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

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IN THE COURT OF COMMON PLEAS

- - - - - Doc. 462

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

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Deposition of KENNETH G. ZAHKA, 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 University Hospitals of Cleveland, 2074 Abington Road, Cleveland, Ohio, on Thursday, the 4th day of June, 1992, commencing at 1:20 p.m., pursuant to notice.

APPEARANCES:

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WITNESS: KENNETH ZAHKA, M.D.

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KENNETH G. ZAHKA, 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. Kenneth Zahka.

Q. What is your current position?

A. I am Director of Pediatric Cardiology at Rainbow Babies and Childrens Hospital, Case Western Reserve School of Medicine.

Q. How long have you held that position?

A. Since July of 1990.

Q. When did you come to the University Hospitals?

A. July of 1990.

Q. Where were you before that?

A. Johns Hopkins Hospital.

Q. What did you do there? What position did you hold at Johns Hopkins?

A. I am faculty of the Johns Hopkins School of Medicine, I was a pediatric cardiologist at

Johns Hopkins.

Q. What is your professional relationship with Dr. Mortimer?

A. I am on the same Case Western Reserve University School of Medicine faculty.

Q. Do you have any relationship with her in your daily practice?

A. We share a number of common patients because of her interest in Down syndrome and my position as pediatric cardiologist.

Q. Are you in the same department as her?

A. We are in the same department.

Q. Is your position superior to hers?

A. We would be considered colleagues,

Q. Okay. I'm not sure you answered my question or not, though,

I mean, you could be colleagues and still one be a superior position to the other?

A. You will have to refocus your question.

Q. What is her position?

a. In the department? Her title?

Q. Yes.

A. I am not sure.

Q. What department is it that we're talking about?

A. The Department of Pediatrics.

Q. Do you have any supervisory authority over her?

A, No.

Q. Does she have any over you?

A. None that I am aware of.

THE WITNESS: Lori, can we go downstairs at 1:30?

LORI: Yes, you can.

Q. Do you have any professional relationship with Dr. Mortimer outside of University Hospital?

A. No.

Q. Have you given presentations with her?

A. Yes.

Q. When and where?

A. I have given a presentation to the Down's Syndrome Parents Group, the upside of Down's, each of the past two years at their physicians night, and she has also been on the program.

Q. Where have the presentations taken place?

A. At the Rainbow Babies and Childrens Hospital Amphitheater.

Q. Is there any written transcripts of that presentation or any written materials that were given at those presentations?

A. Not that I am aware of.

Q. Nave you two given any other presentations

together?

A, Not that I recall.

Q. Do you see each other socially?

A. No.

Q. Did you know her before you came to University Hospital?

A. No.

Q. Are there any text in pediatrics that you consider authoritative?

A. On what subject?

Q. Down syndrome.

A. Authoritative text on Down's syndrome, not that come to mind.

Q. How about any articles?

A. On what area of Down syndrome are you interested?

Q. Just Down's syndrome.

A. The tendency in the medical literature would be not to write an article on Down's syndrome in a peer review journal. The article that you would write would be on a specific aspect of Down's syndrome in a peer review journal.

Q. How about heart defects in Down syndrome children?

A. As you're aware of from my CV, I have authored,

co-authored an article on heart defects in Down syndromes, and I hope that has become one of the authoritative articles.

Q. I didn't really have a chance to read your CV before we started.

Is there more than one article?

A. No, sir.

Q. if you can identify the article for me, please?

A. Article number 23, it's entitled, "Patterns of Cardiac Care in Infants with Down's syndrome."

Q. How about are there any text which you consider authoritative in the field of pediatric cardiology?

A. There are text in pediatric cardiology. You would need to be more specific for me to be able to answer the question to wnether they are authoritative with regard to the issues that you are interested in.

Q. Well, the issues that I am interested in are heart defects in Down syndrome children.

Are there any text that are authoritative in dealing with those issues?

A. I'm not familiar enough with the individual chapters in any of the well-known text in pediatric cardiology enough to be able to answer whether I agree with everything that is in those chapters.

Q. What are the well-known text in pediatric

cardiology?

A. Can you clarify your question, please? Well-known in which way, by my residents, by my Fellows, by sales? Would you clarify, please?

Q. You answered my question by saying you weren't familiar enough with well-known pediatric cardiology texts. I'm asking what you would consider the well-known pediatric texts?

THE WITNESS: Can we break and yo downstairs?

MR. SEIBEL: Sure.

Q. Before we break, since I am in your office, why don't you tell me what text you have in your office that deal with either pediatrics or pediatric cardiology?

A. You are welcome to review them off of my shelf. I am a pediatric cardiologist, most of my textbooks deal with cardiovascular physiology and heart disease. I am not going to go down the entire list.

THE WITNESS: I would like to go off the record.

MR. SEIBEL: Sure.

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(Interruption in proceedings.)

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BY MR. MELLINO:

Q. Before we broke I asked you what text you considered were -- what text you consider were well-known in the area of pediatric cardiology on the issues of heart defects in Down syndrome children, can you answer that for me?

A. I answered your question that I was not aware of any of the specific general text which were viewed authoritative on the subject of heart defects in Down's syndrome, and I am not aware of any specific textbooks on heart defects in Down's syndrome.

Q. What text do you use in your practice with dealing with those issues?

A. I am an associate professor, pediatric cardiologist at Case Western Reserve University School of Medicine, I rely on Med-Line searches and specific articles for researching my papers.

Q. You don't use any textbooks in dealing with those issues?

A. No, sir, I do not.

Q. Can you tell me any articles which you have relied on in dealing with those issues in your practice?

A. I'm sorry. Can you repeat your question?

Q. Can you cite for me any articles that you used

in the past in dealing with those issues in your practice?

A. I will refer you to the bibliography that's present in the article in 1989 in American Journal of Disease, of where I quoted several articles.

Q. When did you first see Kaitlin Stevens?

MR. SEIBEL: While he's looking, just for the record the Doctor has his original chart in front of him from Xaitlin Stevens! and out of fairness I don't think that anybody except Mr. Mellino has a copy of that, so I'll make sure that everyone gets a copy as requested.

Does anybody want a copy of Dr. Zahka's chart?

MR. MELLINO: I'm yoing to mark it and make it an exhibit

MR. SEIBEL: It's not leaving here, Chris. I'm sure we can get a copy made, but he continues to see her, so.

MR. MELLINO: That's fine.

A. The first letter Prom one of my visits is dated April 9, 1991.

Q. Is that the first time you saw her?

A. I cannot recall whether or not I had seen her as part of her hospitalizations, whether I had covered

for her for a weekend, for example.

Q. Who macle the diagnosis of the heart defect?

A, The first consultation in our chart is from my colleague Dr. Butto, and our Fellow -- actually a medical student, date on that consultation is 11-20-90.

Q. Did you have any involvement at all in the diagnosis of the heart defect?

A. We have a cardiac catheterization surgical conference every Monday afternoon where we discuss the data from cardiac catheterizations, and we have a Monday, 8:00 a.m. conference where we discuss all the inpatients that are being taken care of in the pediatric cardiology service, and I attend each of those conferences when I am in town, and 1 was at, at least one of the cardiac catheterization conferences where we discussed Kaitlin's data.

Q. Who would have been present at this one conference that you were at?

A. My colleagues, Dr. Butto, at that time Dr. Ben-Shachar, Dr. Liebman; and the surgeons Dr. VanHeeckeren, Dr. Spector; and our Fellows, and our nurses.

Q. Do you remember when this was?

a. I know it's in here somewhere.

Is the actual date very important?

Q. Yes.

A, As opposed to the month and the year?

Q. Would it have been the Monday after the date on the catheter report?

A. Yes.

Q. Okay. I take it that's what you are lookiny for?

A. No, I have seen the cath reports. It had been here, a copy of the minutes from the catheterization conference.

The date on the catheterization was 11-28 of '90.

Q. So the date of the cath conference would have been the Monday following 11-28-90?

A. Yes. Probably. We meet every week.

Q. And in your file there was contained the minutes of that cath conference?

A. As it pertained to her. It was in it when I yave it to you, the file,

Q. You yave it to me?

a. To review the chart.

Q. Before your deposition?

MR. SEIBEL: About ten minutes ago?

A. Shortly after we began the deposition you reviewed the chart.

MR. SEIBEL: Do you have it, Chris?

MR. MELLINO: No, I don't have it.

Do you have it, Bob?

MR. SEIBEL: No.

MR. MELLINO: Do you have it, John?

MR. JACKSON: How would I have it?

MR. MELLINO: I handed you the records.

THE WITNESS: It has to be here. We may be able to find it in another place, too.

Here it is.

MR. MELLINO: Can I see that?

THE WITNESS: Sure. It's all right for him to see it?

MR. SEIBEL: Sure.

For the record the mystery is solved. It was attached to another document.

Apparently Mr. Mellino didn't have it.

BY MR. MELLINO:

Q That note, that's the minutes of the cath meeting that we said before?

A. Correct.

Q. It's signed, at least has Dr. Butto's name on the bottom of it?

A. He would be the person who had been responsible for that conference, for dictating the minutes.

Q. Whose conclusion would be contained in the minutes?

A. That would be a consensus opinion of the group, If there were any dissenting opinions, they would on most occasions be stated with the specific dissenter's name attached to the statement.

Q. Do you remember there being any dissent?

A. There was no dissenter.

Q. What was the nature of Kaitlin's heart defect?

A. She has a congenital heart defect, the name of it, Complete Atrioventricular Canal.

Q. What does that mean in laymen's terms?

A. It is a defect that includes a hole between the pumping chambers of the heart that extends into the receiving chambers. It is a common valve between the receiving chambers and the pumping chambers instead of two separate valves.

Q. What consequence does that have for the patient?
A. It results in high pressure on the right side of the heart.
Q Is it repairable?
A. It is surgically repairable.
Q. Is it repairable in the first two years of life?
A. It is in general repairable in the first two years of life.
Q. How is AV canal defect diagnosed?
A. AV canal defect, like many of the other defects, is diagnosed by combination of physical examination, electrocardiography, echocardiography, and cardiac catheterization.
Q. What percentage of Down syndrome children have these congenital or have congenital heart defects?
MR. SEIBEL: This specific one or in general?
MR. MELLINO: Heart defects,
A. That epidemiologic data are not known. The usual quoted prevalence of heart disease in children with Down's syndrome is somewhere between 30 and 40 percent.
Q. Wow about AV canal defect?
A. AV canal defect comprises 63 percent of heart disease in children, in children with Down's syndrome.

Q. Wow long has that been common knowledge in the medical community?

MR. SEIBEL: I don't think he said it is common knowledge, Chris.

Q. Well, is that common knowledge in the medical community.

A. Is what common knowledge?

Q. The incidence of heart defect in AV canal in Down syndrome children?

A. It's been recognized for a number of years that children with Down's syndrome have heart defects.

Q. What, can you give me a number, how many numbers of years?

A. The specialty of pediatric cardiology has been around for 40 years, 45 years, 50 years. That was in the -- prior to that time all defects were diagnosed by autopsies, actually.

Q. So you are saying this has been common knowledge then for the last 40 years?

A. No. I said that heart defects in children, including children with Down's syndrome, have begun to be recognized by pediatric cardiologists for about 50 years. My viewpoint is from the viewpoint of a pediatric cardiologist.

Q. You are also a pediatrician?

A. I have not ever practiced pediatrics.

Q Well, do you know if the incidence of heart defect is common knowledge in the field of pediatrics?

A. Let me, rather than speculate on time, rather than speculate on what your question entails, say I began my pediatric training in 1975.

As part of my house staff training I took care of children who had Down's syndrome and heart defects, and so that I would assume at that time part of medical care, the medical care system understood that children with Down's syndrome had heart defects.

How much further beyond, before that, I don't know.

Q. Fair enough.

Did the --

A. Can you speak up.

Q. Sure.

Given the fact that there's high incidence of heart defects in Down syndrome children, is it required that ERG or echocardiograms be done in the first few months of life?

A. Are you asking a question of the standard of care for children with Down's syndrome?

Can you refocus your question in other

terms?

Q. Other terms? You want me to ask it in terms of standard of care?

MR. SEIBEL: I think his concern is with "require," your use of the term "require." If you could work with that a little bit.

MR. MELLINO: All right.

Q. Is it standard of care to do an ERG or echocardiogram on a Down's syndrome infant within the first few months of life to diagnosis a potential heart defect?

MR. JACKSON: Objection.

A. That standard of care has much more variation in regional areas than I had previously recognized before coming here to Ohio. It certainly was very common that children in the Baltimore, Washington area got electrocardiograms or echocardiograms. Whether they all got it, I don't know! because I wasn't -- I only saw the ones who did yet it, and a significant proportion of the ones that I did see in the Baltimore, Washington area had heart defect.

Now, if we say that common knowledge is that 40 percent of children who had Down's syndrome have heart defects, then as I think in retrospect of this, how come I wasn't seeing six normals for every

four that I picked up, because I was clearly seeing eight abnormals for every two normals in the Baltimore, Washington area.

So probably in retrospect somebody was screening those children without ECG and echo, so they were somehow being screened before they came to me.

When I came to Ohio and discussed my interest in echocardiography and my devotion to echocardiography with my colleagues, I actually found that the practice that I had developed of -- in pediatric cardiology, in general, in Maryland was more for or skewed to echocardiography in general! and also much more skewed towards echocardiography in specific for Down's syndrome or any kind of screening operation, and I was fairly surprised to find that.

As you probably know, I usually do, as an individual, recommend screening echocardiography for children with Down's syndrome, and in the two Down syndrome parents group meetings that I spoke at, I recommended that in those meetings because that is my personal opinion.

I've come to realize that that opinion is not shared by everybody, but it's clearly my personal opinion.

Q. These meetings were when, '91 and '90?

A. It would have been January -- January of '92 and January of '91.

Q. And I assume that you were of the same opinion as far as recommending this echocardiographic screening when you were in Baltimore?

A. Over the period of time of this case, I did in fact in Baltimore recommend the same thing to my referring pediatricians in Baltimore.

Q. You mentioned earlier that 1975 when you were undergoing training and also taking care of Down syndrome children -- that I assume was with and without heart defects; is that fair?

A. I think I probably took care of some children with Down's syndrome who had leukemia. It's a long time ago.

Q. When we talked about that before it was in the context of your pediatric training?

A. Right. The problem is I can remember one child quite vividly and so I was thinking of her, in particular of her heart defect in particular. I can even remember her name today.

There are certain things as part of your training that become drilled in your memory because of their circumstances, although generalities may not be clearly as vivid 15, 20 years later.

Q. As part of the care that you gave those children, did you do any kind of screening for heart defects?

A. That would not have been my role or practice at that time. I was a pediatric house officer.

Q. So it would have been up to whoever the attending was at that time to order screening?

A. That's correct.

Q. Did you understand that that was part of the care that was to be given?

A. I would say in retrospect that clearly wasn't part of a care at that time in 1975. That's an opinion and/or speculation.

Q. When did you become an attending?

MR. SEIBEL: An attending what?

A. I joined the faculty at the Johns Hopkins, University School of Medicine of Johns Hopkins Hospital. in 1981 as a pediatric cardiologist.

Q. And in 1981 would it have been standard of care to do any kind of screening?

A. My observations?

Q. Okay. I'll ask the question again.

Was it part of the care that was being given at Johns Hopkins in 1981 to do any kind of screening, either EKG or electrocardiogram, or even a

referral to a pediatric cardiologist in the treatment of Down syndrome children?

A. I am going to say I doubt it, but I would prefer not to yet into the argument of, "Well, Dr. Zahka, did you start recommending this to your referring pediatrician."

I would suspect it was sometime around when we got interested in writing that paper. So the paper came out in '89. We probably started thinking about that paper in '87, and said what is going on with Down's syndrome referrals. Why does sometimes they're not picked up? Are they being picked up in the Baltimore, Washington area? Are they being picked up in a timely fashion in the Baltimore, Washington area?

Q. Are you aware of any literature that was in publication before 1989 that recommended, made the same recommendation that you do now, and that is screening for heart defects in Down syndrome children?

A. I don't think so, because I don't exactly recall as we were reviewing the literature for that paper, seeing an article that came out and said that is a recommendation.

Q. How about any textbooks?

A. With either some degree of pride or

embarrassment, I will once again tell you that I don't read textbooks. I have chapters that I have to write for them, but I don't honestly read them.

Q. Irr your practice do you treat Down syndrome children that have unrepaired AV canal defects?

A. Yes, sir, we do.

Q. What is their clinical source?

A. As a group or individually?

Q. Let's talk about as a group first.

a. Children with unrepaired AV canal defects eventually get Eisenmenger's syndrome, at some rate. 20 months is very unusual. Three years, four years, five years is much more typical.

Q. Were you done with your answer?

A. Yes.

Q. I didn't want to interrupt you, that's all.

What is Eisenmenger's syndrome?

A. Eisenmenger's syndrome is when the arteries in the lung, the small arteries in the lung become damaged because of high pressure and/or high blood flow that is present usually from the time of birth.

Q. It's high blood flow?

A. Or high blood flow. High pressure or high blood flow, or the combination of those two things.

Q. Do Down syndrome children with unrepaired AV

canal defects have a decreased life expectancy?

MR. SEIBEL: From what? What are you comparing it to? You're asking the doctor to say whether they have a reduced life expectancy compared to what?

Q. Compared to a child who has a repaired AV canal defect?

A. Individuals who have Eisenmenger's, the data that are available, are that individuals who have Eisenmenger's in general, not specifically whether they have Down's syndrome or not, live into their third, fourth, and fifth decade. 20, 30, 40, and occasionally 50's, that is less than the life span of an adult in America today.

There are --

Q. Go ahead.

A. There are other aspects to your question, which we can yet into more specifically as you want to know each aspect of it. I can tell you what is known by me on those issues.

Q. What is the life expectancy of somebody who has Down's syndrome?

a. I am not aware of that particular fact. I have an opinion about the data that are available for Down's syndrome who have had heart defect repaired.

Q. So there is data available that has Life expectancy for repair of heart defects, for children who had their heart defect repaired?

A. In fact, to my knowledge those data are not. available for Down's syndrome life expectancy, and the reason I bring this up is that I was very privileged to be part of a long term natural history study collaborative with six institutions across the United States that looked at three specific defects in a young adult who had repair in early childhood, and included was -- in that was not AV canal, included in that were not specifically Down's syndrome patients.

In those data we asked at the time, some of us, are they available for Down's syndrome individually and for that 20, 30, 40 year follow-up that says will the natural history of repaired AV canal be the same in Down's syndrome as in normals, in normal people without Down's syndrome rather, we don't know that yet.

You can speculate yes or no, but at the present time we do not know the 25, 30, 40, or 50 year follow-up of Down's syndrome with complete AV canal, and for that matter we don't know the 25, 30 or 40 year follow-up of AV canal in the occasional person without a chromosomal problem who will have it.

We do know the 25, 30 follow-up for other heart: defects in usual individuals without Down's syndrome.

Whatever speculation you want to take between Down's syndrome and non-Down's syndrome, between other heart defects and AV canal would be open for discussion,

Q. Well, do you have an opinion on what the correlation is between the life expectancy of people with Down's syndrome and people without, when we're talking in the context of heart defects?

A. I think we probably shouldn't draw the parallel. There is no reason to think that they wouldn't be comparable; but for the same, *to* connect them, there is no reason to think that they will be, and that's what I told the parents group in our last meeting in early 1992.

My hope and expectation is that they would have a comparable natural history, but we don't know yet that specifically; although we know a Lot about ventricular septum defect and ventrilogy, the other two common heart defects in Down's syndrome and patients without Down's syndrome, but we unfortunately knew very little about the true 20 year, even, follow-up of AV canal.

Q. Are there studies that are published about life

expectancy of children with unrepaired AV canal defects?

A. As I wrote a chapter for a textbook that is coming out, Adolescence Medicine, on the adolescent and young adults with congenital heart disease, unrepaired, I re-did my literature search. It's not out yet. I re-did my literature search on Eisenmenger's. I was actually very disappointed to see in fact how little had been written in the last two decades on Eisenmenger's. It's almost as if we kind of forgotten about this as a problem.

The last two articles, the better articles are back in the early '70s, and they are not terrible good in terms of really defining natural history.

I would also urge you to wait, whenever it comes out, €or part of the natural history study on ventricular septal defect, which may address some of the Eisenmenger patients as well. in a subset. That may be out in a couple years.

Q. When is this new chapter that you are publishing going to be out?

A. I have been waiting for it for a while. I haven't seen it yet.

Q. What is it going to be published in? What's the

name of the book?

A. It is out of the University of Rochester, probably called Adolescence Medicine or something like that.

I am a relatively focused person, and they asked me to write a chapter about adolescent heart disease, it's going to be an adolescent textbook, and my secretary sends it to where it goes.

Q. Is that on your CV?

A. No, it hasn't come out yet.

Q. Are there any other articles or book chapters that have been published that aren't on your CV?

A. No.

Q. Are there any that are pending publications in addition to this one?

A. I have some chapters in an intensive care textbook, second edition of the Roger's Textbook about cardiovascular physiology, not particularly pertinent to this.

Q. We talked about Eisenmenger's syndrome, you mentioned it a few times, am I correct in understanding that that syndrome that the child developed is as a result of the failure to repair the AV canal defect?

A. The syndrome results from the high pressure

and/or high blood flow.

Q. And the high blood pressure or high blood flow results from the defect?

A. The heart defect.

Q. What symptoms does somebody with Eisenmenger's syndrome experience throughout their lifetime?

A. They usually become blue, the medical name for that is cyanosis, They over a period of decades have decreasing exercise tolerance and probably in a number of them eventually develop either heart rhythm problems or heart function problems related to the chronic load on the heart.

Q. I'm sorry. Heart rhythm function and what?

A. Heart rhythm and heart function problems.

Q. What does decreasing exercise tolerance mean in laymen's terms?

A. It means, for example, it would take you longer to walk a block. For example, if at age 10 it takes you one minute, at age 20 it may take you a minute and a half, at age 30 it may take you two or three minutes.

Q. Does a person with Eisenmenger's syndrome also experience hypoxia?

A. That is the nature of the cyanosis. That's the laboratory measurement of cyanosis.

Q. What is hypoxia?

MR. SEIBEL: Chris, you know that the Doctor knows what hypoxia is. Come on. You don't. know what hypoxia is? Get to something meaningful.

In fact, you don't. have to answer that. It's so commonly known that that's a flagrant abuse of the Doctor's good graces of you being here.

MR. MELLINO: Are you instructing him not to answer what hypoxia is?

MR. SEIBEL: You bet I am, yes.

~~BY MR. MELLINO:~~

Q. Does the hypoxia somebody with Eisenmenger's syndrome would experience have an effect on their organs?

A, Not in general. In general because they have adequate blood flow to their organs and the body extracts the oxygen that it needs from the blood and the organs work properly.

Q. Is organ dysfunction as a result of hypoxia something that can occur in patients with Eisenmenger's syndrome?

A. I will say not directly due to the low oxygen itself.

Q. Can they have organ dysfunction resulting from

Eisenmenger's syndrome?

A. In general prior to their death they do have organ dysfunction, secondary to the long -- the eventual heart function problems, which may limit the perfusion to the kidney or to the liver.

Q. So the damage to the organ occurs as a result of heart dysfunction, loss of heart function, therefore resulting in loss of blood flow to those organs?

A. That has been my experience for those patients at the end of their course. That's when eventually the heart function itself, the muscular function of the heart becomes a problem. That's when they develop more in the way of kidney or liver dysfunction.

Q. When does that usually occur?

A. It's of the natural history that is it exists in literature of Eisenmenger's suggesting that it eventually actually happens in the third, fourth, or fifth decade. That's also been my experience, late 20, 30, occasionally 40's.

Q. How much do these patients' exercise tolerance decrease as you get into the later decades?

A. That's never actually been quantified in a study. My personal experience is that it's actually very variable.

You know, I can remember one young

woman who had a lot of breathlessness with exercise in her late teens, and other patients who were still very much ambulatory in their 30's. Seen one woman who was in her late 40's who was ambulatory and working. It's not a patient with Down's syndrome, however.

Q. Now, did you ever look at the ERG that was done in July of '90?

A. That would have been before --

Q. You can take a look at it, if you want.

A. That would have been before I started taking care of her and I have never seen that ECG, and I would personally prefer, because of my relationship with the institution and this family, my personal request is that I not function here as an expert witness, In deference to this family, in deference to my colleagues, I will not change that approach.

So please take the ECG, which I have not seen, which is not integral to my care of Kaitlin Stevens, please take it frorn in front of me so I can turn and look at you. Please.

Please do not destroy my relationship with this family by asking me to be an expert witness. I am Kaitlin Stevens' pediatric cardiologist. Please do not do anything today to disturb that relationship.

MR. MELLINO: Frank, would you

mark his folder.

MR. SEIBEL: I think he understands what you are talking about.

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(Dr. Zahka Deposition Exhibit 1 marked for identification.)

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BY MR. MELLINO:

Q. Doctor, I have marked your file on Kaitlin Stevens as Deposition Exhibit 1, is this all your records you have in your possession regarding Kaitlin Stevens?

A. Yes. You may copy these. These are my only records on her.

Q. I understand.

A. They cannot be taken from this room.

MR. SEIBEL: Doctor, what we'll do, and this is on the record, if your office could just copy make one set of those, a copy for me, send them to me and I'll make sure all counsel get distributed a copy, okay. If you just have a copy made, one copy; is that acceptable, Chris?

MR. MELLINO: I don't know.

MR. SEIBEL: It's going to be kept in Dr. Zahka's possession. If you want to come

back and compare the copy you got from me that you have of the original, we'll make arrangement for you to do that.

MR. MELLINO: Okay. That's fine.

Q. And you wild. retain this original exhibit in your possession, correct?

A. In order to be able to continue to take care of Kaitlin, it's a very important part of my record.

Q Has this Exhibit 1 ever left your possession?

A. We have a separate filing room, this morning I asked my secretary for Kaitlin's chart, and she brought me Kaitlin's chart. To my belief, it is possible that that may be -- a good portion may already be in the possession of counsel.

Q. I'm just asking about these records right here that you maintain as your personal file.

A. That's correct.

Q. You've always maintained possession of them?

A, Yes, to the best of my knowledge.

Q. Have you removed anything, you or your attorney, removed anything out of this file?

a. No.

MR. SEIBEL: Just for the record, I removed one piece of confidential

attorney/client correspondence, a letter from me to the doctor; other than that, there has been nothing removed from this file.

MR. MELLINO: Do you have the letter? I just want to know what the date of the letter was,

MR. SEIBEL: It was as to scheduling the deposition, and I think it was sometime in the last 30 to 45 days.

MR. MELLINO: Okay.

THE WITNESS: That letter was clipped to this file, when my secretary gave it to me, I took it off, I put in inside the file.

Q. Did you send a copy of these records to your lawyer?

A. To my lawyer?

MR. SEIBEL He means me. No you never did.

A. NO.

Q. Did you ever discuss Kaitlin with Dr. Sundaresh?

A. No, Sir.

Q. Have you ever seen Dr. Sundaresh's records?

A. No, sir,

Q. Have you discussed Kaitlin with Dr. Mortimer?

A. The honest answer to that is I can't remember,

because it is certainly possible she would say to me how is Kaitlin Stevens doing.

Q. Did you ever talk to her about the ERG that was done in July of '90?

A. No, because as I said, I've never seen that ECG.

Q. Did you ever talk to her about her seeing Kaitlin?

A. No.

Q. I take it then you've never seen her records either?

A. No.

Q. How often do you currently see Kaitlin?

A. February 7, '92, the recommended follow-up was one year. I think I have seen her on two other occasions.

August 5, '91, recommended follow-up six months; April 9, '91, for a visit when she wasn't feeling well. No specific follow-up indicated.

Q. You have seen her a total of three times then.

A. As her pediatric cardiologist, I have seen her at heart functions that we have had in the heart mended heart support group.

Q. What is that?

A. It's a parents group for children who have heart problems. I think I've seen her either twice or three

times outside of the hospital at functions of that type.

Q On the three visits that you saw her as her treating doctor,. what treatment did you give?

A. Take a history, did a physical examination. On February 7 she had an electrocardiogram and echocardiogram, and I discussed her hematocrit with her. I believe I called Dr. Gerardo, her pediatrician, talked about her hematocrit, and then chatted with her family.

We did a -- we also did a blood count at that time.

Do you want to go through the other visits?

Q. Yeah, please,

A. August 5, I took a history, did a physical examination --

MR. SEIBEL: 1991?

A. August, 1991, pulse oximetry, ECG, and discussion with the family and undoubtedly with her referring -- with her pediatrician.

And I saw her on April 9, 1991, I believe at R B & C instead of at outpatient offices, did a physical examination, a chest x-ray, blood count, pulse oximetry, we did some counseling about

whether or not she had pneumonia. I thought she had a respiratory illness, but not pneumonia, and we discharged her to home.

Those were my three visits.

Q. Mow was her heart when you saw her in February of '92?

A. I said I am very pleased with Kaitlin's progress of the last year. She has a stable level of cyanosis and good ventricular function, I discussed with Mrs. Stevens the relatively unique nature of Kaitlin's situation and reasons why we feel that suryery is not appropriate for her, recommended SB prophylaxis, and no other restrictions or medications, and I thought that her hematocrit of 44 probably meant on a day in/day out basis, saturation was reasonably good. I suggested follow-up in one year, so I thought she was doing well.

The concept, as you know, of "Doing well" from a pediatric cardiologist's standpoint is where would I expect this patient to be at this time, and my assessment was that she was doing well, and I was pleased with her progress, that she was meeting my expectation.

Q. You mean that she was doing well for somebody with Eisenmenger's?

A. That I expect that she not have any problems at this time.

You have to be very careful because sometimes for children who have heart problems that are known that are not repaired, if you are cavalier about sayiny they're doing well, then sometimes the parents misunderstand you, think you don't understand their problem. That's the only reason I went into that.

Q. What is right ventricular impulse?

A. That's when you can feel the right ventricle here over the chest,

I'm pointing to the area at the bottom of my breastbone.

Q. Is that a normal. finding?

A. That's in general not a normal finding.

Q. What's an early systolic ejection click?

A. That's any sound that you hear after the first heart sound,

Q. What's the significance of that sound?

A. Usually comes from children who have abnormal aortic or pulmonary valves, and we occasionally see it in children who have just simply enlarged aortas, or enlarged pulmonary arteries, especially if there is pulmonary hypertension. It is something that may well

develop over time.

Q. Is that a normal or abnormal finding?

A. It is -- it is an abnormal finding. It would be abnormal finding in somebody who you thought was normal.

It's a not unexpected finding in somebody with Kaitlin's heart problem at this stage with her physiology.

Q. What's a Grade II/6 vibratory systolic ejection?

A. That means you can hear a sound between the heart sounds, and the two out of six refers to the intensity, the vibratory refers to the kind of auditory tones that you hear, and the systolic ejection murmur means that it meets the criteria of sound where a crescendo/decrescendo murmur builds up, then does down.

Q. Is that a normal or abnormal finding?

A. That would typically be described as a normal finding. If a medical student said to me, "Dr. Zahka, I have Grade II over 6 vibratory systolic ejection murmur," then I would say that would be compatible with me with normal blood flow in a normal child.

Q. The liver being palpable, would that be a normal or abnormal finding?

A. How big does it say it was?
Q. Well, liver is palpable one centimeter below the costal margin.
A. That's normal.
Q. What did you mean by the relatively -- that you discussed with Mrs. Stevens the relatively unique nature of Kaitlin's situation?
A. Well, we talked, was that I thought that it was -- it was very, very, very unusual for her to have the extent of Eisenmenger's, and specifically the anatomical changes in the blood vessels at the age of 20 months, and that her presentation with what I assumed had been very high vascular resistance right from the very beginning, so that she didn't have any of the much more typical findings of the AV canal; must have been present from the very beginning.

And I shared with her that we do see occasionally children like this, and in years past they were unfortunately much, much more common than they are today, but there is -- still are occasional children like Kaitlin who come up.
Q. Were they more common in years before that because of the lack of screening?
A. Again, unfortunately, I think right now screening is still not something that is done. I

mean, screening by echocardiography is, from what I can see, not being done. Everybody, whether it's your child, my child, normal child, everybody gets a physical exam which hopefully picks up the clues to the underlying heart defect, sometimes those clues are very subtle and sometimes they are easy.

The easy clues are the loud murmurs; most common cause for a referral to the cardiologist, loud murmur. I wish I can say that single second heart sounds, early systolic ejection clicks represented referring complaints to the pediatric cardiologist, because that would mean that the pediatricians could really pick up on single second heart sound clicks and right ventricular impulses.

I can't remember a child in my 15 years of practice, or whatever it's been, where the pediatrician said, "Dr. Zahka, I am concerned about the single second heart sound here."

That's in contrast to what hundreds of thousands of patients I have seen, where the pediatrician says "I am concerned about this heart murmur," and that's in particular why I stress the ECG and echocardiography screening of children with Down syndrome, because I think it's an imprecise, the physical exam is an imprecise art, even in my hands.

Q. So screening is something that you think should be done in these children?

A. I said it in public and I say it here, not everybody agrees with me however. You know why, because they say it's expensive. Welcome to medicine.

Q. Is failure to thrive a clue to heart defect?

A. Some children who have heart defects have failure to thrive. It's usually the ones who have more dramatic physical findings.

It's pretty unusual for me to get a referral for failure to thrive where it really wasn't obvious that the child had a heart defect.

Nothing is impossible, but it's pretty unusual that primary referral is failure to thrive.

Q. My question was: Is that a clue for the pediatrician that there may be a potential heart defect?

A. And I will answer it the same way I answered it: Based on my experience of referrals, children who have failure to thrive because of their heart. disease, in general they are -- they have the symptoms and signs of the heart defect, not the -- it's not just the failure to thrive.

Q. What other symptoms would they have?

A. usually fatigue intolerance, very rapid and

difficult breathing, those are the symptoms.

The signs are loud murmurs, and the pediatric cardiologist, as we have talked about would talk about precordial hyperactivity, enlarged livers, single second heart sounds.

MR. MELLINO:: Let's take a couple minute break.

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(Recess had.)

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

MR. GARDNER: No questions.

MR. JACKSON: I don't have any questions at this time.

MR. SEIBEL: Be's going to read it. We won't waive at this point.

Can we have a 28 day waiver rather than seven?

MR. MELLINO: Yes,

MR. SEIBEL: We will get copies of the Doctor's chart to everybody in due course,

- - - - -

(Deposition concluded; signature not waived.)

ERRATA SHEET

PAGE LINE

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

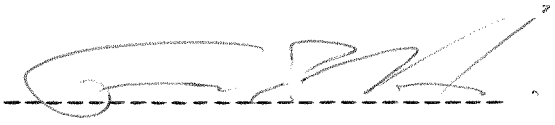
KENNETH ZAHKA

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, KENNETH ZAHKA, 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 10th 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