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IN THE COURT OF COMMON PLEAS
OF CUYAHOGA COUNTY, OHIO

DIANE COLVIN, ADMINISTRATOR
OF THE ESTATE OF GREGORY
COLVIN,
Plaintiff,
vs. Case No.
KEITH KRUITHOFF, M.D.,
ET AL., 388614
Defendants.

DEPOSITION OF STEVEN K. SCHMITT, M.D.
Friday, September 29, 2000

Deposition of STEVEN K. SCHMITT, M.D., a witness herein, called by the Plaintiff for examination under the statute, taken before me, Karen M. Patterson, a Registered Merit Reporter and Notary Public in and for the State of Ohio, pursuant to notice and stipulations of counsel, at the offices of Cleveland Clinic Foundation, 9500 Euclid Avenue, Cleveland, Ohio, at 10:00 o'clock a.m. on the day and date set forth above.

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APPEARANCES:

On behalf of the Plaintiff:

Becker & Mishkind Co., L.P.A., by
JEANNE TOSTI, ESQ.
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Cleveland, Ohio 44113
(216)241-2600

On behalf of the Defendant Cleveland Clinic Foundation:

STEPHEN A. SKIVER, ESQ.
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Perrysburg, Ohio 43551
(419) 666-3417

On behalf of the Defendant Keith Kruithoff. M.D

Bonezzi Switzer Murphy & Polito Co.,
L.P.A., by
JOHN S. POLITO, ESQ.
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526 Superior Avenue
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On behalf of the Defendant Ohio Permanente Medical Group:

Roetzel & Andress, by
INGRID KINKOPF-ZAJAC, ESQ
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STEVEN K. SCHMITT, M.D., of lawful age, called for examination, as provided by the Ohio Rules of Civil Procedure, being by me first duly sworn, as hereinafter certified, deposed and said as follows:

EXAMINATION OF STEVEN K. SCHMITT, M.D.
BY MS. TOSTI:

Q. Doctor, would you please state your name for us.
A. Steven Schmitt.
Q. And what is your home address?
A. My home address is 435 Medway, M-E-D-W-A-Y, Road, Highland Heights, Ohio, 44113.
Q. Is that a single-family home?
A. It is.
Q. Is your current business address here at the main campus of Cleveland Clinic?
A. It is.
Q. And was that also true at the time that you rendered care to Gregory Colvin in 1997?
A. Yes.
Q. I'm sorry, 1998.
A. Yes.
Q. In 1998, who was your employer?

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A. Cleveland Clinic Foundation.
Q. And that is also your current employer?
A. Yes.
Q. And aside from Cleveland Clinic, do you provide professional services for any other entity?
A. I provide no patient care for any other entity.
Q. Any other type of professional services for any other entity besides the Cleveland Clinic?
A. Occasional lectures for drug companies.
Q. Have you ever had your deposition taken before?
A. I have.
Q. How manytimes?
A. Once.
Q. And why was your deposition being taken? And by that I mean in what capacity; were you a fact witness, a Defendant, a medical expert?
A. I was a fact witness.
Q. Was it in a medical negligence case?

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A. It was.
Q. When was your deposition taken?
A. Earlier this year. I can't remember exactly when.
Q. Was your care in question in that case?
A. No.
Q. Do you recall the name of the Plaintiff in that case?
A. Todaro.
Q. Is that case still pending?
A. Yes.
Q. Can you tell me what the allegation of negligence is in that case, please?
MR. SKIVER: Just very briefly, doctor, if you know.
A. It was a case of endocarditis that seeded a prosthetic joint and subsequently led to debility on the patient's part.
Q. Did the patient die?
A. No.
Q. I want to go over a few of the ground rules for depositions. I'm sure counsel has had a chance to talk with you. This is a question-and-answer session; it's under oath.

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It's important that you understand my questions. If you don't understand them, just tell me, and I'll be happy to repeat the question or rephrase them. Otherwise, I'm going to assume that you understood my question and that you're able to answer it.
It's important that you give all of your answers verbally. The court reporter can't take down head nods or hand motions. If at some point you would like to refer to the medical records that counsel has provided to you, please feel free to do so. Also, at some point during the deposition, defense counsel may choose *to* enter an objection. You are still required to answer my question unless counsel instructs you not to do so.
Do you understand those instructions?
A. Yes.
Q. Have you ever been named as a Defendant in a medical negligence case?
A. No.
Q. Have you ever given trial testimony in a medical negligence case?
A. No.
Q. Have you ever acted as a medical

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expert in a medical/legal case?
A. No.
Q. Now, doctor, you are currently licensed in the State of Ohio; is that correct?
A. Yes.
Q. Are you licensed in any other states?
A. No.
Q. And at the time that you rendered care to Gregory Colvin, you were also so licensed in Ohio?
A. Yes.
Q. Has your license in Ohio ever been suspended, revoked or called into question?
A. No.
Q. You are board certified in infectious disease and in internal medicine; is that correct?
A. Yes.
Q. Did you pass both of those certifications on your first attempt?
A. Yes.
Q. I take it you have hospital privileges here at Cleveland Clinic; correct?
A. Yes.
Q. Do you have hospital privileges at any

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other area hospitals?
A. No.
Q. Have your hospital privileges ever been suspended, revoked or called into question?
A. No.
MS. TOSTI: Would you put an exhibit sticker on this for me, please.
- - - - -
(Thereupon, PLAINTIFF'S Deposition Exhibit 1 was mark'd for purposes of identification.)
- - - - -
Q. Doctor, I'm handing you what has been marked as Plaintiffs Exhibit 1, and I would ask if you would just identify that document for us.
A. This is my curriculum vitae.
Q. Is it current and up to date, or are there any corrections that you would like to make to that document?
A. There may be some poster presentations from a meeting a week or two ago, but nothing other than that.
Q. Now, doctor, you served both a residency and a fellowship here at Cleveland Clinic; correct?
A. Yes.
Q. And currently you hold the position of

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staff physician here; correct?
A. Correct.
Q. Do you have any other administrative titles here at the Cleveland Clinic besides staff physician?
A. No.
Q. Doctor, you have a number of publications that are listed on your curriculum vitae. Do any of those publications deal with the subject matters of endocarditis?
A. No.
MR. SKIVER: Wait a minute, doctor. There might have been one here that I saw.
A. Oh, one, pardon me. Correction. Abstract.
Q. Would you tell me what the title of that abstract is.
A. "Of back pain and stroke: Staphylococcus aureus endocarditis with multiple septic emboli."
Q. And is that abstract published in any particular publication?
A. No.
Q. And aside from that particular abstract, is there anything else on your

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curriculum vitae that deals with endocarditis?
A. No.
Q. In May of 1998, did you hold any administrative positions at the Cleveland Clinic aside from your designation as staff physician?
A. No.
Q. Have you ever taught or given formal lecture on the subject matter of endocarditis?
A. No.
Q. Tell me what you have reviewed for this deposition.
A. I have reviewed in detail the admission from May of 1998; May 12, 1998 to May 17th, 1998.
Q. There are a number of other medical records that pertain to care that this patient received at the Cleveland Clinic. Have you only seen the one admission on Gregory Colvin?
A. I have briefly seen an earlier admission from, I believe, February of 1998, but have not reviewed it in detail for this.
Q. He had an admission in which he had his mitral valve replaced. Did you look at any of those records from the actual mitral valve replacement which occurred early in February?

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A. I have not.
Q. And then there was a set of records for a second admission when he came in, I believe, on February 23rd for about four days. You looked at some records from that admission?
A. Very briefly.
Q. Have you looked at any Kaiser or Cleveland Clinic outpatient records?
A. No.
Q. Have you at any time reviewed the actual tapes from any echocardiograms?
A. No.
Q. Any deposition testimony have you reviewed?
A. No.
Q. And in preparation for this deposition, have you referred to any textbooks or journal articles?
A. No.
Q. Since this case was filed, have you discussed the case with any physicians other than Mr. Skiver?
A. When I first heard that there was litigation, I began to discuss the case with my partner, David Longworth, for about one minute,

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and he reminded me that we ought not be, so we stopped.
Q. And in the brief time that you discussed it with him, what did you discuss?
A. That there was litigation.
Q. Did you discuss any of the facts in the case?
A. No, not that I recall.
Q. Other than with counsel, have you discussed this case with anyone else?
A. No.
Q. Do you have, aside from what is in the medical records from Gregory Colvin's May 12th admission, do you have any personal notes or a personal file on this case?
A. No.
Q. Have you ever generated any such notes?
A. No.
Q. Doctor, is there a textbook or a particular book that you consider to be the best in your field of infectious disease?
A. There are several excellent textbooks with good information; some of it I agree with, some of it I don't.

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Q. Which ones do you find that you use occasionally?
A. I use Mandell's textbook mostly.
Q. Do you find generally that that information is reliable in that book?
A. I agree with it sometimes, and sometimes I disagree.
Q. As you sit here today, are there any particular publications that you believe have specific relevance to this case? And my question is if there's any that you know of at this particular point in time.
A. Not specifically.
Q. Have you participated in any research dealing with the subject matter of bacterial endocarditis?
A. No.
Q. And is your practice limited to the field of infectious disease?
A. Yes.
Q. How often do you see patients with prosthetic valve endocarditis?
A. Perhaps five in a year.
Q. Do you know what the incidence of early prosthetic valve endocarditis is after

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valve replacement?
A. That varies according to institution.
Q. What is it at Cleveland Clinic?
A. I'm not certain.
Q. Who would have those statistics?
A. I'm not sure. Perhaps the department of surgery might, but I don't know for sure.
Q. That's not something that the infectious disease department would track, the rate of prosthetic valve endocarditis at the Cleveland Clinic?
A. Not the department of infectious disease. Surgeons might.
Q. Is there a particular organism that is the most common organism to cause prosthetic valve endocarditis?
A. The most common organism --
Q. Yes.
A. --would be coagulase negative staphylococci. Also, I think I need to amend a statement. Probably the department of infection control also tracks that, just so you have that correct answer.
Q. Does prosthetic valve bacterial endocarditis always require valve replacement to

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effect a cure?
A. Not in every circumstance.
Q. So you're aware of some instances where it has been treated effectively by medical means rather than surgical means?
A. On occasion.
Q. Can you give me a ballpark estimate as to how often that occurs?
A. Not very often.
Q. So would it be fair to say, in most cases of prosthetic valve endocarditis, there's going to have to be surgical intervention to cure the infection?
A. In most cases, there is surgical intervention.
Q. Doctor, do you know what the mortality rate is for early prosthetic valve endocarditis?
A. I don't off the top of my head.
Q. If prosthetic valve endocarditis goes untreated, would you agree it's almost universally fatal?
A. If untreated?
Q. Yes.
A. Yes.
Q. And would you agree that, given the

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life-threatening nature of prosthetic valve endocarditis, physicians caring for patients with prosthetic heart valves must be extremely vigilant for signs and symptoms of prosthetic valve endocarditis?
A. I would agree that patients should be followed, yes.
Q. Doctor, what type of signs or symptoms would raise reasonable suspicion for prosthetic valve endocarditis?
MR. SKIVER: Objection.
Q. You may answer.
A. Fever, chills, sweats.
Q. Weight loss?
A. Can be. It's a nonspecific finding.
Q. Anemia?
A. Can be.
Q. Elevated erythrocyte sedimentation rate?
A. Yes. But, again, that's a nonspecific finding.
Q. Well, doctor, wouldn't fever and chills and sweats and fatigue be nonspecific also?
A. Absolutely.

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Q. If there's a reasonable suspicion for prosthetic valve endocarditis, what should the medical workup entail?
A. Usually it would entail blood cultures, many of the blood tests you just mentioned: Complete blood count, sedimentation rate, usually blood chemistries, frequently an echocardiogram.
Q. And when you speak of blood cultures, what is the procedure for doing the blood cultures? How many blood cultures, how often do you do them, what spacing of time, those types of things?
A. It would depend on the situation, but we would ordinarily get several blood cultures in a space in time of the first few days of admission.
Q. Well, what would it depend on, doctor? You said it would depend on the situation. In some circumstances, you might get more than others. For instance, if the blood cultures that you initially draw are negative, you may get more.
Q. Well, doctor, if the patient comes in and you have a reasonable suspicion for

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prosthetic valve endocarditis, what type of orders are you going to write for the blood cultures? You have to give some direction as to how many you want and how often, how much time there should be between each culture. Is there any type of procedure that's followed for that?
A. What I do is I would order four blood cultures on the first day, and then two 12 hours later. And then I might order a third set the following day around 12 hours after the first. But, again, those times are not absolute.
Q. Now, you also mentioned that you draw blood chemistries on the patient. Would there be anything in particular that you would be looking for in the blood chemistries that would assist you in making the diagnosis of endocarditis?
A. Sometimes look for kidney dysfunction, which can be a sign of endocarditis.
Q. So you would be looking for the portion of the blood chemistry that would reflect the kidney function; correct?
A. Yes.
Q. And what would you be looking at? The erythrocyte sedimentation; right?
A. Elevation.

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Q. What would that be an indication of?
A. Inflammation.
Q. And in regard to the complete blood count?
A. There can be an elevated white blood cell count, there can be anemia, there can be either elevations or lowerings of platelet count.
Q. Now, in order to diagnose a patient with prosthetic valve endocarditis, do you have to have any particular diagnostic results in order to make that diagnosis?
A. Usually the finding of multiple positive blood cultures or definitive echocardiographic findings.
Q. And, doctor, in some instances, do you make a presumptive diagnosis when you don't have positive blood cultures or definitive echo findings that the patient has prosthetic valve endocarditis? Is that done in some instances?
A. If there was a strong clinical suspicion on the basis of physical findings, we might make that diagnosis.
Q. Now, doctor, how long does it take for blood cultures to come back once they're drawn? How long does it take before you receive

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results?
A. It varies widely. It can be a matter of hours to several days.
Q. So they will continue to grow the culture. Is there a point when they cut it off and they say it's not going to grow anything anymore?
A. Again, that varies per institution, but usually at five to seven days, they will say it's negative.
Q. And if it grows something before that, you'll get a report back earlier than the five to seven days; correct?
A. Yes.
Q. Now, doctor, once initial blood cultures are drawn and there's a reasonable suspicion for prosthetic valve endocarditis, when should antibiotics be started?
A. Again, that depends. If there are multiple positive blood cultures, then antibiotics should be started immediately. If the patient is unstable, sometimes we'll start antibiotics before we get that full set of blood cultures together, but we try to at least have some blood cultures on the board before we make

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the move to antibiotics, if the patient is stable.
Q. Would you agree that all the necessary blood cultures should be obtained and then antibiotics should be started?
A. Yes, except when the patient is unstable, in which case you start immediately.
Q. So in those instances, it would be appropriate to start the antibiotics before there's confirmation of positive blood cultures; correct?
A. Yes.
Q. Is it accepted practice to start antibiotics and then stop them to take more blood cultures and then restart the antibiotics?
MR. SKIVER: Under what circumstances?
MS. TOSTI: Under any circumstances with a patient that has prosthetic valve endocarditis.
Is that reasonable?
MR. SKIVER: If it's diagnosed he has endocarditis?
MS. TOSTI: Well, the doctor said that definitively you need positive blood cultures --

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let me rephrase it.
Q. If there's a presumptive diagnosis of prosthetic valve endocarditis, is it accepted practice to start antibiotics, stop them to take additional blood cultures, and then restart the antibiotics?
A. If the patient is clinically stable and there have been a very small number of doses of antibiotics given, in an attempt to maximize your ability to recover the organism, which is very important in treating, it is sometimes reasonable to stop the antibiotics briefly, collect more blood cultures, and then restart.
Q. If a patient has prosthetic valve endocarditis and receives IV doses of antibiotics an hour or two before the blood cultures are drawn, can that cause the blood culture to be falsely negative?
A. It can.
Q. Is there a usual period of time after which the antibiotic is unlikely to produce an effect on the blood culture results, a certain amount of time you should wait after an antibiotic dose has been given before you attempt to do a blood culture?

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A. There are no standards for that.
Q. How long would you expect an antibiotic to continue to influence the results of a blood culture in a patient?
A. That varies quite widely, depending on the level of bacteremia in the patient and the susceptibility of the organism. So it may not -- a dose or two of antibiotics may not affect the blood cultures at all, or may render them sterile for several days.
Q. Does starting and stopping antibiotics in a patient with prosthetic valve endocarditis have any effect on the virulence of the organism?
A. With a brief stoppage, it should not.
Q. And what do you consider to be a brief stoppage?
A. Hours to days, but, really, what encourages resistance, if that's what you're talking about, would be multiple stops and starts.
Q. Doctor, isn't it true that some patients with bacterial endocarditis never have positive blood cultures?
A. That's true.

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Q. Is that also true of some patients with prosthetic valve bacterial endocarditis?
A. That is true.
Q. If there's a presumptive diagnosis of bacterial endocarditis and initial blood cultures have been drawn, what would be the typical antibiotic regimen that would be instituted before blood culture results come back? What antibiotics would we use?
A. It would very much depend on the clinical suspicion for the organism. Typically an indolent course, it could -- it's almost always a combination of antibiotics. But vancomycin, gentamicin are very typically used.
Q. Now, if an infected prosthetic valve is known to be incompetent because of endocarditis, is there a duration of time that the patient should be on antibiotics before they're taken to surgery?
A. That is individualized on a per patient basis. It depends on the patient's clinical status.
Q. What things would you be looking at to make that judgment before you would say that the antibiotic treatment was sufficient prior to

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surgery?
A. It would be -- again, it would vary widely. Often patients go to surgery with positive blood cultures; sometimes they go with negative blood cultures. So it's really not a standard according to whether the blood cultures are positive or negative.
Q. But from your perspective as an infectious disease physician treating a patient, is there a period of time you like to have the patient on antibiotics before surgery? And I understand the surgical decision is not necessarily in your hands, but is there a period of time that you feel the patient should be on antibiotics before they go to surgery? And if there isn't, that's fine; just tell me that.
A. Again, it varies according to the patient. If I think the patient is unstable when I see the patient, then the surgery should be immediate. If I think the patient is stable, then we would -- it's not uncommon at all for us to give several days of antibiotics before going just to try and minimize the amount of infection residual at the time of the surgery.
Q. Is the prognosis for prosthetic valve

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endocarditis better when the infection is treated longer with antibiotics to the point of negative blood cultures?
A. Again, I think that varies according to the patient. I think if you have a stable patient, it is preferable to have negative blood cultures, although there is not a tremendous amount of data to back that up.
Q. Doctor, would you agree that there has to be a high index of suspicion for bacterial endocarditis when a prosthetic valve patient presents with persistent fever of unknown origin, fatigue and night sweats?
A. Those can be signs of endocarditis and would require investigation.
Q. It would raise a red flag, or should raise a red flag, in the mind of a physician treating a patient with a known prosthetic valve; correct?
A. It would certainly raise the suspicion of an infectious disease doctor.
Q. Doctor, as an infectious disease physician, do you make recommendations as to the timing for the replacement of an infected valve?
A. Those decisions usually fall to the

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surgeon.
Q. Did you make recommendations ever to the surgeon in regard to this patient should go have that valve done as soon as possible?
A. We make recommendations from the infectious disease point of view that mainly indicate that we think this is surgical -- a surgical issue where we think the valve needs to be replaced, whenever the surgeon thinks it's a stable situation to do that.
Q. What would be the indicators for you to make a recommendation like that to a surgeon? What do you look for in a patient's condition that would tell you to make a recommendation like that to the surgeon?
A. If a patient has multiple embolic phenomenon, if a patient has uncontrolled sepsis -- and by that I mean low blood pressure and heart failure -- if a patient has uncontrolled bloodstream infection, but that's usually something that's made over several days.
Q. Now, do you have an independent recollection of Gregory Colvin? Do you remember him?
A. I don't remember very much, honestly.

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Q. Do you remember anything in regard to the care that you provided to Gregory Colvin?
A. I remember independently, without the chart, I remember his condition after he had a change in his status on the 16th.
Q. Doctor, feel free to look at the chart. I'm going to ask you some questions in regard to your care, and it may be helpful to you to reference back to that.
When is the first time that Gregory Colvin came under your care?
A. On the 13th of May 1998.
Q. And how is it that you came to see him on that particular day?
A. We were asked to consult on his care.
Q. Who requested the consult?
MR. SKIVER: If you don't know, doctor, that's fine.
A. I can't find an order written, so I'm not certain.
Q. At the time of the consultation, do you know what information you were given in regard to Gregory Colvin? And I'm not speaking of your own assessment: I'm speaking of any information you were given at the time of the

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consult.
A. I don't know.
Q. Now, did you see Gregory Colvin then on the 13th and do your own assessment of the patient?
A. I did.
Q. And at the time that you saw him, was there anyone else in attendance with you?
A. Infectious disease fellow.
Q. Did you see Gregory Colvin with the infectious disease fellow on the 13th?
A. The infectious disease fellow saw Gregory Colvin, and then I came after with the fellow and assessed Mr. Colvin.
Q. Do you recall what time you saw him on the 13th? Was it morning or afternoon?
A. I do not independently recall.
Q. Could it have been either morning or afternoon in this case?
A. Likely afternoon.
Q. Based on your schedule?
A. Based on my schedule, afternoon to evening.
Q. Now, there is a clinical note that I believe is written by the infectious disease

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fellow on the 13th. And it begins ID fellow, 51-year-old black male electrician, home Cleveland.
Is that a note that you read through and confirmed with the infectious disease fellow?
A. Yes.
Q. Who was the fellow that wrote that note?
A. Dr. Gumbo.
Q. Is Dr. Gumbo still at the Cleveland Clinic?
A. No, he is not.
Q. What is Dr. Gumbo's first name?
A. Tawanda.
Q. Now, at the time that you saw Gregory Colvin, did you review any of his past medical records that he had?
A. We reviewed records from the previous admission in February.
Q. Now, there is some underlining that is done in the infectious disease fellow's note of 5-13-98. Did you do that underlining?
A. Yes, I did.
Q. As you reviewed the note, is that one

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of the ways that you confirmed the findings, by putting an underline in?
A. Yes.
Q. Does that underlining have any other significance?
A. A teaching mechanism also.
Q. And what is it that you're trying to convey by underlining certain things in the notes?
A. That we reviewed it together and that I confirmed his findings.
Q. Now, in about the middle of that page of the note, it refers to a 2-24 TEE, I believe. And it says a questionable small echo density anterior commisure, mitral valve versus suture material. Do you see that?
A. Yes.
Q. What's the significance of that finding?
A. Unknown.
Q. I didn't hear you.
A. I don't know what the significance of that finding is.
Q. That's something that you underlined and you also reviewed with the infectious disease

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doctor?
A. Yes.
Q. Did you consider it significant to Gregory Colvin's present condition on his admission?
A. I noted it.
Q. In Mr. Colvin's case, is it likely that that echo density seen on the February 24th TEE was an early indication of prosthetic valve endocarditis?
MR. SKIVER: Objection.
MS. KINKOPF-ZAJAC: Objection.
A. I don't know.
Q. Now, that note also reads, I believe, patient subsequently had a right IJ stitch abscess diagnosed, and it says no culture, I think, discharge 2-27-98, temperature max 38.2. Do you see that part?
A. I do see that.
Q. In Gregory Colvin's case, what was the significance of the stitch abscess?
A. I don't know.
Q. Obviously, at the time that you spoke with the infectious disease fellow, he included in his note, you confirmed his findings, and

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there must have been a reason for why it was included in this particular clinical note. Can you tell me what that reason is?
A. Just to note the clinical course.
Q. You didn't think it had any particular significance to the diagnosis of presumptive endocarditis that he was admitted for at this admission?
A. We were uncertain as to its significance.
Q. Would you agree that, in Gregory Colvin's case, an abscess in his neck that was emitting several cc's of pus over the course of at least two days was a risk factor for infection of his prosthetic valve?
A. It's a risk factor, but there were several negative blood cultures at that point which made it less likely.
Q. Which blood cultures are you referring to?
A. I believe he had some blood cultures drawn at the time of the stitch abscess.
Q. During the February admission then, he had those blood cultures?
A. Yes.

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Q. Do you know whether or not all of those blood cultures were done before antibiotic therapy was started, doctor?
A. I don't know.
Q. Would that make a difference as to whether that abscess in his neck was significant if several of those cultures were drawn after antibiotic therapy was started?
A. Antibiotic therapy can make blood cultures negative.
Q. Doctor, in Mr. Colvin's case, is it likely that his stitch abscess was the original source of infection that caused his prosthetic valve endocarditis?
A. I don't know.
Q. You can't rule it out as a cause, though; correct?
A. No.
Q. Now, doctor, in the infectious disease doctor's note, I believe it also, about two-thirds of the way down the page, it says no culture, and that's underlined. He was admitted in February with a fever of unknown origin, he had an obvious abscess draining purulent material in his neck. Would you agree that that site

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should have been cultured?
A. I wasn't caring for him at that time, so I can't say.
Q. Doctor, as an infectious disease physician, in a patient with a prosthetic valve that has an abscess in his neck draining purulent fluid and a fever of unknown origin, wouldn't you agree that that should have been cultured?
MR. SKIVER: Objection. Asked and answered. Go ahead, doctor.
A. Again, I did not see Mr. Colvin at that time. If there were a very small superficial amount, I would not necessarily culture. If there was a lot of pus, not responding to therapy, I might.
Q. I want you to assume that he had purulent material on two successive days of about two cc's. Would that be a sufficient amount to culture in his case with his history?
MR. SKIVER: Sufficient amount to culture? Does that mean to require culture or --
Q. To require culture based on what you just told me.
A. I might have cultured, but I would have to see it. I would have to see him.

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Q. Do you have an opinion as to whether prosthetic valve endocarditis was ruled out during his February admission at the Cleveland Clinic?
MR. SKIVER: Objection. I think he indicated he hasn't gone through those records in detail. I don't know how he can answer that. Go ahead, doctor.
A. I didn't see him, so I can't say whether it was ruled out.
Q. Well, doctor, at the time that you were speaking with the infectious disease fellow, you said you did have access to the February records, and so my question is: Based on your review of the records and anything else that you recall --
A. I don't think it's completely excluded.
Q. --would you agree that, given Mr. Colvin's presentation at that time, fever of unknown origin, stitch abscess in his neck, echo density on his echocardiogram, that he should have been followed after discharge in February --
MS. KINKOPF-ZAJAC: Objection.

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Q. -- specifically for prosthetic valve endocarditis?
MS. KINKOPF-ZAJAC: Objection.
MR. POLITO: Objection.
MR. SKIVER: Objection. Go ahead, doctor, if you know.
A. No. I did not see Mr. Colvin at that time. It's impossible for me to comment on his care at that point.
Q. On the second page of the infectious disease fellow's note, about halfway down under the section of the physical exam for the head, ear, eyes, nose and throat, I believe it says that there was a positive right-sided cervical lymph node. Do you see that?
A. I do see it.
Q. Now, you did a physical exam on him, and you have confirmed that finding by underlining it with the infectious disease fellow; correct?
A. Yes.
Q. Did you attach any significance to the fact that he had an enlarged cervical lymph node on the right side?
A. It was noted, but that's of unclear

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significance. Lymph nodes can be swollen for a variety of reasons.
Q. That was on the same side that he had the stitch abscess; correct? I believe on the first page of the infectious disease fellow's note, he indicates it was a right IJ stitch abscess.
A. Yes. I don't have the record from there, but yes. I have the record from the infectious disease fellow's note, but, yes, that's on the same side that's noted here. Right.
Q. Is there a relationship between lymph node enlargement and infection?
A. Not always.
Q. Can there be a relationship between lymph node enlargement and infection?
A. Sure.
Q. And what causes a lymph node to enlarge in the presence of infection?
A. Immune response to infection.
Q. Does it have anything to do with where the infection is in regard to the bacteria traveling from the localized area?
A. In the presence of infection, the

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lymph nodes can be enlarged at or near an area of infection.
Q. And would that be of greater concern than if there is no lymph node enlargement in the presence of infection? As an infectious disease doctor, if you see a localized infection in one patient and a localized infection with enlarged lymph nodes in another, is there any increased significance attached to the one that has the lymph node enlargement?
A. Not necessarily.
Q. In Gregory Colvin's case, do you think that the enlarged lymph node that he had on the right side had any relationship to the stitch abscess that he had on the right side of his neck?
MR. SKIVER: At what point in time? We've got a three-month difference here. There's no evidence of a stitch abscess at this point in time.
MS. TOSTI: At this point in time, he's referenced it in the note, so I'm asking.
MR. SKIVER: That's a history. I'm sorry, go ahead.
A. I don't know.

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Q. Now, after you had an opportunity to see Gregory Colvin on the 13th, you concurred with the clinical impressions that Gregory Colvin had prosthetic valve endocarditis clinically; correct?
A. Yes.
Q. And were the items that you underlined in the infectious disease fellow's note what you deemed to support the diagnosis of prosthetic valve endocarditis?
MR. SKIVER: Which things underlined? Are you talking about all of them?
MS. TOSTI: Yes.
A. Some of them supported the diagnosis of prosthetic valve endocarditis.
Q. Would you tell me which ones that you underlined did not.
A. Did not --
Q. Yes.
A. -- support the diagnosis of prosthetic valve endocarditis?
Q. Yes.
A. On the physical examination?
Q. On any part of the infectious disease fellow's note that you have put underlines in.

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A. Well, I've underlined 51-year-old black male. It doesn't have any special significance. I've underlined admitted 10-97 with CHF. That doesn't necessarily support it. I've underlined the part about the 2-24-98 TEE with a small echo density versus suture material. That doesn't necessarily support it. I've underlined right IJ stitch abscess diagnosed, no cultures, discharged 2-27, T max 38.2. That doesn't necessarily support it. Three weeks ago, he had cardioversion for a-fib. That doesn't necessarily support it.

Four days later, back in a-fib, but that doesn't necessarily support it. Underlined no cough, no chest pain, no dysuria, no diarrhea, no joint pains. That doesn't necessarily support it. I've underlined right-sided cervical lymph node. That doesn't necessarily support it. I have underlined no splenomegaly, no hepatomegaly. That doesn't necessarily support it. I've Underlined the neurologic exam. That doesn't necessarily support it. I've underlined musculoskeletal exam; that doesn't necessarily support it.

I think that the rest of it all refers

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to the endocarditis.

Q. So I want to be clear, doctor. In regard to the echo density that was seen on the 2-24 echo and the stitch abscess that there was no culture done on and the right-sided cervical lymph node that you found on physical exam, those three things, did you attach any significance to them in regard to your diagnosis of prosthetic valve endocarditis?

A. I considered them to be possibly related, but not by any means definitively.

Q. Now, under the physical exam on the cardiovascular system, you concurred with the findings regarding a heart murmur; is that correct?

A. Yes. There was a heart murmur.

Q. Was the murmur you heard of any significance as it relates to your impressions of clinical prosthetic valve endocarditis?

A. He had a murmur in the mitral area, and I thought that was a possible sign of endocarditis, yes.

Q. Do you know whether this particular murmur had changed at all from any previous findings, whether it had a different character,

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intensity, et cetera?

A. I'm looking at the blue night float senior's note from the 12th, which was one day before I saw him, and there was a murmur referred to. And it's approximately the same intensity. It's noted to be grade three by the senior, and Dr. Gumbo and I thought it was likely grade two. So it was about the same.

MR. SKIVER: Doctor, the question is: Do you know if there is a change. I don't want you to be guessing or anything else. Do you know if there is a change.

A. Oh, no.

Q. In the infectious disease fellow's note also, there's a notation that the erythrocyte sedimentation rate is 61. What is the normal reference range for the erythrocyte sedimentation rate?

A. It should be around 20 or less.

Q. In Mr. Colvin's case, what was the significance of that elevated erythrocyte sedimentation rate?

A. Likely represented endocarditis.

Q. Now, the last line of the infectious disease fellow's note on May 13th, I believe it

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says, is there a right IJ clot. It's on the --

A. I see it.

Q. What was the basis for that query? You have underlined that.

A. I don't recall specifically.

Q. Do you recall what evidence there was that would raise that as a question, what the findings, the clinical findings, were that would cause the fellow and you to confirm what the fellow said about an IJ clot?

MR. SKIVER: If you know, doctor. Don't guess.

A. I don't recall specifically.

Q. Would that have any relationship to endocarditis?

A. If infected, it could.

Q. Pardon me? I didn't hear what you said.

A. Yes. If there were an infected clot, it could.

Q. Is there any way to make a determination whether there was a clot there or not, any type of a diagnostic study or further examination that would tell you one way or the other?

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A. Diagnostic study for a clot would be an ultrasound.
Q. And was an ultrasound done in this case?
A. I can't find evidence of one.
Q. If in fact he had an infected clot, how would that be treated?
A. Typically with antibiotics.
Q. So would it have been the same treatment as it would have been for the endocarditis?
A. Yes.
Q. So there wouldn't be anything different even if you knew that was there?
A. No.
Q. Now, doctor, did you also write your own note on the 13th for this patient?
A. Yes.
Q. And at the end of the note that you wrote, would you tell us what your plan of care was for the patient. If you could just read through what you have written there.
A. Temporarily hold antibiotics. Collect blood cultures this p.m. and tomorrow a.m. Hopefully first set will be positive. Open heart

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surgery ASAP. Discuss with Dr. Miller cardiology; cardiothoracic, Pat Ginley.
Q. Who is Pat Ginley?
A. He is one of doctor -- one of the cardiothoracic surgical assistants.
Q. And what was the basis for your opinion that Gregory Colvin needed open heart surgery as soon as possible?
A. The concern that he had valvular leakage.
Q. And were you concerned that he could have sudden cardiac collapse?
A. At the first assessment, I was not concerned that he was about to have sudden cardiac collapse.
Q. Well, doctor, at the time that you wrote this note, you had seen the echocardiogram on him; correct?
A. Yes.
Q. And you saw that he had rocking and dehiscence of his prosthetic valve; correct?
A. Yes.
Q. Did that raise a concern in your mind that he could suddenly decompensate because of the extent of his infection?

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A. It raised concern, but he appeared stable when I saw him.
Q. But that could change very suddenly in these types of patients; correct, when you have got rocking and dehiscence of a valve caused by infection?
A. It can, but often patients have that kind of finding, and it goes unchanged for several days.
Q. Now, doctor, you indicated in your note that you wanted the antibiotics temporarily held; correct?
A. Yes.
Q. Why weren't the necessary cultures drawn before starting the antibiotics?
A. I wasn't caring for Mr. Colvin at that point.
Q. I understand that, doctor, but I'm asking you if you know why the necessary blood cultures were not drawn before the antibiotics were initiated.
A. I do not know.
Q. Would you agree that they should have been all drawn before antibiotics were initiated?

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MS. KINKOPF-ZAJAC: Objection.
A. I did not see Mr. Colvin at the time of his admission, so it's difficult for me to answer that.
Q. Well, doctor, didn't you think that there was some type of an error made here when they started the antibiotics without doing sufficient cultures?
MR. SKIVER: Objection.
MS. KINKOPF-ZAJAC: Objection.
MR. SKIVER: Go ahead, doctor.
MR. POLITO: Jeanne, just to be fair to the doctor, I thought he said in his note we now have two blood cultures off antibiotics.
A. There were two blood cultures off of antibiotics. I thought that we would be better at that point with more blood cultures to improve our yield, potential yield, for acquiring the microorganism. But that was based on my findings when I saw him.
Q. Now, your note indicates discuss with Dr. Miller; correct?
A. Yes.
Q. Does that indicate that you discussed it with him or you were intending to discuss it

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with him?
A. I do not specifically remember the conversation. Ordinarily, it means that I've discussed it with him.
Q. Do you remember anything that was transmitted between you and Dr. Miller in regard to what you have noted here?
A. I do not remember.
Q. It also notes a reference to Pat Ginley that you said was a surgical assistant in cardiothoracic.
A. Yes.
Q. Did you have conversation with Pat Ginley?
A. I do not recall the conversation, but I've noted here that I spoke with him. That's all. I do not remember the substance of conversation.
Q. What would be the reason that you would be contacting Pat Ginley?
A. It would be because I felt that the patient would require surgery at some point.
Q. Would Pat Ginley have any responsibilities for scheduling the surgery?
A. He would have responsibility for

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transmitting information back to the surgeon, and then the surgeon would make the decision about when the surgery would take place.
Q. Was any plan at that time discussed regarding when Gregory Colvin would actually go to surgery?
MR. SKIVER: Objection. He's already indicated he doesn't recall the conversations.
A. I don't remember the conversation.
Q. Well, when you saw him on the 13th, did you have, in your mind, when you thought this patient should go to surgery?
A. I thought that he should go when it was felt by cardiology and cardiothoracic surgery that he was stable to go.
Q. Now, Gregory Colvin was seen at Cleveland Clinic's ER on the 10th of May, just three days before his admission when you saw him with an elevated temperature, shortness of breath, night sweats, increased erythrocyte sedimentation rate to 58, anemia. Would you agree that those were indicators of prosthetic valve endocarditis?
MR. POLITO: Objection.
MS. KINKOPF-ZAJAC: Objection,

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MR. SKIVER: Objection. Go ahead, doctor.
A. I didn't see Mr. Colviin at that time.
Q. Isn't it likely he had prosthetic valve endocarditis on the 10th --
MS. KINKOPF-ZAJAC: Objection.
MR. SKIVER: Objection.
MR. POLITO: Objection.
Q. --when he went into the emergency room?
A. I didn't see Mr. Colvin on the 10th.
Q. Do you think he developed it in the three days before you saw him? Is that likely?
A. I didn't see Mr. Colvin on the 10th. I think that endocarditis usually exists for several days before it's diagnosed.
Q. You think it was appropriate to discharge him to home from the emergency room on the 10th?
MR. POLITO: Objection.
MS. KINKOPF-ZAJAC: Objection.
MR. SKIVER: Objection.
A. I didn't see him. I can't say.
Q. Doctor, at the Cleveland Clinic, if you have a high level of concern that a patient

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has prosthetic valve endocarditis, could you get a transesophageal echo done on the same day if you felt it was indicated?
A. We can.
Q. And is it easier to get that done if the patient is an inpatient than if it's an outpatient, a little easier if the patient is hospitalized in the hospital to get a transesophageal done than if it's an outpatient?
A. I don't know.
Q. Do you have an opinion as to, if a transesophageal or transthoracic echo was done on May 10th, whether it would have shown indications of prosthetic valve endocarditis?
MR. SKIVER: Objection. Go ahead, doctor.
MS. KINKOPF-ZAJAC: Object.
A. I didn't see him on the 10th. I can't say.
Q. Well, doctor, you saw him on the 13th, and you also saw his echocardiogram from that date. If an echo had been done on the 10th, do you think it would have shown any indication of prosthetic valve endocarditis?
MR. SKIVER: Objection,

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MS. KINKOPF-ZAJAC: Objection.
MR. SKIVER: Go ahead, doctor.
A. I didn't see him on the 10th.
Q. My question was in relation to what you saw on the 13th and the extent of his infection. Is it likely, if an echo was done three days before, there would have been evidence of infection at that time that would have been seen on echo?
MR. POLITO: Objection.
MR. SKIVER: Objection.
MS. KINKOPF-ZAJAC: Objection.
A. It's possible. It's possible.
Q. Now, you also saw Mr. Colvin on the 14th; is that correct?
A. Yes.
Q. And you then wrote your own note; correct?
A. Yes.
Q. And there was also an infectious disease fellow note written that day that --
A. Yes.
Q. Did you review that one?
A. Yes.
Q. And also confirm it with them?

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A. Yes.
Q. And in regard to his condition on the 14th, was there any change in your assessment from what you had seen on the previous day?
MR. SKIVER: Let her finish her question up there.
A. No change.
Q. Was there any change in your plan of care for Mr. Colvin based on your assessment of the 14th?
A. We had restarted antibiotics and that had no change in the plan.
Q. And then you again saw him on the 15th of May; correct?
A. Yes.
Q. Do you know what time you saw him: morning or afternoon that day?
A. I don't know.
Q. And based on your schedule, is there a likely time, whether it would have been morning or afternoon?
A. It could have been either.
Q. Let me ask you this: Did you confirm the notes of the infectious disease consult written at 8:10 in the morning on the 15th?

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A. Yes.
Q. And is that also another fellow's note?
A. It's a resident.
Q. A resident's note.
A. Yes.
Q. Do you know what resident that is?
A. Dr. Koepke.
Q. Is that your underlining in his note?
A. Yes.
Q. Now, when you saw him on the 15th, did your assessment of him change from your previous assessments?
A. I have written that I thought he had more signs of heart failure.
Q. You wrote that he had worsened heart failure; correct?
A. Yes.
Q. Was it your impression that Gregory Colvin was moving towards cardiac collapse?
A. I don't recall whether I thought he was moving toward cardiac collapse.
Q. Doctor, at the end of your note on May 15th, 1998, you wrote OR as soon as possible, and you have it underlined.

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A. Yes.
Q. Why do you have that underlined?
A. Because I felt that he should go to the operating room as soon as he was stable enough based on the surgeon's assessment.
Q. In your opinion, did Gregory Colvin need urgent surgery when you saw him on the 15th?
A. I felt that he needed surgery soon, but, again, that assessment is made by the surgeon, not by me.
Q. Well, the time that he goes to surgery, but, in your opinion, did you feel that he needed urgent surgery based on your assessment of this patient?
A. I can't recall whether I felt he needed urgent surgery at that point.
Q. Did you speak to Dr. Kruithoff or Dr. Miller on May 15th, 1998 about Gregory Colvin?
A. I don't recall.
Q. Are you aware of any plans to schedule him for surgery on Friday, May 15th of 98?
A. I have not noted any.
Q. Do you have a recollection or anything that you reviewed in the records?

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A. No, I don't.
Q. I was going to ask a different question.
A. I'msorry.
Q. Do you have a recollection, or from anything you reviewed in the record, speaking with any other physicians about Gregory Colvin's condition, other than the residents that you evaluated the patient with?
A. I don't remember.
Q. Was there any reason, to your knowledge, that prevented Gregory Colvin from going to surgery for valve replacement on May 15th, 1998?
A. From an infectious disease point of view, there was nothing holding him back, but, again, that's a decision made by the surgeon as to when the patient is taken.
Q. And you're not aware of anything else that would have prevented him from going to surgery on Friday; correct? I'm just asking for what you have knowledge of, doctor. You're not aware of anything that would have prevented him from going to surgery on Friday, May 15th of 98; correct?

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MR. SKIVER: You're asking from an infectious disease standpoint?
MS. TOSTI: I'm asking him knowledge from any base.
MR. SKIVER: Doctor, if you feel you can give any other information, go ahead.
Q. Do you have any knowledge of anything that was preventing him from going to surgery on May 15th, 1998?
A. From an infectious disease point of view, no.
Q. Do you have any knowledge from any other source of any other reason why he couldn't go to surgery on May 15th of 1998? I'm not asking you to review the whole record. I'm asking if you have any knowledge.
A. I don't remember having any conversation -- any conversations I had with any of the other physicians as to why not.
Q. Not to your knowledge then?
A. Not to my knowledge.
Q. When you saw Gregory Colvin on May 15th of 98, in your opinion, was he hemodynamically unstable?
MR. POLITO: Objection. Did you say

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unstable or stable?
MS. TOSTI: Unstable.
A. I felt that he had worsened heart failure.
Q. Was he hemodynamically unstable?
A. I had not noted his blood pressure at the time that I saw him, so I will have to say I don't remember.
Q. Do you have any recollection of speaking to Gregory Colvin or his family about his condition while he was a patient during this admission?
A. I don't have any recollection of the conversation.
Q. You don't recall speaking to his family at any time?
A. I recall speaking to his family in hospital quarters after he had a clinical downturn on the 16th.
Q. We'll get to that in a minute.
There is a clinical note written on the 16th at, I believe, 0630 hours. Is that your clinical note, or one that you confirmed?
A. This is my clinical note.
Q. And you saw the patient early in the

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morning then on the 16th?
A. Yes.
Q. What was his condition when you saw him at that time?
A. I described him as stable but sick.
Q. Was his condition any different from what you had seen the previous day on the 15th of May?
A. To the best of my recollection, he was not much different than when I had seen him the day before.
Q. Now, at the end of your note, you wrote to OR as soon as possible; correct?
A. Right.
Q. And you had put something similar to that on the previous day as well as on the 13th.
A. Yes.
Q. What was the plan in regard to taking this patient to surgery?
A. The plan was that, when the surgeon felt he was stable to go to surgery, he would go to surgery.
Q. Did you have any conversations with the surgical staff? You had indicated that you were going to talk with Pat Ginley. Did you have

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any type of conversations with any of the surgeons as to what the plan was as to when he was actually going to go to surgery?
A. I don't recall.
Q. So you don't recall whether even on the 16th there was an actual time or date that he was going to go to surgery; correct?
A. I don't recall.
Q. Now, doctor, there's another clinical note written on the 16th at about 2:40 p.m. Is that also your note?
A. Yes.
Q. How did you come to write that note?
A. I was notified that the patient had had a clinical downturn.
Q. Who notified you?
A. I believe that it was an infectious disease fellow, but I'm not certain.
Q. What were you told in regard to what had occurred with Gregory Colvin?
A. That he had had apparently abrupt onset of abdominal pain and then had hemodynamic difficulties and had had extracorporeal membrane oxygenation placed.
Q. And did you do an assessment of him

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when you went to see him?
A. I did.
Q. What were your findings?
A. I don't have them noted. I don't have them noted, so I do not recall.
Q. Did you have any conversations with any of his physicians after you were asked to see this patient on the 16th?
A. I don't recall. It is almost certain that I did. It would be my practice to.
Q. Who is it that you would have talked to?
A. I would have likely talked to intensive care unit personnel and to cardiothoracic surgery, but I honestly do not recall.
Q. And why is it you would have talked to cardiothoracic surgery?
A. To discuss the patient's status.
Q. Regarding going to surgery?
A. Yes. And, in general, what had happened, et cetera.
Q. And you don't have any recollection?
A. I do not have any recollection of those conversations.

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Q. When you saw him on the 16th, what was your prognosis for him in the afternoon when you saw him?
A. I have not noted my prognosis. I don't remember.
Q. You mentioned that you thought that you had a conversation with the family sometime after you saw him on the 16th. Do you recall who it is that you spoke to?
A. No, I do not.
Q. Do you recall the content of that conversation with the family?
A. I recall some of it. I recall discussing that he was very, very ill, and that he would have a very difficult battle. I don't remember much more than that.
Q. Do you recall any plans to take him to surgery on the 16th?
A. I don't recall.
Q. Do you have an opinion as to whether Gregory Colvin should have been taken to open heart surgery prior to the time of his death?
A. I think that retrospectively, it --we obviously think it would have been better if he had gone. But there's certainly no guarantee

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that he would have done well with that surgery.
Q. Are you aware of any attempts to schedule Gregory Colvin for surgery prior to the time that he died?
A. I don't do surgical scheduling. It's up to the surgeons.
Q. I'm just asking whether you have any knowledge of anyone that was trying to schedule him for surgery before he died.
A. I don't remember, and I haven't noted it.
Q. Did you speak with Dr. Kruithoff about Gregory Colvin any time after Gregory Colvin's death?
A. I don't recall.
Q. Did you speak with Dr. Miller about Gregory Colvin any time after Gregory Colvin's death?
A. I don't recall.
Q. And the same question in regard to Dr. Craig Saunders.
A. I don't recall.
Q. Do you have an opinion as to when Gregory Colvin developed his prosthetic valve endocarditis?

A. I don't know.
Q. Do you have an opinion as to what point in time his condition was irreversible?
A. My feelings were that he was irreversible on the 17th.
Q. If Gregory Colvin had gone to surgery for a valve replacement before he suffered the cardiac collapse, do you have an opinion as to whether he would have likely survived the surgery?
A. I don't know.
Q. Do you have an opinion as to whether earlier treatment with antibiotics and valve replacement would have increased his chances for survival?
MR. POLITO: Objection.
A. I don't know.
Q. Do you have any criticisms of any of the care that Gregory Colvin received after his valve surgery?
A. I don't.
Q. And do you have any criticism of Gregory Colvin or blame him in any way for the complications that he suffered?
A. No.

MS. TOSTI: Doctor, I don't have any further questions for you.
MR. SKIVER: Anybody else? He'll review it.
MS. TOSTI: Thank you for your time.
(Deposition concluded at 11:55 o'clock p.m.)
- - - - -

AFFIDAVIT

I have read the foregoing transcript from page 1 through 66 and note the following corrections:

PAGE	LINE	REQUESTED CHANGE

_____
STEVEN K. SCHMITT, M.D.

Subscribed and sworn to before me this _____ day of _____,2000.

_____
Notary Public
My commission expires _____.

CERTIFICATE

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

I, Karen M. Patterson, a Notary Public within and for the State of Ohio, duly commissioned and qualified, do hereby certify that the within named STEVEN K. SCHMITT, M.D. was by me first duly sworn to testify to the truth, the whole truth and nothing but the truth in the cause aforesaid; that the testimony as above set forth was by me reduced to stenotypy, afterwards transcribed, and that the foregoing is a true and correct transcription of the testimony.

I do further certify that this deposition was taken at the time and place specified and was completed without adjournment, that I am not a relative or attorney for 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 8th day of October 2000.

Karen M. Patterson, Notary Public
Within and for the State of Ohio

My commission expires October 7, 2004

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