant clinical professor of medicine at Case Western Reserve University from '84 to the present time; is that correct?

A. That's right.

Q. Who did you teach?

A. Residents and medical students,

Q. Do you teach classes at Case?

A. No. I teach clinical medicine for students who rotate at Saint Luke's Hospital,

Q. How often do you do that?

A. Whenever there is rotation. For example, when I take over, two months a year, possibly; and then whenever I do consultation with the students around there, I teach them.

Q. Did you look at the CV before the deposition?

A. No.

Q. Let me hand it to you, then ask you if it is up-to-date.

Is it up-to-date as far as the medical societies that you belong to?

A. Chicago Medical Society, I used to belong to, not anymore; and 'chat is correct, that is correct,

I just -- after January I am past president; and Illinois, I am not anymore, I used to be there. I am member of medical association.

As far as hospitals are concerned?

Q. Yes,

A. I am at Saint Luke's, and Meridia, and Hillcrest, and Marymount, and of course Women's Hospital is not there anymore.

That Cook County Hospital, when I was there in Illinois.

Q. Could I have that back?

Have you authored any articles or publications that relate to the field of cardiology OK pediatric cardiology?

A. Field of cardiology, I will say endocarditis I have done some work, That is infection in the heart.

Q. Is that one article or more than one article?

A. More than one article.

Q. Does that relate more to infectious disease than cardiology?

A. That's correct.

Q. I'm not sure, did I ask you about Board certification already?

MR. SEIBEL: No.

Q. You are Boarded in Internal Medicine and Infectious Disease?

A. That's correct.

Those are the only specialties that you are Boarded in?

MR. SEIBEL: You did ask him that before.

A. Yes.

Q. I see. Did you pass both those exams the first time you took them?

A. That's correct.

Q. Do you have any records in your possession for a patient named Kaitlin Stevens?

A. No. I -- after I got letter from you, I asked my lawyer to provide me with the record. We send me a copy of the EKG. I don't have any records myself.

Q. Do you have a copy of that EKG?

A. It is inside. Do you want me to briny it?

Q. Why don't you. It might make it easier.

A. Yes,

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(Interruption in proceedings.)

(Dr. Shekar Deposition Exhibits 1 and 2 marked for identification.)

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~~BY MR. MELLNO:~~

Q. Doctor, you brought three pieces of paper out of your office, what I had marked is two of the three sheets of paper, what was --

MR. SEIBEL: You don't have to answer.

Q. -- the third one?

MR. SEIBEL: I am instructing the Doctor not to answer.

We just told you he does not have a chart for this patient. When you attempted to

subpoena him or subpoena him for this deposition, at his request I supplied him with a copy of the EKG, which bears his signature; beyond that, you are not entitled to any further information about the documents, the three documents that he brought out into this room for this deposition. You have been given part of what I sent the doctor, and the rest of it you're not entitled to, it's attorney/client privilege and he doesn't have to answer your question.

MR. MELLINO: Well, we don't know if it's privileged unless we can get it identified on the record.

MR. SEIBEL: I guess we don't.

MR. MELLINO: That's the point.

~~BY MR. MELLINO:~~

Q. You did bring three sheets of paper out into the deposition; did you not?

MR. SEIBEL: You can answer that.

A. Yes.

MR. MELLINO: And you are not going to let him answer what the -- just what it was? I mean, if it was a letter or --

MR. SEIBEL: No. It's privileged attorney/client communications.

Q Would you identify for the record Exhibits 1 and 2?

A. These are the copies of the EKG that I received from my attorney.

Q. Is it two copies of the same EKG?

A. That's right-

Q Is that your signature on the EKG?

A. That's correct.

Q. Did you read the EKG?

A. Yes.

Q. How is it that you read the EKG?

A. It was read by the computer as poor data.

Q. As what?

A. Poor data, information may be adversely affected.

Q. Let me interrupt you for a minute because my question was poorly phrased.

In July of 1990 you apparently had some relationship with Booth Hospital that you were reading EKG's that were done for outpatients at that hospital?

A. Outpatient as well as inpatient, yes.

Q. What was the nature of the relationship?

A. I was in charge of the department of medicine and I was reading EKG on a contract basis with the

Booth Hospital.

Q. Was the contract with you yourself, individually?

A. I believe so, yes.

Q. Were you practicing with a group at that time?

A. No. I have a corporation, but I was practicing by myself.

Q You have a copy of that contract?

A. I don't. At this time I don't know.

Q. You don't know where it is?

A. No.

Q. Who was the contract with, you and who was the other party?

A. The hospital.

Q. Booth Memorial Hospital?

A. Right,

Q. I'm sorry. What was your position at the hospital?

A. I was the -- I think the chief of medicine department there.

Q. Was there a cardiology department at Booth?

A. No.

Q. Were there any cardiologists on staff at Booth?

A. No, not that I know of.

Q. Pardon me?

A. No, there was no cardiology department as such, was department of medicine.

Q. Did your corporation have any employees besides yourself?

A, No. I mean, secretaries I have.

Q. You were the only physician?

A. Physician, correct.

Q. You were the only shareholder of the corporation?

a. That's right.

Q. What was the name of the corporation?

A. Shekar Internal Medicine, Inc.

Q. Is that corporation still in existence?

A. Correct, Yes.

Q. And you still practice under that, in that corporation?

A. Right.

Q. Are you still the only employee?

A. That's correct?

Q. Physician employee?

You started in private practice in when, '76?

A. No. I was on the faculty of Cook County Hospital, University Illinois in '76. I was doing some consultation work there, but my practice I

started when I came here in 1982.

Q. Where did you work? Where did you start working in '82?

A. Shaker Hospital. I think it is called Shaker Hospital, which was in existence, that is where I came.

Q. Where was that?

A. It is on Shaker Boulevard, just close to Saint Luke's.

Q. Does this hospital still exist?

A. No, it does not exist,

Q. Were you practicing under your corporation then in '82?

A. No, had -- I started as a sole practitioner, then I got incorporated at a later date. I don't know when exactly.

Q. Have you always practiced as a sole practitioner?

A. That's correct.

Q. When did you incorporate?

A. I don't remember. Sometime maybe a year or two after I came here.

Q. Were you affiliated with any other hospitals besides Shaker Hospital in '82?

A. Yes, I was. Saint Luke's, that was affiliated

with at the time; and I do believe I was affiliated with Booth in '82.

Q. Were you affiliated with Booth from '82 until it went out of business?

A. That's right.

Q. When did you start reading EKG's for Booth?

A. I don't recall exactly, maybe about '86 or '87.

Q. Was the contract; a yearly contract? What was the period of time that --

A. Yes, yearly contract, then goes over.

Q. When was the last year it was renewed?

A. I believe it was renewed until it close, then before that they gave me a notice saying they are going to terminate the contract.

Q. You don't have copies of any of these contracts?

A. No, I don't keep them with me. They may be somewhere, but. when hospital close, I put them away.

Q. You put them away?

A. I have to give to my secretaries to put them away.

Q. You haven't destroyed them?

A. No, I have not destroyed them, I don't believe.

MR. SEIBEL: In all fairness, you don't know what your secretaries did with them, do you?

THE WITNESS: No. I have not instructed them to destroy them or anything, I presume they would be around.

Q. Do you know who was reading the EKG's at Booth before you?

A. Dr. Krall was reading them before,

Q. Doctor who?

A. K-r-a-l-l, Krall.

Q. What is his specialty?

A. He was a cardiologist.

Q. Why did he stop reading them?

A. I really don't know.

Q. Do you know why it was that you started reading them?

A. Yes, it was in the administration, asked me whether or not I can do that. I say yes, I would be willing to do that. I used to go regular basis there to do consultation work for internal medicine and infectious disease. I used to be around. It was not much of a problem for me to yo there because I used to go there, and they want me to read because I was available easy, that was --

Q. Who specifically from Booth asked you to do this?

A. The administrator. Also the chief of medicine

at that time for oncology, Stanley Post..

Q. What was the administrator's name?

A. I don't remember his name.

Q. What experience did you have reading EKG's?

a. I was an internist, I used to read the EKG with my patients, and read -- during my training I had read EKG's.

Q. During what?

a. During my training in internal medicine I did read EKG's.

Q. Prior to '86 or '87, prior to whatever time you started reading the EKG's at Booth, had you done this at any other hospital?

A No.

MR. SEIBEL: You mean when you say "Done this," you mean been under contract like this?

MR. MELLINO: No, I didn't mean that.

MR. SEIBEL: You mean reading EKG's.

A. Reading my EKG's, 1 used to read EKG's when I admitted my patients or in my office, for example. And say I admitted a patient to hospital, I would read the EKG of those patients; but not in an official way,

this fashion,

Q Once you entered into this contract with Booth, were you responsible for reading all the EKG's that were done at Booth?

A. That's correct. Right.

Q When you read your own patients' EKG's, were you assisted by either reading or consulting with a cardiologist?

A, No. It was read, but not -- I mean consult, if I need anything future for the EKG. In particular I didn't need a consultation,

Q But was the ERG read by a cardiologist first?

A Not necessarily first, no, It depend on when it was done. Like for example, I can do an EKG on the floor when I admitted a patient and I would interpret the EKG before the cardiologist read it.

Q Before the cardiologist read it; is that what you said?

A. Yes. In the emergency situation, yes,

Q But a cardiologist would --

A. Interpret, yes.

Q. But the EKG's that were done while you were under contract at Booth to read the EKG's, those EKG's would not have been read and interpreted by cardiologists?

A. That's correct..

MR. SEIBEL: Well, one second.

Do you know for a fact that none of the EKG's that you read were likewise interpreted by a cardiologist?

THE WITNESS: There was no provision for a cardiologist to read my EKG's afterwards on a regular basis.

MR. SEIBEL: That's not to say the EKG's were not eventually read by a cardiologist for some reason?

THE WITNESS: Right, That is not the interpretation.

~~BY MR. MELLINO:~~

Q. There was no cardiologist that had a contract with Booth to read the same EKG's that you were reading, was there?

A. Not to my knowledge.

Q. What was the purpose of your reading the EKG's?

A. My purpose was to -- many a time patient used to go to a surgery, to detect any acute changes in rhythmia or any electrolyte imbalances that might be there, and also to make sure there was no unusual abnormalities that might be detrimental to the health of the patients, particularly those that were going

for surgery.

Q. What information did you have about the patient prior to reading the EKG's?

A. Any patient or this patient in particular?

Q. No. Any patient?

A. I would have the information that was on the sheet mostly, which would be age of the patient, sex of the patient, and any other clinical indication that might be given for ordering the EKG, which is not always --

Q. How would you know the patient was going to surgery or not?

A. That would be indicated, because surgery, that would be done, There would be a list of every patient who were supposed to go to surgery or indication who was to go for surgery.

Q. That would be written on the EKG or would it be a separate --

A. Right.

Q. -- record?

A. Not on the EKG, necessarily, but somewhere there would be indication that surgery for patient.

Q. Where would the indication have been?

A. On sometimes maybe on the EKG itself, or sometimes just a slip of paper.

Q. Well, would there be a slip of paper that would have been separate from the EKG?

A. That's right. It could be, yes.

Q. Is there a difference in interpretation between an ERG prescribed for an adult and for a child?

A. Yes, it would be.

Q. What information did you have about why the EKG was being ordered for Kaitlin Stevens?

A. I don't recall now.

Q. Well, if it had been done to rule out a condition, would that have been information that you would have been provided with?

MRS. CWRULAS: Objection.

Q. You can answer.

A. Can you repeat the question again?

Q. Sure.

If the EKG were being ordered to rule out a condition, would that have been information you would have been given?

MRS. CWRULAS: Objection.

a. I believe so. I mean, it would have been given by the technicians if it was indicated, or there would be a slip that is attached, meaning sometimes it might be there.

Q. Wow were you paid for reading the EKG's?

A, I was paid on a monthly basis, not for individual EKG's. A monthly certain sum.

Q. You were paid a certain sum monthly for reading all the EKG's that were done that month at Booth?

A, That's right,

Q Regardless of the number of EKG's that were done?

A. That's correct?

Q. And you were paid by Booth?

A. That's right.

Q. So you would have been an employee of Booth for the purpose of reading these EKG's?

MR. PARKER: Objection.

MR. SEIBEL: Don't answer that, Doctor, Really, that is a legal conclusion question, Chris, whether you establish it's a contract, whether it's an employee OK employer relationship, contractor/contractee relationship, I don't think is something that the Doctor is going to answer,

MR. MELLINQ: I don't think whether he considered himself an employee is really a legal question or not.

MR. SEIBEL: Be is not going to answer it.

MR. MELLINO: It might have

legal implications, but that doesn't make it a legal question.

MR. SEIBEL: We is not going to answer.

MR. MELLINO: Okay.

BY ~~MR. MELLINO:~~

Q. Early-on you were going to tell me about how the EKG is actually read and I cut you off.

Could you go ahead and tell me now how EKG's are actually read.

MR. SEIBEL: Do you want this one or in general?

MR. MELLINO: In general.

A. In general? Okay.

I would go in the morning and I will go through the records and I will go through individual records and read the EKG's.

If there's a computer printout like this, I would look through and if I agree with that interpretation, I will sign it. If I -- I didn't, I would scratch the part that was not correct or which I thought was; if need be, I would add one or two lines.

Q. You said in your answer that if there were computer readouts that you would do these things, were there some that didn't have computer readouts?

A. Then I would say that what my interpretation was, I would say that it is normal EKG, OK it is sinus rhythm or any rhythm abnormality.

I will say if there was any clots, I can say if any hypertrophy, I will refer to that. If there were any acute changes, I would refer to them.

Q. Why would some have a computer reading and some wouldn't?

A. It depend on the machine. What machine they had at that time.

Q. You mean -- I don't understand your answer.

A. Certain time period in when I was reading there were machines that would interpret them, sophisticated machine; other times there were machine that didn't have this interpretation.

Q Is this a machine they got while you were --

A. During.

Q. -- while you were doing it?

A. Yes.

Q. So before a certain time period you would have read all of them yourself; after they got this machine, they make the computer read them first?

A. Correct.

Q. Do you know when they got the machine?

A. No.

Q. Apparently they had the machine by July of 1990?
A. Right.
Q. So the readings that are on the Exhibits 1 and 2, starting with poor data quality and all those findings, they would have been done by the computer?
A. That's right,
Q. Are there additional findings on this EKG that the computer didn't list?
A. No, I wouldn't say so.
Q. So you're satisfied that the computer has listed all the abnormalities that are present on this EKG?
A. That's right.
Q. When your attorney sent you the copy of the EKG, did you review it again?
A. Yes,
Q. To determine the accuracy?
A. Right.
Q. Of those findings?
A. Yes.
Q. When was that; do you recall?
A. I don't remember.
Q. Sometime after you received the subpoena for your deposition?
A. Right.
Q Do you know who programmed the computer that

read the printout, these findings?

A. I don't.

Q. Do you know if there was a separate program for pediatric EKG's and for adult EKG's?

A. Right. That, I knew.

Q. There was a separate program?

A I believe so,

Q. Who would have been responsible for making sure that the EKG was interrupted under the correct program?

MR. PARKER: Objection.

Q. You can answer,

A. I mean, you will have to repeat it again.

Again, the technician would be responsible for switching that, pediatric or adult, that's right, for computer interpretation.

Q The technician would be the one to determine under which program the EKC would be reviewed under?

A. As far as computer is concerned.

Q. How would you know when you go over to read these whether or not it was reviewed under the pediatric or adult program, or would you know?

A. No. I mean, I don't remember now how I would have known, whether that would be a separate print or not.

To me this didn't matter too much, as far as I agreed with this interpretation, really, whether it is for pediatric or adult. I mean, even for pediatric this is abnormal,

Q. I'm not sure whether or not you answered whether or not you would know under which program it was run.

A. I don't know how I would have known.

Q Either way, if this was run under an adult program or pediatric program, this is still an abnormal EKG?

A. That's correct,

Q. Would this EKG put a doctor on notice if there were -- or that follow-up needed to be done with the patient on the abnormal findings?

MRS. CARULAS: Objection.

A. Do you want me to answer?

Q. Yes, unless your attorney instructs you not to answer, you can answer.

THE WITNESS: Do you want me to answer?

MR. SEIBEL: Let me bear the question again.

- - - - -

(Question read.)

- - "- - -

MR. SEIBEL: Go ahead.

A. Really, I don't know, I am not a pediatrician. I would say this is abnormal EKG. As far as how and what should be done, is up to the physician.

Q. When you read these EKG's, did you ever make recommendations to the clinicians?

A. Yes, I did make recommendations to clinicians.

Q. Would you have done that on your reports, would this have been verbal, or how would it have been done?

A. I would make occasionally on the report, but most of the time I would report, particularly people who are supposed to go for surgery, if I felt they shouldn't go or something serious, that's how I would do it, call the physician and say we should cancel surgery, for example.

Q. Do you know Dr. Sundaresh?

A. Yes, I do.

Q. Did you know him in July of '90?

A. Yes, I did.

Q. How lony have you known him?

A. 20, 30 years. 30 years.

Q. How is it that you know him?

A. He is from same medical school as I am from. We have known since then,

Q Did you talk to him about the EKG?

A. No. No, I did not talk to him about the EMG.

Q Did you know that this was his patient?

A. No. I do now. At that time when I read the EKG, probably I may not have known who filled out the top. I just interpreted this.

Q. Well, it has Dr. Sundaresh's name on it?

A. Right. I mean, what I am trying to say, I may not look into the who referred all the time.

Q. You say you might not have looked at it?

A. 1 might have looked at it, too.

Q. But it was on there?

A. Yes.

Q. Sundaresh's name is on the EKG?

A. Right.

Q. So if you had noticed that, you would have known it was his patient?

A. Right. Definitely.

Q. Did you ever have occasion to make recommendation to Dr. Sundaresh about -- let me start over.

Did you ever have occasion to make wecommendations to Dr. Sundaresh about his patients after you had interpreted EKG's done on his patients?

A. I don't recall, I don't recall.

Q. You don't recall one way or the other?
A, Right.
Q. What is an abnormal superior factor?
A. Abnormal superior factor?
Q. Yes.
A I don't know.
Q. You don't know what that is?
A. NO.
Q. Do you know what a left anterior herniblock is?
A. Yes, I know that,
Q. What is that?
A. It is situation, the conduction of the impulse from the atrium to the ventricle travels through an abnormal path because of the blockage from one of the conduction fascicles, and it would show a left axis deviation.
Q. What's a left axis deviation?
A. That is a QRS complex having an axis bending to the left.
Q. Is there a left axis deviation on that EKG?
A. In this ERG?
Q. Yes.
A. Yes, there is.
Q. How can you tell that?
A. I can tell that by the QRS complex in

the III, aVF inferior. No. Wait,

Q. Do you mind if I just look over your shoulder?

A. I'm sorry. Let me yo over this thing again, I cannot see it very well on -- from this. I can say that in the aVF, the major portion is below the horizontal line, which means in the vector is pointing up.

Q. What I would like to do is on my copy of the EKG, if you would circle that part where you are talking about?

a. In the aVF the vector -- I mean the QRS complex, majority of it is below the horizontal line.

Q. Just put your initials there by that circle.

MR. MELLINO: Would you mark that as 3.

- - - - -

(Dr. Shekar Deposition Exhibit 3 marked for identification.)

Q. This is Dr. Shekar Exhibit 3, this is my copy of the EKG which you circled, the part of the strip that shows left axis deviation, correct?

You have to answer out loud.

A. Yes.

Q. On your copy, on Exhibit 1, where it says P-R-T

axes, 54 250; do you see that?

A. Yes.

Q. The 250 is circled?

A. Right.

Q. Who circled that?

A. I don't recall, I don't remember.

Q. Bid you circle it?

A. No. I don't remember.

Q. Was it circled when you got it?

A. I don't remember.

MR. SEIBEL: You mean on the original, Chris?

MR. MELLINO: Pardon me?

MR. SEIBEL: You mean on the original? All he's ever gotten was the copy, currently.

PIR. MELLINO: Yes, you're right.

Q Did you circle it on the original?

A. I don't recall. I don't believe so, that I would have.

Q. On the copy it's already circled, right?

A. Right. This copy is circled. On here it is not circled.

Q. What is the significance of the 2-50?

A. That is the R wave axis, 250, 250 is it directs

it -- the angle on the projection in the anterior -- what should I say? How should I say?

It is the projection of the QRS complex in the vector.

You want me to circle it and show you?

Q. I thought I saw a diagram on this. It would be on these two, this is Exhibit 2?

A* Yes. I just made that up to --

Q. You drew this diagram on 2?

a. Yes,

Q. First of all, does the 250 have anything to do with left axis deviation?

A. No. It would be right axis.

Q. What does the 250 mean? Does that diagram help explain what the 250 means?

A, Yes. That diagram help explain what 250 means, yes.

Q. Why don't you explain to me what it means.

A. We project the EKG QRS axes on horizontal and vertical planes, and this is the I, and this is aVF; and this is an aVF.

If it is positive, it will be projected in this fashion; if it is negative, it would be projection higher up; and if it is 250, this is 90, this is zero, this will be 180, 270, and 250 axis

would be somewhere here.

Q. All right, What does that mean?

A. I am sorry.

Q. Is that a right axis?

A. I'm sorry. Yes. This is right axis deviation.

Q. So this ERG has both right axis and left axis deviation?

A. According to this. Then if you project with the -- almost project the whole thing again -- let me try and do this other than being -- so in I, it is minus, so it would be in here; and in aVF also it is minus, which would be here.

Q. Yes?

A. So a left axis deviation is the one wherein the -- it should be above the horizontal axis, okay; and right axis is the one wherein it will be right of this and in here, this will actually project to somewhere here.

Q. So zero is actually right here where you had 1?

A. Right. And I meant 180, but this is 90, this would be 180.

Q. Yes,

A. So 250 would De here.

Q. That's a left axis deviation?

A. It is indicated neither left or right axis here,

When you actually do -- at this time when you actually ask that, just look into this rather than at the Lead I. So the -- if you have to go with both, you have to take into account both of them. If you do it, would project to so-called indeterminate. It could be extreme left or extreme right, the way you interpret it.

Q. Which one is it?

A. You can take your pick.

Q. So it's either extreme right or it's extreme left, take your pick?

A. Yes.

MR. SEIBEL:: Based upon this EKG.

Q. What's the significance of this finding in terms of the patient's clinical status?

A. No. The QRS complex is projecting in a very abnormal direction.

Q. What's the clinical significance of the abnormality?

A. This could be brought on by ventricular hypertrophy, which it is there already.

Q. Could it also be caused by a complete AV canal defect?

A. It could be, yes.

Q When you were explaining this to me before you said this one below the line would be positive, and the ones going this way would be negative?

A. Yes.

Q. So would the 250 be expressed as a negative?

A. No. It is -- will be -- no, it will be expressed up to AV. I mean, up to here as negative. This quadrant would be negative, and this would be positive.

Q. It's positive all the way over to 270?

A. Right,

Q. You've never heard this quadrant as being negative?

A. No.

Q I'm sorry. I forgot your answer when I asked you about that being caused by a complete AV canal defect, what did you say?

A. It might be.

Q. The finding of either an extreme right or left axis deviation is not one of the abnormalities as mentioned by the computer, is it?

A. Right. That's right. And I am interpreted that at that time as them being part of the ventricular hypertrophy, itself.

Q. Well, should one of the findings be either

extreme right or left axis deviation?

MRS. CARULAS: Objection.

A. It could be, yes; but as I said, I might have interpreted it at that time as this being part of the ventricular hypertrophy, which indeed gave us right axis deviation,

Q. Well, does right ventricular hypertrophy give you left axis deviation?

A. No. I said that -- that incorrectly on my part, to say it was left axis deviation. I said just based on -- on aVF, I said rather than taking into account the whole EKG.

Q. You confused me.

Are you saying this EMG does not have left axis deviation?

A. This EKG I said has an indeterminate axis, and this would be more compatible, especially in view of the right ventricular hypertrophy, as extreme right axis deviation. That part that I said was incorrect. I mean only by looking at aVF, because it did go in a negative way.

MR. SEIBEL: Doctor, in all fairness to you, he asked you before whether there are indications on this EKG of a left axis deviation, and I believe you identified there are in the aVF Lead,

but in the context --

A, Right. You're looking at that, is not just left axis deviation, it is indeterminate as plotted out now.

Q. Just answer my question so there is no confusion on the record.

Is there left axis deviation. on this EKG strip?

MR. SEIBEL: As a whole or specifically?

A. The aVF I would say indicated in negative vector, That, I would say.

Q. Which means what?

A, Which means that it would be above the horizontal line, the axis would be above the horizontal. line.

Q. Is that left axis deviation?

A. It could be extreme left or extreme right, I said.

Q. Okay.

A. I don't mean to be resistant. I just went over that in simplistic way first, rather than looking into the Lead I, also.

Q. I just want to make sure that I understand what your testimony is.

Are you telling me that this EKG can be interpreted as either having extreme right axis or extreme left axis deviation, either one?

A. Right.

Q It's depends on how you interpret it?

A Rights

Q. But it definitely has one or the other?

A. Right. Yes, It is not a normal EKG.

Q. It either has an extreme right axis deviation or an extreme left axis deviation on it?

A. Right.

Q You're saying that's correct?

A. It could be, but as I said, in this context I would say it would indicate right, extreme right axis deviation.

Q. Your interpretation of this is right axis deviation more so than left axis deviation?

A. That's correct.

Q. And if you were interpreting this EKG today, would you include the additional finding of extreme right axis deviation as one of the findings?

A. I don't know that for sure. I interpreted this as compatible with right ventricular hypertrophy.

Q. The finding of right ventricular hypertrophy that is on the EKG strip you felt would alert a

pediatrician who was looking at this to the fact that there was right axis deviation?

A. Right.

MRS. CARULAS: Objection.

Q. Let me ask you to assume that this EKG strip shows left axis deviation instead of right axis deviation, should the finding of left axis deviation have been included in the abnormal finding?

MR. SEIBEL: Are you asking him to assume something that he doesn't believe is there? I think that's unfair to the Doctor. He is not going to answer that.

MR. MELLINO: Wait a minute. He said this could be interpreted either way, either right axis deviation or left axis deviation.

MR. SEIBEL: That's not what he said. He said in context of the EKG. He said -- he identified some portion of it.

MR. MELLINO: Well, the record is going to be very clear. Let's continue asking the questions,

MR. SEIBEL: Move on to another question. Ne is not going to answer your hypothetical.

MR. MELLINO~ That's fine. Get

that on the record because we'll go the to court and get sanctions because that's grossly improper.

BY MR. MELLINO:

Q. All right. I want you to assume that somebody would read this strip and interpret the finding that we have talked about, the P-R-T axes 250 as being left axis deviation as opposed to right axis deviation, if you assume that, should the finding of left axis deviation have been included as a specific finding on the EKG strip?

MR. SEIBEL:: You don't have to answer that. He's instructed not to answer.

Q. Did you anticipate that this EKG would be read by a cardiologist after you read it?

A. No.

Q. Are you familiar with any cardiology text?

A. I have Adult Cardiology, not pediatric, Adult.

Q. You've read --

A. I have Adult Cardiology. Internal Medicine and Adult Cardiology.

Q. What text have you read?

A. I just say. And I have read Hertz & Brownwald, not all of it, parts of it.

Q. What's the name of that text?

A. Brownwald Textbook of Cardiology.

Q. And you have not read any pediatric cardiology text?

A, No.

Q. Do you know what text are considered authoritative in the field of pediatric cardiology?

a. No, I don't.

Q. Have you read any articles or any other publication in the field of either cardiology or pediatric cardiology?

A. Cardiology, yes, not pediatric cardiology.

Q. What articles have you read?

A. I don't remember all the articles that I have read.

Q. But this would have just been in adult cardiology?

A. That's correct.

Q. When you were reading these EKG's, interpreting the EKG's, did you refer to a textbook to assist you in reading them?

A. Yeah, I had an ERG book, not a text book, an EKG book. Medic and Chung's reference, sort of used to read that.

Q. What was the name of that?

A. C-h-u-n-g. Medic, C-h-u-n-g.

Q. Those are the authors of the book?

A. Yes.
Q. What is the name of the book?
A. I don't know the names.
Q. I take it you have never practiced in the field of pediatrics?
A. That's correct.
Q. You've never treated children?
A, No. Other than -- no.
That's right. Other than as a consultant in infectious disease occasionally I see children, but no,
Q. Do you treat patients with Down's Syndrome in your practice?
A. No.
Q. Do you know how to diagnosis an AV canal defect?
A. NO.
Q. Do you know what the signs of an AV canal defect are on an EKG?
A. EKG -- I had read them before. Now I don't recall all the details of them. When I was interpreting, I had looked into those.
Q. As we sit here today at this deposition you can't tell me what the --
A. Correct.
Q. __ findings are on an EKG that will be

diagnostic of AV canal defect?

A. 'That's right.

Q. Would you agree that the finding of severe axis deviation on EKG means that unless the patient has surgery, that he or she will die or become a pulmonary cripple?

MR. SEIBEL: Objection,

MRS. CARULAS: Objection.

A. I don't know.

THE WITNESS: Oh, am I not to answer?

MR. SEIBEL: Let's hear it again.

- - - - -

(Question read.)

- - - - -

MR. SEIBEL: Do you want to ask it again?

MR. MELLINO: Sure.

Q. Do you agree that the finding of severe left axis deviation on EKG means that if the patient doesn't have surgery that he ox she will die or become a pulmonary cripple?

A, I don't know.

MRS. CARULAS: Objection.

MR. PARKER: Objection.

Q I think on Exhibit, 2 there is this diagram that's in --

A, No, this is something that I scratch.

Q. Don't mark on those.

A. This one I don't know. This also is okay.

Do you want to me --

Q. I just want to ask you some questions about this one.

You did that, you drew that diagram?

A. Yes,

Q. When did you do that?

A. I was just doing just now.

Q. Before the deposition?

A. Right.

Q. Why were you doing that?

A. I was just going through and trying to project this and I was trying to write the --

Q. Trying to project what?

A. The axis.

Q. The 2503

A. Yes.

Q. And you projected it into the lower right quadrant of that diagram -- lower left quadrant, I mean?

A. Yes.

Q I'm looking at it upside down,

MR. SEIBEL: You were right.

A. It is upper right.

Q. Pardon me?

Where you have it drawn --

A. Wait. I don't think I was right. I was drawing that way. Right. So it is --

Q. It's in the Lower left where you have it drawn; is that right, the lower left?

A. I mean I was just playing with that.

Q. I understand that. I just want to know where this is, the line that you projected, the 250 is in the lower Left quadrant, correct?

You have to answer yes or no?

A. Yes.

MR. MELLINO: Thanks, Doctor. I don't have any other questions for you,

MRS. CAKULAS: On behalf of Drs. Sundaresh and Mortimer I'd Like to reserve our right to call this witness in the future.

MR. PARKER: Doctor, my name is Alan Parker. I represent Booth Hospital, now Metro, and I just have a few.

- - - - -

CROSS-EXAMINATION

BY MR. PARKER:

Q. I take it that EKG tracings have to be interpreted, they are not self-explanatory, but a physician has to review them and interpret them; is that correct?

A. That's correct.

Q And in the interpretation of EKG tracings, am I correct that medical judgment and experience plays a role?

A. That's right.

Q. Does the hospital exercise control over your medical judgment and your interpretation of these EKG's findings?

MR. MELLINO: Objection.

MR. SEIBEL: You can go ahead and answer.

A. Hospital has no control over how I interpret things.

MR. PARKER: I think that's all I have. Thank you.

MR. SEIBEL: The Doctor is going to review his transcript if it is ordered and before it becomes an official part of the record. We're not waiving signature.

Also, can we have this just marked and attached to the deposition so that everyone gets a copy of the CV?

MR. MELLINO: Sure.

You want 28 days to read it.

MR. SEIBEL: Yes.

- - - - -

(Deposition concluded; signature not waived.)

- - - - -

ERRATA SHEET

PAGE LINE

I have read th foregoing transcript and the same is true and accurate,

_____

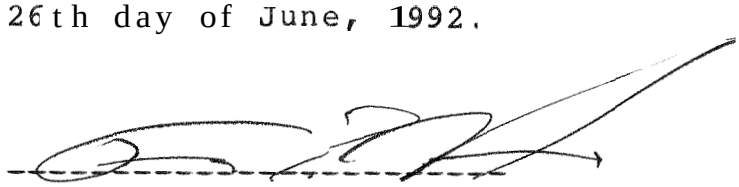
RAJA SHEKAR, M.D.

The State of Ohio, :

County of Cuyahoga.: CERTIFICATE:

I, Frank P. Versagi, Registered Professional Reporter, a Certified Legal Video Specialist, Notary Public within and for the State of Ohio, do hereby certify that the within named witness, ~~RAJA~~ SHEKAR, M.D., was by me first duly sworn to testify the truth in the cause aforesaid; that the testimony then given was reduced by me to stenotypy in the presence of said witness, subsequently transcribed onto a computer under my direction, and that the foregoing is a true and correct transcript of the testimony so given as aforesaid, I do further certify that this deposition was taken at the time and place as specified in the foregoing caption, and that I am not a relative, counsel, or attorney of either party, or otherwise interested in the outcome of this action.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Cleveland, Ohio, this 26th day of June, 1992.



Frank P. Versagi, Registered Professional Reporter, a Certified Legal Video Specialist, Notary Public/State of Ohio. Commission expiration: 2-25-93

~~ERRATA-SHEET~~

~~PAGE~~		~~LINE~~
5	change → changed. Typo	11
7	change → changed Typo.	2
7	add - do. Typo	
18	16 - Say → Said Typo.	16
18	chief & Medicine → chief of Staff - Typo	25
19	oncology → gynecologist - Typo.	1
19	with → of Typo	5
21	rhythmia → arrhythmia Typo	22
26	clots → blocks - Typo.	4
37	Ventricular → Right ventricular	21
43	Brownwald → Brunwald. - Typo	22 25
44	Merie → Merritt. -	21, 24.
46	That is right → That may be so.	2

I have read the foregoing transcript and the same is true and accurate.

RAJA SHEKAR, M.D.

7/24/90
Jean AM
11

Name: STEVENS, KATHRYN 012565-8
Age: 15 Ht: Wt: Med: 012565-8
Sex: Race:
Loc: Room:

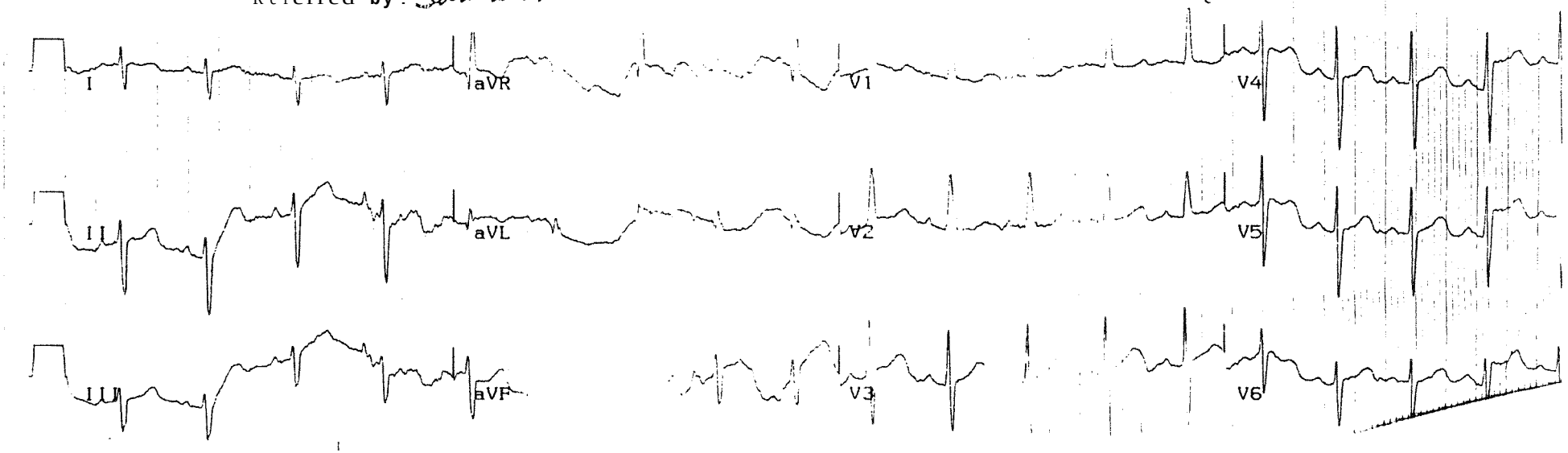
25mm/s
5mm/mV
40Hz
Pgm 105C /104

Vent. rate	115	BPM
PR interval	132	ms
QRS duration	84	ms
QT/QTc	292/403	ms
P-R-T axes	54 250 74	

Reviewed by:
Referred by: Saunders

28-JUL-90 08:28 BOOTH MEMORIAL HOSPITAL

*** POOR DATA QUALITY, INTERPRETATION MAY BE ADVERSELY AFFECTED
SINUS TACHYCARDIA
PULMONARY DISEASE PATTERN
RIGHT VENTRICULAR HYPERTROPHY
ST ELEVATION, PROBABLY DUE TO EARLY REPOLARIZATION
NONSPECIFIC ST ABNORMALITY
ABNORMAL ECG



DEPOSITION EXHIBIT
6-24-92
DR. SHEKAR 2

December 1, 1991

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EDUCATION

First Grade College, Tumkur. India Pre- Medicine, 1960-1961

Government Medical College Mysore, India Medicine 1962-1969

Government Medical College Mysore, India Internship 1968-1969

J. J. M. Medical College Devangere, India Lecturer in Pathology, 1969

All India Institute of Medical Science New Delhi, India House Officer, 1970

Bronx-Lebanon Hospital Bronx, New York Internship (Medicine) 1971-1972

Both-Isreal Medical Center, New York Residency (Medicine) 1971-1974

Cook County Hospital Chicago, Illinois Fellowship, Infectios Diseases 1974-1976

BOARD ~~CER~~TIFICATION

SPECIALTY: American Board of Internal Medicine, June, 1974

SUBSPECIALTY: Infectious Diseases October 1976

UNIVERSITY APPOINTMENTS

University of Illinois Assistant Professor of Medicine 1977-1982

Assistant Clinical Professor of Medicine
Case Western Reserve University
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DEPOSITION EXHIBIT
6-24-92
R. Shekar 4

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MEDICAL SOCIETIES

Member of the Governing Board of American Association of Physican from India

American Society of Microbiology

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Illinois Medical Society

American Medical Association

HOSPITAL AFFILIATIONS

OHIO

1. MetroHealth Saint Luke's Cleveland, Ohio 1982-Present

2. Meridia Huron Hospital Cleveland, Ohio

3. St. Alexis Hospital Cleveland, Ohio

4. Meridia Hillcrest Hospital Mayfield, Ohio

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1. Cook County Hospital
Chicago, Illinois 1976-1982

2. Grant Hospital
Chicago, Illinois 1978-1982

3. Good Samaritan Hospital
Downers
Grove, Illinois 1978-1982

4. Edward Hospital Naperville,
Illinois 1978-1982

DISTINCTIONS AND AWARDS

1. Gold Medalist in Physiology - University of Mysore, India 1964

2. Golden Apple Award for Best Teacher of the Year - Grant Hospital, Chicago - 1979-1980

3. Best Teacher of the Year - St. Luke's Hospital Cleveland 1986

4. Quality Assurance Award for Infection Control Committee Meridia Huron Ifospital - 1989, 1990-1991

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3. Resistance of Some Strains of Staphyolococcus aureus to the Bactericidal Action of Nafcillin.
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6. Bacteriocidal Activity of Anti-Staphylococcal Antibiotics against Tolerant Strains of Staphylococcus aureus.
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T.W. Rice, K.R. Rajashekaraiah, C.A. Kallick. Presented at Sterling, Scotland, June, 1982.