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

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IN THE COURT OF COMMON PLEAS

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Karl J. Yost, et al.,)
)
Plaintiffs,)
)
vs.) Case No. 449275
)
Cleveland Clinic Foundation, et al.,)
)
Defendants.)

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Deposition of Jack S. Elder, M.D., a witness herein, called by the defendants for the purpose of cross-examination, pursuant to the Ohio Rules of Civil Procedure, taken before Frank P. Versagi, RPR, CLVS, Notary Public in and for the State of Ohio, at University Hospital, 11100 Euclid Avenue, Cleveland, Ohio, on Monday, May 12, 2003, commencing at 12:10 p.m.

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APPEARANCES:
On behalf of the Plaintiffs:
Michael F. Becker, Esq.
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On behalf of the Defendants:
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NO EXHIBITS MARKED

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JACK S. ELDER, M.D.

of lawful age, being first duly sworn, as hereinafter certified, was examined and testified as follows:

CROSS-EXAMINATION

By Mr. Parker:

Q Will you state your full name, please?

A Jack S. Elder.

Q You are a physician, obviously?

A Yes.

Q Your specialty?

A I'm a urologist specializing in pediatric urology.

Q Do you hold any Board certifications?

A I have Board certification in urology. There is no -- currently there is no subspecialty certification in pediatric urology.

Q Doctor, I'm Alan Parker. I represent the Cleveland Clinic Foundation in this case that has been brought on behalf of Karl Yost.

You have had occasion to treat Karl Yost, as I understand it?

A Yes.

Q Can you tell me the circumstance in which Mr. Yost came to you?

I'm giving you back your medical records, feel free to refer to them any time you like.

A I don't recall specifically how they got my name, but they -- he was having trouble with incontinence and made an appointment to see me at one of my offices that I used to go to in Lorain; and the first time I saw him was on February 18, 1999.

Q What was the pertinent history you obtained at that time?

A As I understood it, at that time he was 15 years old, and it was my understanding that in June, 1996 he had undergone surgery on his lower spine for correction of a tethered spinal cord; and according to -- as I recall, he was there with his father for that. I just sort of -- I'm trying to recollect the who he was with, so I don't recall where -- who was providing the information.

But the history I obtained was that he was going to the bathroom normally before his surgery for the tethered spinal cord but since the surgery he had been unable to have satisfactory bladder control; and he -- it had been recommended that he catheterize himself to drain his bladder intermittently, and he had been given medication to try to help his bladder store even more urine and even with that he had been unable to stay dry.

In addition, he had had some problems with

bacterial infection, urine; and he had also in the interim I believe been diagnosed with insulin dependent diabetes mellitus.

Q What was the nature of your examination and anything that you ordered for him at that time?

A It was -- he was interested in becoming continent and I -- on physical exam there was the main pertinent finding was that he had a decubitus ulcer on his sacrum that was healing and was covered, and at that time his urine did not show signs of infection.

So we -- and I think he had -- we did an ultrasound which was showed normal kidneys, and I believe we did -- we also did -- recommended what is called video urodynamics, which is the test to evaluate the bladder capacity to see how much it stores and under what pressures and to then make plans for surgical correction.

Q Was the video urodynamic testing performed?

A I think we just the straight urodynamics. I'm not sure we did the video.

Q What of significance --

A So what it showed, normally a young man who is 15 years old would have a capacity of 450 to 500 milliliters, which is 15 to 16 or 17 ounces; and

his capacity was about 310.

He did not seem to have good sensation of his when his bladder was full, and when he -- we then had him urinate and he was unable to achieve a very good flow rate. I think -- I believe the maximum was about 4 milliliters per second. Normally it should be about 16 to 18; and he at that time he had a significant residual urine volume of nearly 200 milliliters.

So his capacity was reduced and he cannot empty his bladder very well and he didn't have very good sensation in his bladder.

Q With a normal patient is there any residual volume?

A Normally it should be less than 10 cc's.

Q So that was a significant finding?

A Yes.

Q So it sounds like his capacity was less than normal, his residual volume was greater than normal, his flow rate was below normal?

A Yes.

Q What if any recommendation did you make?

A What I recommended was that he -- I told him that I thought that he would -- that he would need to have his bladder enlarged, and the way we usually do that is with a patch of intestine; and there is a

figure here which I provided which indicates the technique that we use, and it is called an ileocystoplasty.

What that means is we take a segment of the small intestine, which is ileum, and separate it from the rest of the small intestine, open it up and then so it becomes a rectangle and then we fashion it into a patch which can then be put on top of the bladder to enlarge it.

And I did recommend that he have that, that's the optimal way to enlarge the bladder capacity and the safest and with the lowest risk of long term complication.

And I also recommended tightening his bladder neck somewhat to help reduce the chance of him having ongoing leakage, and I also recommended -- I told him that he would need to catheterize himself to empty his bladder in all probability after this type of surgery.

And often in these cases if you have a normal -- if you have normal sensation in the penis, often young men and woman would prefer to have a what is called continent stoma, where we create a connection, if you will, between the bladder and the abdominal wall; typically we bring

it out through the umbilicus, so that when we -- they need to catheterize themselves to drain the bladder, we can insert it through -- relatively painlessly through the umbilicus or somewhere on the abdominal wall rather than having to insert it through the penis or in the female urethra; and he was not interested in having that particular part of the procedure done and subsequently we went ahead and performed the ileocystoplasty and tightened the bladder neck.

Q Does the ileocystoplasty address the issue of residual volume?

A It does not.

Q Was there anything that was recommended to address that issue?

A Well, it is -- you can't really -- if anything, the ileocystoplasty is going to make the residual volume more, even more, because the -- because the bladder itself can contract but the ileo patch does not, you cannot make it generate a contraction; so the only way you would be able to empty it is by pushing, straining your abdominal muscles.

And of all of my patients who have had this done, none are able to empty their bladder satisfactorily if they have had a spinal cord

abnormality, such as spina bifida or a tethered spinal cord.

Q Ultimately it's my understanding that you did perform surgery on Karl Yost, is it the surgery that you have outlined?

A Yes.

Q When was that done?

A It was performed on January 6, 2000.

Q Now, am I correct that when Karl Yost came to you, you were addressing bladder incontinence?

A Yes.

Q Was he continent of bowel?

A It was my understanding that he was.

Q That's my understanding as well, but I'm trying to find out --

A Okay.

Q -- whether I'm wrong in that understanding.

Can you characterize the results of the surgery that you performed?

A When I have seen him in follow-up he has not been performing regular catheterizations. He has told me that he is urinating, he seems to by Valsalva's, by straining; and he is staying relatively dry during the day.

But he is -- if he is active athletically,

playing basketball or other activities, he is -- he has incontinence; in other words, what we call stress incontinence; and overnight he was having trouble staying dry.

When we checked him it turned out that he was -- he seemed to be emptying his bladder a little bit better afterwards than before.

The last time I saw him was October 15, 2002. At that time we did an ultrasound of the kidneys, which showed that the kidneys were normal in appearance, and the -- we did not catheterize him to check the residual urine volume but by ultrasound the residual urine volume was 70 milliliters.

Q So that is an improvement over his preoperative condition?

A Yes.

Q Do you have any information as to how frequently he is incontinent overnight?

A It's my understanding that he is incontinent most of the time. I'm not sure that I specifically asked are you incontinent or are you wet every single night, but it was my -- it's not just part of the time, it seems to be -- it's definitely a significant problem.

Q What if anything could be done to address the problem of overnight incontinence?

A Well, there are several possibilities: One would be to insert a catheter overnight, so he would sleep with an indwelling catheter in the bladder; another possibility would be to make sure he drains his bladder over -- before he goes to sleep with a catheter; another would be to set an alarm in the middle of the night to have him get up and go to the bathroom or to get up in the middle of the night to catheterize himself; and then another possibility would be to use one of those -- either the second or third option or in addition to using DDAVP, which is medication which can reduce the urine output.

He also has diabetes mellitus and I think it would be important to try and assess what his urine output is overnight when he is in good control versus when he is not in such good control; because if you're -- with diabetes mellitus there is -- if the serum glucose is elevated, then often you have polyuria, elevated urine output.

So that if he is emptying his bladder every three or four hours during the day, is able to stay reasonably dry that way, but he is sleeping for

eight or nine hours then it would be unlikely -- it might not be that likely he's going to be able to stay dry with a polyuric condition.

Q In other words, the diabetes may be contributing to an increase urine output --

A Yes.

Q -- for him, making his control all the more difficult overnight?

A Could be.

Q Have you recommended any of these modalities to help him control his overnight incontinence?

A We did recommend the DDAVP as an initial treatment before recommending waking up or trying something more that's going to alter his lifestyle more, and I have not seen him since last October and they haven't communicated with me as to how the DDAVP is working.

Q Do you know if Mr. Yost is following up with any other urologist?

A Well, it's my understanding that he has an appointment to see me in the next few weeks.

MR. BECKER: Excuse me for interrupting.

Doctor, did you say you gave him a prescription for that medication, the DDAVP?

THE WITNESS: Let me just -- according to my record from October 15th I did give him a prescription to take it one hour before bedtime, yes.

MR. BECKER: Okay. Thank you.

By Mr. Parker:

Q What is DDAVP?

A It's called desmopressin acetate and one of the -- it works on the collecting tubules in the kidney, it's an analog of a hormone called vasopressin; and normally when you're not drinking fluid your urine output goes down.

The reason it goes down is because when you're relatively dehydrated you have an elevated production of vasopressin by the pituitary gland that goes to the kidney and works on the collecting tubules to help pull the water out of the collecting tubules; in other words, out of the urine, and bring -- so it brings the water -- it is to help conserve water in your system rather than release it as urine.

And DDAVP is what we call an analog to vasopressin, meaning it is chemically similar and has similar mode of action and it's one of the -- is one of the common medications used to treat bed

wetting in children. We use it in -- we also use the same medication in individuals with spina bifida or other spinal cord abnormalities who are having trouble maintaining overnight bladder control.

And I have not used it in somebody -- to my recollection in somebody who has diabetes and a neuropathic bladder and an augmentation cystoplasty, so I don't have -- but we do have quite a large experience in using it in children with bed wetting.

Q When you last saw Karl Yost, was he self catheterizing at all?

A Infrequently. It's my understanding he was catheterizing infrequently.

Q Do you have any understanding as to what that means, infrequently; how frequent?

A Maybe I should say inconsistently.

Q Did he express to you any concerns or thought about how his condition was continuing to affect his lifestyle?

A No, but I must say I'm not sure that I asked him a lot about that.

Q Sure.

I have copies of many of your treatment

records. They are not entirely complete, and I will address that in the deposition how we want to address that, but I have your treatment records. There are a couple of letters written to a Dr. Sandoval.

I do not have any reports authored by you to Mr. Becker or specifically concerning this litigation; are there any such reports?

A I don't believe I have one.

Q You have been identified as a treating physician and obviously I would expect you to testify to the course of treatment that you gave to Karl Yost; do you have any understanding that you would be expressing standard of care opinions in this case?

A I don't believe I'd be expressing any standard of care.

Q Do you in your practice perform spinal debulking or detethering surgery?

A No, I don't.

Q Have you had occasion to treat other patients who have had neurogenic bladder following debulking and detethering of spinal lipomas?

A Yes.

Q Can spinal lipomas in and of themselves cause neurogenic bladder?

A Yes.
Q Do you have an opinion as to Karl Yost's prognosis urologically?
A Well, there are several aspects to that. I think that -- I'm not sure that he's going to need any more surgical treatment. The -- we can address some of the problems with the ileocystoplasty first, because there are some potential long term complications of the ileocystoplasty that he had.

First, because we're using part of the small intestine that produces mucus, and the mucus can build up in the bladder, and it does predispose to having infection in the bladder, which would require antibiotic therapy and has the potential to result in kidney infection.

In addition, the mucus can be a -- what we call a nidus for stone -- for bladder stone formation, so -- and it's not -- probably one of the most common late complications of this type of surgery is that bladder stones form that need to be removed with a follow-up operation.

The -- there is also the potential that in individuals with -- who have had this type of surgery that if the bladder is not emptied regularly that the bladder can rupture through the

site of the ileocystoplasty, and there are people who have died from that complication because if you have bacteria in the bladder and your bladder ruptures, then it provides a direct path for bacteria to spread throughout the peritoneal cavity and so there is that potential also.

The bladder neck tightening I think will not -- I think that's -- that's usually pretty stable as long as no one goes in to try to do a major cystoscopic procedure with the sling.

For example, if he had a bladder stone, it would probably not be a good idea to go in with a scope and try to extract it because it could damage that part of the surgery.

The diabetes also plays a role because he -- I would expect that over time that his bladder function may be compromised and he will probably be unable on a -- at some point in the future to empty his bladder the way he is doing now, so I would predict at some point in the future he's going to need a -- start performing intermittent catheterization.

In addition, there are vascular complications to the kidneys from diabetes, so his renal function may be impaired.

Q It's my understanding that in debulking and detethering procedures the lipoma is not completely and entirely removed and may recur, would that be expected to play a role in future urologic function?

A That's unpredictable.

Q You just told me a minute ago diabetes may be expected to play a role in the future, is that independent of the neurogenic bladder? In other words, would he have problems because of his diabetes or is this -- I don't quite understand the relationship between the diabetes, the neurogenic bladder, or whether they're independent?

A Well, when you have -- when you have diabetes, if you have an infection it's more difficult to get rid of the infection even with the antibiotics; and if you need surgical treatment, it may affect your wound healing for that aspect.

In addition, with the polyuria that can occur, I think it does present a difficulty in managing the incontinence particularly at night. So I don't think that's going to improve on its own over time.

In other words, over time, the way he is now if nothing changes in his management, I don't

think it's going to be any different in ten years.

In terms of the ongoing effect of the chronic diabetic condition, I think it probably will have an effect on his bladder function because diabetes is known to cause what is called an atonic bladder and -- in a number of individuals, and certainly he would -- if he already has some neurologic impairment of his bladder function, I would think that it is going -- it may make that more difficult for him to empty his bladder.

In addition, his -- it will affect -- chronic diabetic condition has an adverse effect on renal function also, so that -- I'm sort of including -- you're asking and I am sort of responding to your long term urologic prognosis, which would include renal function, although that may not be directly related to his neuropathic bladder, but if he developed recurring infections of the kidneys, that in addition to the diabetes would -- could -- would have the potential to cause significant reduction in renal function.

Q I want to go back over some of the potential problems that may arise in Mr. Yost's future and see if you can quantify that risk, you may or may not be able to.

One of the risks that you raised was increased risk of bladder infection, typically from the small intestine tissue that's utilized; can you give me some idea of the likelihood of that risk manifesting itself?

A Probably about 80 to 90 percent.

Q You also indicated there was increased risk of kidney infection in that same process, what is the likelihood of that?

A That's a little difficult, that's more difficult to quantify. I would say over, you know, his lifetime, probably 30 to 40 percent chance of having at least one kidney infection.

Q The increased risk of bladder stones, is it possible to quantify that?

A In some series it's been over 50 percent. I think most of us -- if individuals are -- one of the ways we think that we can reduce the likelihood of getting bladder stones is by catheterizing and irrigating the mucus out of the bladder regularly.

In some -- I try and have many of my patients do it every day, and even with that some will develop stones, so in series where -- probably the highest, again not with life long follow-up, but with follow-up for five to ten years, over 50

percent develop bladder stones.
Q The risk of bladder rupture, what is that?
A That's a little more difficult to quantify. That's -- in some series it's been as high as 10 to 12 percent.
Q Do you know whether or not Karl Yost suffered from a subclinical level of neurogenic bladder before his detethering surgery?
MR. BECKER: Objection. You may answer, Doctor.
A I'm not -- just by going from his history, he indicated that he had normal bladder function and I'm not aware of any urodynamic studies being performed before the surgical procedure.
Q Absent urodynamic studies, is it knowable whether there was some level of neurogenic bladder before the surgery?
A Well, again, I'm just going from his history, there is no indication that there was.
Q Is neurogenic bladder a known potential complication of lipoma detethering and debulking surgery?
A Yes.
Q Can the complication arise in the absence of negligence?

MR. BECKER: Objection. If you know.

A Well, I don't want to -- I think I'd rather not answer that.

Q That's outside your specialty --

A Yes.

Q -- and surgical experience, and that's fine.

Next question you may have the same answer: Do you know whether or not intraoperative monitoring can eliminate the complication of neurogenic bladder secondary to lipoma detethering?

A That's outside my expertise.

Q You told me that there is an appointment scheduled for you with Mr. Yost, has that been set at the patient's initiative, the lawyer's initiative, or your office's initiative or do you know?

A I think he was just supposed to come for follow-up. Let's see.

When I saw him in October I indicated I wanted to see him back in six months, so it's my understanding it was at my initiative.

Q It's about time for that --

A Yes.

Q -- follow-up visit?

A Yes. Since he is at school I often -- I do like to

keep seeing my patients that I operated on, even though I specialize in pediatric urology, I still ask my patients to keep coming back to see me as long as they're feeling comfortable coming back.

If they're in college, then I just tell them when they're back for Spring break or Summer break, whenever it's convenient.

Q Do you have a date of that follow-up?

A It's my understanding it is for May 20th.

Q Are there any tests scheduled?

A Well, often we will perform a urinalysis and urine culture in the office. Often we'll perform a -- we'll check a post-operative residual urine volume by performing an ultrasound.

Q Anything else at this point anticipated as a likely test?

A Well, just going back over -- oh, for testing? Not that I would invision.

Q Otherwise you will perform the examination and you may order additional tests based upon history and progress of the patient obviously?

A Yes.

Q I gather from some conversation when I walked in here that you had retrieved some literature that does what, explains the procedure that you

performed?
A That explains the surgical procedure that was performed several years ago to -- which is the ileocystoplasty and then the bladder neck sling.
Q I gather that you had a copy made available for plaintiff counsel and a copy made for me?
A Yes.
Q Is there any purpose to this literature other than it provides lay people some understanding of the procedure?
MR. BECKER: I asked him to do it so we can better understand what transpired.
MR. PARKER: Okay.
Q Did you review anything in preparation for this deposition?
A I looked at Karl's deposition.
Q What if anything did you learn of relevance from his deposition?
A I learned a different side of Karl than what I have seen in the office.
Q Tell me what you mean by that.
A Well, he is -- to me it is a fairly significant description of the feelings he is going through having to live with his incontinence and -- I mean, from what I recall, he was a school leader when I

first saw him, and I -- I don't recall the details but I remember I was very impressed with that, he was -- that he was a leader in his high school class and so forth and my from reading his deposition it seems like he is -- seems to be constantly in fear of being incontinent and I had thought that we had done a pretty good job of getting him dry, at least during the day, but he paints a little different perspective, so it was eye opening to me.

Q Did you review anything else? Presumably you took a look at your office notes?

A Yes, I reviewed those.

Q Anything else besides Karl deposition and your office notes?

A No.

Q Has anything else been requested of you between now and time of trial, that you review, that you prepare, et cetera?

A I'm not aware of anything.

Q When I glanced through your office notes and I compared them quickly to what I have been provided it looks like I have most of the major records. For instance, the updates to Dr. Sandoval and I think that I have most of the testing, but I did

notice some notes I don't have in my copy, so I'm going to ask, and I'll happy to be discuss how to best do this, if you would have your record copied and provided it -- let's go off the record for a minute.

(Discussion had off the record.)

MR. PARKER: Back on the record.

We've had a discussion off the record with regard to your medical records. We have agreed since Karl Yost has an additional appointment scheduled we're going to wait until after that day, June 20th, at that point I would like the chart copied in its entirety and provided to plaintiff's counsel, who will then forward it onto me.

For Mr. Becker's benefit he has advised me that he anticipates eliciting opinions from you regarding permanency of Karl Yost's urologic condition and that based upon history it was related to the surgical event.

Q Let me follow up on that latter one in particular.

Tell me what your opinion is with regard to the cause of Karl Yost's urologic condition that you treated him for.

A It seems like it was most likely related to something that happened during his cord

detethering.

Q What's the basis for that opinion?

A Because preoperatively he had normal bladder control and following the surgical procedure he had a -- he was incontinent and had evidence of neuropathic bladder.

Q Whether or not the something that happened related to a surgery was a non negligent complication of surgery or whether it was from a deviation of standard of care, you have no opinion on, correct?

A That's correct.

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

MR. BECKER: Thank you, Doctor, for your time.

THE WITNESS: Thank you.

(Deposition concluded at 12:57 p.m.)

(Signature not waived.)

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I have read the foregoing transcript from page 1 through 28 and note the following corrections:

PAGE	LINE	REQUESTED CHANGE

_____
Jack S. Elder, M.D.

Subscribed and sworn to before me this _____ day of _____, 2003.

_____
Notary Public

My commission expires: _____.

State of Ohio,)
) SS: CERTIFICATE
County of Cuyahoga.)

I, Frank P. Versagi, RPR, CLVS, Notary Public in and for the State of Ohio, duly commissioned and qualified, do hereby certify that the within named witness, Jack S. Elder, M.D. was by me first duly sworn to testify the truth, the whole truth, and nothing but the truth in the cause aforesaid; that the testimony then given was reduced by me to stenotypy/computer in the presence of said witness, afterward transcribed, 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 in the foregoing caption specified, and was completed without adjournment.

I do further certify that I am not a relative, counsel, or attorney of either party, or otherwise interested in the event of this action.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my seal of office at Cleveland, Ohio, on this 14th day of May, 2003.

_____

Frank P. Versagi, RPR, CLVS,
Notary Public in and for the State of Ohio.
Commission expiration: 03-08-08.