

<p style="text-align: right;">Page 1</p> <p>1 IN THE COURT OF COMMON PLEAS 2 CUYAHOGA COUNTY, OHIO 3 DIANE COLVIN, Administratrix 4 of the Estate of 5 GREGORY COLVIN, deceased. 6 Plaintiff, 7 vs Case No. 388614 8 KEITH KRUIHOFF, M.D., 9 et al., 10 11 Defendants. 12 13 ----- 14 DEPOSITION OF SORIN JAKOB BRENER, M.D. 15 TUESDAY, SEPTEMBER 5, 2000 16 ----- 17 The deposition of SORIN JAKOB BRENER, M.D., 18 the Witness herein, called by counsel on behalf 19 of the Plaintiff for examination under the 20 statute, taken before me, Vivian L. Gordon, a 21 Registered Diplomate Reporter and Notary Public 22 in and for the State of Ohio, pursuant to 23 agreement of counsel, at the offices of The 24 Cleveland Clinic Foundation, 9500 Euclid Avenue, 25 Cleveland, Ohio, commencing at 1:30 o'clock p.m. on the day and date above set forth.</p>	<p style="text-align: right;">Page 3</p> <p>1 SORIN JAKOB BRENER, M.D., a witness herein, 2 called for examination, as provided by the Ohio 3 Rules of Civil Procedure, being by me first duly 4 sworn, as hereinafter certified, was deposed and 5 said as follows: 6 EXAMINATION OF SORIN JAKOB BRENER, M.D. 7 BY MS. TOSTI: 8 Q. Doctor, would you please state your 9 name for us. 10 A. Sorin Brener. 11 Q. Spell your last name. 12 A. B-R-E-N-E-R. 13 Q. What is your home address? 14 A. 25275 Shaker Boulevard in Beachwood, 15 Ohio. 16 Q. Your zip code? 17 A. 44122. 18 Q. Is that a single-family home? 19 A. Yes. 20 Q. Your current business address, is it 21 here at The Cleveland Clinic? 22 A. Yes. 23 Q. Who is your current employer? 24 A. Cleveland Clinic Foundation. 25 Q. What is your title here at The</p>
<p style="text-align: right;">Page 2</p> <p>1 APPEARANCES: 2 3 On behalf of the Plaintiff 4 Becker & Mishkind 5 BY: JEANNE M. TOSTI, ESQ. 6 Skvliht Office Tower Suite 660 7 1660-West 2nd Street 8 Cleveland, Ohio 44113 9 10 On behalf of the Defendant Kruithoff, M.D. 11 Bonezzi, Switzer, Murphy & Polito 12 BY: JOHN S. POLITO, ESQ. 13 1400 Leader Building 14 Cleveland, Ohio 44114 15 16 On behalf of the Defendant Cleveland Clinic 17 BY: STEPHEN A. SKIVER, ESQ. 18 30025 E. River Road 19 Perrysburg, Ohio 43551 20 On behalf of the Defendant Ohio Permanente 21 Roetzel & Andress 22 BY: INGRID KINKOPF-ZAJAC, ESQ. 23 One Cleveland Center 24 1375 East 9th Street 25 Cleveland, Ohio 44114 -----</p>	<p style="text-align: right;">Page 4</p> <p>1 Cleveland Clinic, currently? 2 A. Staph cardiologist. 3 Q. Was that the same in 1998? 4 A. Yes. 5 Q. Do you hold any administrative 6 positions at The Cleveland Clinic? 7 A. No. 8 Q. Have you ever? 9 A. No. I don't know exactly what you 10 mean by administrative. 11 Q. Such as the head of the coronary 12 intensive care unit. 13 A. No. 14 Q. Or the head of any particular 15 department. 16 A. No. 17 MR. SKIVER: Try to keep your voice 18 up. 19 Q. When did you first become employed at 20 The Cleveland Clinic? 21 A. I started training in 1989 and have 22 remained at the Clinic ever since. I became 23 staph in 1996. 24 Q. Aside from your employment here at The 25 Cleveland Clinic, do you provide professional</p>

<p style="text-align: right;">Page 5</p> <p>1 services for any other entity?</p> <p>2 A. We have an affiliation with</p> <p>3 MetroHealth Medical Center, and part of my duties</p> <p>4 is to provide similar services there.</p> <p>5 Q. What type of things do you do at</p> <p>6 Metro?</p> <p>7 A. The same thing; coronary intensive</p> <p>8 care unit, cardiac catheterizations and</p> <p>9 angioplasty.</p> <p>10 Q. Have you ever had your deposition</p> <p>11 taken before?</p> <p>12 A. No.</p> <p>13 Q. I want to review some of the ground</p> <p>14 rules for a deposition. I am sure counsel has</p> <p>15 had a chance to talk with you.</p> <p>16 This is a question and answer</p> <p>17 session. It's under oath. It's important that</p> <p>18 you understand the questions that I am going to</p> <p>19 ask you. If you don't understand them, ask me</p> <p>20 and I'll be happy to repeat them or to rephrase</p> <p>21 them; otherwise, I'm going to assume that you</p> <p>22 understood my question and that you are able to</p> <p>23 answer it.</p> <p>24 I would also ask that you give all of</p> <p>25 your answers verbally, because our court reporter</p>	<p style="text-align: right;">Page 7</p> <p>1 three or four.</p> <p>2 Q. Were they for the plaintiff or the</p> <p>3 defendant in the case?</p> <p>4 A. I really don't recall all the details.</p> <p>5 Q. Do you recall whether they were for a</p> <p>6 medical practitioner or for a patient, the family</p> <p>7 of a patient?</p> <p>8 A. Again, these were informal reviews. I</p> <p>9 believe it was for the medical practitioner.</p> <p>10 MR. SKIVER: If you don't know,</p> <p>11 doctor, don't guess.</p> <p>12 Q. Have you ever done any medical reviews</p> <p>13 for Mr. Skiver?</p> <p>14 A. No.</p> <p>15 Q. Attorney Anna Carulas?</p> <p>16 A. No.</p> <p>17 Q. Mr. Polito?</p> <p>18 A. No.</p> <p>19 Q. Do you recall who, what attorney you</p> <p>20 did do the medical reviews for?</p> <p>21 A. No.</p> <p>22 Q. In any of the reviews that you have</p> <p>23 previously done, did any of them deal with issues</p> <p>24 involving infective endocarditis?</p> <p>25 A. No.</p>
<p style="text-align: right;">Page 6</p> <p>1 cannot take down head nods or hand motions.</p> <p>2 A. Sure.</p> <p>3 Q. And at any point, if you would like to</p> <p>4 refer to the medical records, feel free to do</p> <p>5 so. This isn't any type of a memory test.</p> <p>6 At some point during the deposition,</p> <p>7 one of defense counsel may choose to enter an</p> <p>8 objection. You are still required to answer my</p> <p>9 question unless counsel instructs you not to do</p> <p>10 so. Do you understand those?</p> <p>11 A. Yes.</p> <p>12 Q. Have you ever been named as a</p> <p>13 defendant in a medical negligence case?</p> <p>14 A. No.</p> <p>15 Q. Now, you have indicated you have never</p> <p>16 had your deposition taken. Have you ever given</p> <p>17 testimony in a medical negligence case? I mean</p> <p>18 at trial.</p> <p>19 A. No.</p> <p>20 Q. Have you ever acted as an expert in a</p> <p>21 medical negligence case?</p> <p>22 A. I have reviewed cases before they got</p> <p>23 to court, as an expert, and I provided my input.</p> <p>24 Q. How many cases have you reviewed?</p> <p>25 A. If my memory serves me correctly,</p>	<p style="text-align: right;">Page 8</p> <p>1 Q. Do you recall the allegation of</p> <p>2 negligence in any of the cases that you reviewed?</p> <p>3 A. I did not state that there was</p> <p>4 negligence. The issue, because I'm an expert in</p> <p>5 angioplasty, it had to do with the use of this</p> <p>6 procedure.</p> <p>7 Q. Now, doctor, your counsel has given me</p> <p>8 a copy of your curriculum vitae. I would like</p> <p>9 you to please take a look at it, and if you would</p> <p>10 just identify it for the record for us.</p> <p>11 - - -</p> <p>12 (Thereupon, BRENER Deposition</p> <p>13 Exhibit 1 was marked for</p> <p>14 purposes of identification.)</p> <p>15 - - - -</p> <p>16 Q. Is that your curriculum vitae that's</p> <p>17 been marked as Plaintiffs Exhibit 1?</p> <p>18 A. Yes.</p> <p>19 Q. And are there any additions or</p> <p>20 corrections that you would like to make to it?</p> <p>21 A. No.</p> <p>22 Q. Doctor, you are currently licensed in</p> <p>23 the State of Ohio to practice medicine; is that</p> <p>24 correct?</p> <p>25 A. Yes.</p>

<p style="text-align: right;">Page 9</p> <p>1 Q. You were so licensed also in 1998; is 2 that correct? 3 A. Yes. 4 Q. Are you licensed in any other states? 5 A. No. 6 Q. Has your medical license ever been 7 called into question, suspended or revoked? 8 A. No. 9 Q. Has your medical privileges at any 10 hospital ever been called into question, 11 suspended or revoked? 12 A. No. 13 Q. Are you board certified in any area of 14 medicine, doctor? 15 A. Yes. Internal medicine, 16 cardiovascular medicine and intervention 17 cardiology. 18 Q. And were there tests involved with 19 each one of those? 20 A. Yes. 21 Q. Board certifications? 22 A. Yes. 23 Q. Did you pass each of those on your 24 first try? 25 A. Yes.</p>	<p style="text-align: right;">Page 11</p> <p>1 Following Repeat Cardiac Valve Surgery published 2 in 1994. 3 Q. Thank you, doctor. 4 Have you ever given a formal 5 presentation on the subject of infective 6 endocarditis? 7 A. No. 8 Q. Tell me what you have reviewed for 9 this deposition today. 10 A. I have reviewed my note from May 15th, 11 which was my sole encounter with the patient. 12 And I reviewed the note following that day after 13 we switched services, the 16th. 14 Q. Did you review any other parts of the 15 medical records? 16 A. No. 17 Q. Did you refer to any textbook 18 articles, textbooks or journal articles in 19 preparation for this deposition? 20 A. No. 21 Q. Have you at any time since this case 22 was filed reviewed the tapes of the 23 echocardiograms that were done on Gregory Colvin? 24 A. No. 25 Q. Since this case was filed, have you</p>
<p style="text-align: right;">Page 10</p> <p>1 Q. Doctor, on your curriculum vitae, you 2 have a number of publications listed. 3 Do you have any publications that are 4 currently in progress of publication that are not 5 listed on this curriculum vitae? 6 A. There are probably two or three 7 articles that are under review, yes. 8 Q. Do any of them deal with infective 9 endocarditis? 10 A. No. 11 Q. In regard to the articles that are 12 listed on your curriculum vitae, do any of them 13 deal with infective endocarditis? 14 A. No. 15 Q. Do any deal with prosthetic mitral 16 valve replacement? 17 A. No. There is one article that deals 18 in general with valve surgery at The Cleveland 19 Clinic Foundation. 20 Q. Would you tell me on your curriculum 21 vitae which article that is? Do you have them 22 numbered? 23 A. They are not numbered, but I can show 24 you. 25 This was the article Permanent Pacing</p>	<p style="text-align: right;">Page 12</p> <p>1 discussed this case with any physicians, other 2 than Dr. Skiver? 3 A. No. 4 Q. And other than with counsel, have you 5 discussed this case with anyone else? 6 A. No. 7 Q. Aside from the notes that you have 8 just referenced in the medical records, do you 9 have any other notes or personal file on this 10 case? 11 A. No. 12 Q. Doctor, is there a textbook in your 13 field of practice that you consider to be the 14 most reliable or the best? 15 A. There are two or three textbooks which 16 are considered reliable. 17 Q. Which textbooks would those be? 18 A. Braunwald and Tober's, the Heart. 19 Q. Do you refer to them from time to time 20 in your practice? 21 A. Certainly. 22 Q. Do you consider them to be 23 authoritative? 24 A. They are, yes, the best that exist. 25 Obviously, there is a lag of time between the</p>

<p style="text-align: right;">Page 13</p> <p>1 time they are published, and the knowledge 2 advances quite fast in certain areas. 3 Q. Now, as you sit here today, are there 4 any specific publications that you believe have 5 relevance to the issues in this case? 6 A. Not that I'm aware of. It's not my 7 field of expertise. 8 Q. Have you participated in any research 9 dealing with the subject matter of infective 10 endocarditis? 11 A. No. 12 Q. Any research dealing with prosthetic 13 valve endocarditis, specifically? 14 A. No. 15 Q. Doctor, I would like you to just 16 describe for me a little bit what your clinical 17 practice is. I understand that you are a 18 cardiologist, but do you limit your practice to 19 any specific area of cardiology? 20 A. Well, I specialize in the invasive 21 procedure of cardiac catheterization and 22 angioplasty, hemodynamic monitoring and provision 23 of intensive care in the intensive care unit. 24 Q. Do you perform echocardiograms in your 25 practice?</p>	<p style="text-align: right;">Page 15</p> <p>1 involves the inflammation of the lining of the 2 heart, and most often is in the context of an 3 infection. 4 Q. What is early prosthetic valve 5 endocarditis? 6 A. It's the appearance of this process, 7 which again is presumed to be infective in 8 origin, in the first few months after the 9 replacement of the valve. 10 Q. Would you agree that staph epidermis 11 is a common cause of prosthetic valve 12 endocarditis? 13 A. Yes. 14 Q. Do you know what the peak time of 15 onset for prosthetic valve endocarditis is after 16 cardiac surgery? 17 A. I believe it's 30 days. 18 Q. And do you know what percentage of 19 valve replacement surgical patients go on to 20 develop prosthetic valve endocarditis within the 21 first two months after surgery? 22 A. I'm not absolutely sure. I have an 23 approximate. 24 Q. Approximately then. 25 A. Less than five percent.</p>
<p style="text-align: right;">Page 14</p> <p>1 A. No. 2 Q. Do you evaluate echocardiograms in 3 your practice? 4 A. I review them when relevant, although 5 I do defer to the expertise of those who mainly 6 do them. 7 Q. Do you see patients outside of the 8 acute care areas; such as in the clinics, at all? 9 A. Yes. 10 Q. Do you do that on a regular basis? 11 A. Yes. 12 Q. How many hours a week do you do that? 13 A. One day a week. 14 Q. Are the other days of the week 15 involved in the acute care hospital setting? 16 A. The other days of the week are spent 17 in the catheterization laboratory, and 18 periodically, approximately four months a year, I 19 am in the intensive care unit. 20 Q. When you are in the cath lab, do you 21 have any responsibilities in the coronary 22 intensive care, cardiac intensive care? 23 A. No. 24 Q. Doctor, what is endocarditis? 25 A. Endocarditis, it's a process that</p>	<p style="text-align: right;">Page 16</p> <p>1 Q. Do you know what Cleveland Clinic's 2 rate of prosthetic valve endocarditis is after 3 surgery in 1997 or 1998? 4 A. No. 5 Q. And in your practice, do you see 6 patients with prosthetic valve endocarditis? 7 A. The ones that I do are in the 8 intensive care unit, although most of them do 9 come from other hospitals. 10 Q. Aside from -- I'm sorry. Did you 11 complete your answer? 12 A. Yes. 13 Q. Aside from this case, however, do you 14 see prosthetic valve endocarditis? 15 A. Again, I'm not 100 percent certain, 16 but I would think two to five cases a year. That 17 doesn't necessarily mean that they are all early 18 prosthetic valve endocarditis. 19 Q. I understand, doctor. 20 Would you agree that there has to be 21 a high degree of vigilance for infective 22 endocarditis in a patient with a prosthetic 23 valve? 24 A. Yes. 25 Q. Are there any factors that would place</p>

<p style="text-align: right;">Page 17</p> <p>1 a patient with a prosthetic valve at increased 2 risk for prosthetic valve endocarditis? 3 A. The occurrence of prosthetic valve 4 endocarditis -- and again, not necessarily the 5 early varieties -- are associated with patients 6 who undergo invasive procedures, particularly 7 dental procedures; use of intravenous drugs, 8 usually illicit drugs; the presence of poorly 9 healed endocarditis before the initial valve 10 replacement; and lack of administration of 11 antibiotic prophylaxis during invasive procedures 12 in such patients. 13 So these would be some of the risk 14 factors associated with the occurrence of this 15 condition. 16 Q. Would an abscess in the neck draining 17 purulent material increase the risk for 18 prosthetic valve endocarditis? 19 MR. POLITO: Objection. 20 Q. You may answer. 21 A. As it is, if it is associated with 22 bacteremia, yes. 23 Q. What are the signs and symptoms of 24 infective endocarditis? 25 A. It is usually a systemic disorder that</p>	<p style="text-align: right;">Page 19</p> <p>1 patient that has prosthetic valve endocarditis 2 differ at all from the ones that you just 3 mentioned? 4 A. I believe in general they are the 5 same. 6 Q. How is prosthetic valve endocarditis 7 diagnosed? 8 A. Generally, infective endocarditis is a 9 bacteriologic diagnosis, meaning that the 10 presence of positive blood cultures are 11 identified in the patients in whom such a 12 condition occurs. And once it exists, obviously, 13 the source is identified, and as was stated 14 before, because patients who have a prosthetic 15 material, a valve or anything else, are at higher 16 risk of this infection, then echocardiographic 17 evaluation of the valve will detect the presence 18 of abnormal masses which in the right context 19 would imply the presence of a vegetation. 20 Q. Does a patient have to have positive 21 blood cultures before a presumptive diagnosis of 22 prosthetic valve endocarditis can be made? 23 A. The majority of patients would have 24 positive blood cultures, yes. The vast majority. 25 Q. But my question is, does a patient</p>
<p style="text-align: right;">Page 18</p> <p>1 manifests with lack of appetite, weakness, 2 appearance of a murmur, or exacerbation of a 3 previously existent murmur; stigmata, enlargement 4 of the spleen, renal dysfunction. 5 There is deterioration of the heart 6 function because of abnormalities of valve 7 function, congestive heart failure, embolization 8 to brain or other organs. Probably these are the 9 most common manifestations. 10 Q. Is fever and night sweats also 11 associated with infective endocarditis? 12 A. Fever is common, but very nonspecific 13 as opposed to all the others. Night sweats are 14 certainly part of it; not as prominent maybe as 15 the others. 16 Q. Is anemia associated with infective 17 endocarditis? 18 A. A long-standing process certainly 19 results in anemia, like any other chronic 20 condition. 21 Q. Weight loss? 22 A. Again, when the process is very long 23 and not diagnosed. 24 Q. Now, we were speaking about infective 25 endocarditis. Do the signs and symptoms for a</p>	<p style="text-align: right;">Page 20</p> <p>1 have to have positive blood cultures before 2 presumptive diagnosis of prosthetic valve 3 endocarditis can be made? 4 A. No. 5 Q. What is culture negative endocarditis? 6 A. It's a condition associated with the 7 presence of deterioration of valve structure 8 function, and despite repeated analysis of blood 9 cultures, they remain bacteriologically silent. 10 Q. Would you agree that negative blood 11 cultures are more likely to occur in a patient 12 with prosthetic valve endocarditis than an 13 endocarditis patient without a prosthetic valve? 14 A. I'm not aware of that distinction, no. 15 Q. Would you agree that the blood of some 16 patients with active bacterial endocarditis may 17 persistently culture negative after receiving a 18 short course of antibiotics? 19 A. Yes. 20 Q. Would you agree that when you are 21 caring for a patient with prosthetic valve 22 endocarditis that you must be vigilant for sudden 23 onset or worsening of heart failure? 24 A. Yes. 25 Q. And in a patient with prosthetic valve</p>

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1 endocarditis, would it be important to get the
2 patient into surgery for valve replacement before
3 cardiac collapse occurred?

4 A. Obviously it would be the goal to
5 correct the abnormality at the optimal time.

6 Q. Doctor, would you agree that
7 echocardiographic studies are vitally important in the
8 diagnosis of infective endocarditis?

9 A. Echocardiographic studies determine
10 the degree of abnormality of the valve. They do
11 not establish the diagnosis of endocarditis. It
12 is a bacteriologic diagnosis.

13 Q. Well, doctor, if you see vegetations
14 on a patient's heart valve but they are culturing
15 negative, would there be a presumption that this
16 patient has endocarditis?

17 A. Certainly so. Nevertheless, by
18 echocardiography you do not see vegetations, you
19 see masses which need to be interpreted,
20 particularly in the setting of previously
21 existing valve abnormalities.

22 Q. If you see echo densities that suggest
23 vegetations even if the patient has negative
24 blood cultures, would that allow you to make a
25 presumptive diagnosis of endocarditis?

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1 decompensation would be helpful in determining
2 the timing of surgery?

3 A. Again, only in the direction of the
4 deterioration. The resolution of findings by
5 echocardiogram would not necessarily obviate the
6 need for surgery.

7 Q. Well, my question said can it assist
8 in making that decision, doctor.

9 A. Assist, yes.

10 Q. Doctor, if there is a question about
11 an echo density on an echocardiogram in a patient
12 that has a prosthetic valve, would it be
13 advisable to do a follow-up echo to look for
14 changes in that echo density?

15 MR. POLITO: Objection.

16 A. The utility of repeat
17 echocardiographic studies exists only if the
18 reason for the indecision is because the
19 abnormality was not severe enough. If you cannot
20 see it on the first one, because you can't see
21 the structure, then you will not be able to see
22 it on another one.

23 Q. But if there is an echo density that
24 you are unsure about as to whether it might be
25 suggestive of a vegetation or not, would a

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1 A. In the right clinical context,
2 certainly.

3 Q. And would that clinical context
4 include cardiac decompensation that was
5 progressing?

6 A. Certainly.

7 Q. Would you agree that you cannot
8 exclude the diagnosis of endocarditis on the
9 basis of a negative echocardiogram alone?

10 A. Yes.

11 Q. Does the presence of a prosthetic
12 valve sometimes interfere with the detection of
13 echo densities that would suggest vegetations?

14 A. Frequently.

15 Q. Would you agree that sequential
16 echocardiograms performed during treatment of
17 endocarditis can assist in making decisions on
18 the necessity for and the timing of surgery by
19 providing objective assessment of cardiac
20 function?

21 A. The detection of deterioration despite
22 treatment would be an indication for surgery.

23 Q. So would the answer to my question be,
24 yes, sequential echocardiograms performed during
25 treatment that show a progression of cardiac

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1 follow-up echo at a later date give you more
2 information regarding that echo density?

3 MR. POLITO: Objection.

4 A. Not necessarily. Again, if the
5 abnormality existed and you decided to treat that
6 condition anyhow, then in the absence of clinical
7 signs and symptoms, you would not necessarily.

8 Q. What type of clinical signs and
9 symptoms?

10 A. Heart failure, heart blocks,
11 embolizations. Particularly if the course was
12 already decided as to what's the next step. In
13 the absence of treatment, the sequential
14 echocardiographic studies might assist you in
15 determining whether that density has changed or
16 disappeared, decreased in size.

17 MR. SKIVER: Keep your voice up.

18 Q. In a patient with early prosthetic
19 valve endocarditis that is treated with
20 antibiotics and valve replacement, do you know
21 what the cure rate is?

22 MR. SKIVER: Objection. Calls for
23 speculation. Go ahead, doctor.

24 MR. POLITO: I join in.

25 A. Cure, defining as?

<p style="text-align: right;">Page 25</p> <p>1 Q. Resolution of the infection and 2 resolution of the cardiac decompensation. 3 A. If the operation is successful, the 4 rate of cure, as you define it, is high. 5 Q. Can you give me a percentage? 6 A. Usually in the 90 percent range. 7 Q. Doctor, I understand that there is a 8 transthoracic type echo and a transesophageal 9 echo. Is one type of echo more sensitive in 10 regard to vegetations? 11 A. The definition of the densities by 12 transesophageal cardiography is superior to the 13 transthoracic. 14 Q. Now, what would the clinical 15 indicators be that would warrant proceeding with 16 an echocardiogram, either transthoracic or 17 transesophageal, to assist in the diagnosis of 18 prosthetic valve endocarditis? 19 A. The suspicion for the presence of 20 endocarditis, particularly in the presence of 21 positive blood cultures. 22 Q. Now, if the blood cultures are not 23 positive, are there any other clinical indicators 24 that would cause you to proceed with an 25 echocardiogram?</p>	<p style="text-align: right;">Page 27</p> <p>1 both, then there is no ground for such diagnosis. 2 Q. If you have just the positive blood 3 cultures without vegetations, can you make the 4 diagnosis of endocarditis? 5 A. No. 6 Q. How is prosthetic valve endocarditis 7 treated once it's been diagnosed? 8 A. The majority of patients with 9 prosthetic valve endocarditis will necessitate 10 surgery. After adequate antibiotic therapy, 11 surgery will be followed by an additional 12 antibiotic course, quite prolonged. 13 Q. How long usually is the antibiotic 14 course after surgery? 15 A. Usually a total of six weeks. Again, 16 it depends on how much before and how much after 17 the surgery. 18 Q. Would you agree that the sooner 19 prosthetic valve endocarditis is treated with 20 antibiotics, the more likely the outcome will be 21 positive? 22 MR. POLITO: Objection. 23 MS. KINKOPF-ZAJAC: Objection. 24 A. The sooner it is diagnosed and 25 treated, yes.</p>
<p style="text-align: right;">Page 26</p> <p>1 MR. POLITO: Objection. 2 Q. You may answer. 3 A. Deterioration in heart function, 4 presence of heart blocks, that's rate 5 abnormality. 6 Q. We talked about all the signs and 7 symptoms of endocarditis before. If the patient 8 was exhibiting those signs, would that warrant 9 moving towards an echocardiogram? 10 MR. POLITO: Objection. 11 Q. Without positive blood cultures. 12 MR. POLITO: Objection. 13 A. In the presence of an identifiable 14 source for those symptoms, no. 15 In the absence of such a source, yes. 16 What I meant by source is if the 17 patient has urinary tract infection, then, no, it 18 is not indicated to perform an echocardiogram. 19 Q. I think you may have implied the 20 answer to this, but do valvular vegetations have 21 to be present before the diagnosis of prosthetic 22 valve endocarditis can be made? 23 A. Again, if the diagnosis rests on the 24 presence of positive blood cultures and densities 25 or vegetations on the valve. In the absence of</p>	<p style="text-align: right;">Page 28</p> <p>1 Q. If a patient with prosthetic valve 2 endocarditis develops a new heart murmur, is that 3 of significance clinically to the patient? 4 A. Yes. 5 Q. What would that be an indication of, 6 or possibly an indication of? 7 MR. POLITO: Objection. 8 A. It could possibly indicate the 9 presence of negative regurgitation or stenosis. 10 The former is more common. 11 Q. Would you agree that the timing of 12 surgery for replacing an infected prosthetic 13 valve is extremely important in the management of 14 a patient with prosthetic valve endocarditis? 15 A. The optimal time of replacement is of 16 crucial importance, yes. 17 Q. How would you define optimal time of 18 replacement, doctor? 19 A. It's the time to which you have made 20 every effort to sterilize the infected area, 21 which is typically the valve or the surrounding 22 tissues, while not compromising the hemodynamic 23 status of the patient. 24 From a clinical point of view, it 25 means that the blood cultures have become</p>

<p style="text-align: right;">Page 29</p> <p>1 negative, assuming that they were positive at the 2 beginning of the disease. 3 Q. So if surgery is delayed too long in a 4 prosthetic valve endocarditis patient, the 5 patient's hemodynamic status may deteriorate so 6 seriously that surgery would no longer be 7 feasible; correct? 8 A. A number of complications may ensue, 9 not necessarily hemodynamic, yes. 10 Q. But hemodynamic deterioration is one 11 of those complications; correct? 12 A. Yes. 13 Q. Doctor, would you agree that because 14 of the likely need for surgery during the course 15 of prosthetic valve endocarditis that the patient 16 should be managed in consultation with cardiac 17 surgery service? 18 A. Yes. 19 Q. And the reason for that would be to 20 facilitate timely surgery when the optimum time 21 arrives; correct? 22 A. Yes. 23 Q. Doctor, once a patient with prosthetic 24 valve endocarditis develops moderate or severe 25 cardiac failure, isn't there a high risk that</p>	<p style="text-align: right;">Page 31</p> <p>1 of structural abnormalities of the valve area, 2 such as the dehiscence ring or the struts of the 3 valve itself; the presence of embolization to 4 peripheral organs, the brain or others; the 5 inability to eradicate the infection, meaning 6 that the blood cultures remain positive despite 7 adequate antibiotic therapy. All these are some 8 of the indicators that surgery is needed. 9 Q. If a patient with prosthetic valve 10 endocarditis develops heart failure that's 11 unresponsive to therapy, does that make the 12 patient a surgical candidate barring other 13 reasons why the patient couldn't go to surgery? 14 A. If the presence of heart failure is 15 related to the compensation of the valve 16 structure, yes -- or function, I should say, yes. 17 Q. Do you have an independent 18 recollection of Gregory Colvin as you sit here 19 today? Do you remember him? 20 A. The patient, no. Just from the notes. 21 Q. From your review of the record, can 22 you tell me when Gregory Colvin first came under 23 your care? 24 A. It was on May 15th. It appears that 25 he was transferred to the coronary intensive care</p>
<p style="text-align: right;">Page 30</p> <p>1 cardiac function may suddenly worsen? 2 A. Over what period of time? 3 Q. At any point in the acute illness. 4 A. I'm not sure what very likely means. 5 Q. If the patient has a moderate to 6 severe cardiac failure and also has prosthetic 7 valve endocarditis, is not that patient at high 8 risk for sudden decompensation of his cardiac 9 function? 10 A. No. But again, I'm not sure what you 11 mean by high and low, so -- 12 Q. Well, higher risk than a patient who 13 doesn't have cardiac failure. 14 A. Yes. 15 Q. Now, doctor, you mentioned that a high 16 number of patients with prosthetic valve 17 endocarditis will need surgical replacement of 18 the infective valve. 19 In a patient with prosthetic valve 20 endocarditis, what would be the indicators for 21 recommending surgical removal and replacement of 22 the valve? 23 A. There are a number of considerations. 24 The particular organ which affects the valve is 25 at times an indicator for surgery. The presence</p>	<p style="text-align: right;">Page 32</p> <p>1 unit from the regular nursing floor on that day. 2 Q. And is that the only day that you saw 3 Gregory Colvin? 4 A. Yes. 5 Q. Did you see him at any time at any of 6 his previous hospitalizations at The Cleveland 7 Clinic that you are aware of? 8 A. I'm not aware. 9 Q. And what is the reason that he came 10 under your care in the coronary intensive care 11 unit? 12 A. Diagnosis of infective -- or the 13 presumptive diagnosis of infective endocarditis 14 of the prosthetic valve was made and he had a 15 mild degree of renal insufficiency. There was 16 suspicion on an echocardiogram for a mitral 17 valvular abscess, and typically we like to 18 observe the patients under more strict care in 19 the intensive care unit. 20 Q. I note that your name appears on the 21 stamp on the clinical notes from the CICU and 22 that your clinical note indicates that you are 23 the CICU attending physician; is that correct? 24 A. Yes. 25 Q. Were you responsible for Gregory</p>

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1 Colvin's management while he was in the CICU?
2 A. Yes.
3 Q. And as his attending physician in the
4 CICU, what were your duties and responsibilities?
5 A. To evaluate the history and the
6 physical examination and to review the progress
7 since his admission to the hospital and
8 coordinate the plans for future management.
9 Q. Did anyone ask you to specifically
10 consult on his case when he came into the unit?
11 A. No. The attending. I see everybody.
12 Q. So he just automatically was assigned
13 to you because you were the attending at that
14 particular time?
15 A. Yes. I'm in charge of all the
16 patients who reside in the intensive care unit at
17 that particular time.
18 Q. Did you have any discussions with any
19 of his physicians that had been caring for him
20 prior to the time that he came to the CICU?
21 A. I do not recall.
22 Q. And if I ask you something that you
23 don't recall, just tell me, but I need to ask it
24 to find out whether you do recall something.
25 A. Sure.

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1 Q. From your review of the record, was
2 there anyone else that had management
3 responsibilities of Mr. Colvin while he was in
4 the CICU? Aside from yourself, was there anyone
5 else managing some component of his care while he
6 was in the unit?
7 A. Well, there were consultants. The
8 infective disease service was consulted, like in
9 every other case of presumptive endocarditis, for
10 the antibiotic prescription, for the optimal
11 antibiotic prescription.
12 The vascular medicine service, as I
13 saw, was involved related to anemia and to over
14 anticoagulation. And there was a consultation
15 placed, I believe, with the cardiac surgeons for
16 the reason that you had stated before.
17 Q. Did you have any conversations that
18 you recall with any of the consultants that were
19 providing care to Gregory Colvin while he was in
20 the CICU?
21 A. I do not recall.
22 Q. From your review of the record, can
23 you tell me approximately what time you saw
24 Gregory Colvin on May 15th of '98?
25 A. It appears based on the note that his

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1 transfer occurred after the morning rounds, but I
2 do not know exactly the time in the afternoon
3 when I saw him.
4 Q. What time are morning rounds?
5 A. Usually between 8:00 and 12:00,
6 depending upon the clinic load on that particular
7 day.
8 Q. So you likely saw him sometime after
9 12:00 noon?
10 A. Yes. We review the new patients that
11 get admitted during the day.
12 Q. As the attending, how is it that you
13 only saw him on the 15th?
14 A. I'm not sure I understand the
15 question.
16 Q. You have indicated that you were his
17 attending physician while he was in the
18 cardiac intensive care unit.
19 A. Yes.
20 Q. And you have also indicated you only
21 saw him on the 15th.
22 A. Yes.
23 Q. Is there a reason as his attending
24 physician you didn't see him on the 16th or the
25 17th?

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1 A. We switched attendings in the
2 intensive care unit on the 15th. That's the
3 regular service.
4 Q. Who was the attending after the 15th
5 then for Mr. Colvin?
6 A. I believe Dr. Francis.
7 Q. Now, you were indicating the reason
8 that he was transferred to the CICU was because
9 he was developing some complications; is that
10 correct?
11 A. No.
12 Q. What's your understanding as to why he
13 was transferred to the CICU?
14 A. For better monitoring of his condition
15 because of the potential mitral valvular abscess,
16 which was suspected on the transthoracic
17 echocardiogram.
18 Q. Was he in congestive heart failure
19 when he came into the unit?
20 A. Not at the time that I examined him.
21 Q. When you see a patient for the first
22 time, do you review the clinical notes that have
23 been written on the patient during the admission?
24 A. I review my residents' notes and I
25 review the pertinent clinical notes from the

<p style="text-align: right;">Page 37</p> <p>1 other services, yes.</p> <p>2 Q. And in Gregory Colvin's case, would</p> <p>3 you have reviewed the reports of his</p> <p>4 transthoracic echo and his transesophageal echo</p> <p>5 that were done on, I believe, May 13th?</p> <p>6 A. I noted here that the history and the</p> <p>7 physical examination were reviewed, so I would</p> <p>8 assume that I did that.</p> <p>9 Q. And you don't remember reviewing the</p> <p>10 actual tapes of either of those echoes; correct?</p> <p>11 A. No. I do not recall. But I believe</p> <p>12 that there was no doubt as to the presence of</p> <p>13 severe mitral regurgitation.</p> <p>14 Q. Do you know whether the resident or</p> <p>15 the fellow thought that Mr. Colvin was in</p> <p>16 pulmonary edema or congestive failure at the time</p> <p>17 he came into the unit?</p> <p>18 A. If I know now or if you want me to --</p> <p>19 oh, I can check to see. This is the admission</p> <p>20 note and it says looks stable without distress.</p> <p>21 On oxygen, was 100 percent saturations. Awaiting</p> <p>22 surgery with wide open mitral regurgitation and</p> <p>23 presented previously with pulmonary edema which</p> <p>24 had resolved by now. The plan was to continue</p> <p>25 antibiotics, diuretics as needed.</p>	<p style="text-align: right;">Page 39</p> <p>1 ring is as it relates to a prosthetic valve?</p> <p>2 A. The metallic structure that holds the</p> <p>3 prosthesis in place, tightened to the heart</p> <p>4 itself.</p> <p>5 Q. Is it a structure where they actually</p> <p>6 physically sew through the ring --</p> <p>7 A. Yes.</p> <p>8 Q. -- in order to secure the valve to the</p> <p>9 heart?</p> <p>10 A. Yes. The sutures actually go through</p> <p>11 the ring, yes.</p> <p>12 Q. And what does mitral regurgitation</p> <p>13 mean?</p> <p>14 A. Leakage of the mitral valve. The</p> <p>15 valve does not close as it should and blood</p> <p>16 regurgitates from one chamber to another and it</p> <p>17 shouldn't.</p> <p>18 Q. So it's actually like a back flow</p> <p>19 through the valve?</p> <p>20 A. Yes.</p> <p>21 Q. Now, I believe the transthoracic echo</p> <p>22 refers to four plus MR. Is that four plus mitral</p> <p>23 regurgitation?</p> <p>24 A. Three plus to four plus, yes.</p> <p>25 Q. Are you looking at the transthoracic</p>
<p style="text-align: right;">Page 38</p> <p>1 So neither was it my impression that</p> <p>2 he was in pulmonary edema at the time of his</p> <p>3 examination.</p> <p>4 Q. Doctor, I would like you to look back</p> <p>5 in the clinical notes at the report of the</p> <p>6 transthoracic echo that was done on May 13th. I</p> <p>7 believe it appears in the clinical notes.</p> <p>8 A. Yes.</p> <p>9 Q. Just take a look at what has been</p> <p>10 reported on there.</p> <p>11 A. Yes.</p> <p>12 Q. What does the word dehiscence mean in</p> <p>13 that report?</p> <p>14 A. It means that the valve structure is</p> <p>15 not attached to the mitral valvular apparatus, to</p> <p>16 the heart structure itself; at least in one</p> <p>17 location.</p> <p>18 Q. Would that be suggestive of an abscess</p> <p>19 formation?</p> <p>20 A. It is indicative that the valve is not</p> <p>21 stable. Frequently it is associated with the</p> <p>22 presence of an abscess, although you cannot see</p> <p>23 the abscess by echo.</p> <p>24 Q. And I believe that report also refers</p> <p>25 to a sewing ring. Can you tell us what a sewing</p>	<p style="text-align: right;">Page 40</p> <p>1 echo or the transesophageal?</p> <p>2 A. This is the transesophageal, I'm</p> <p>3 sorry. Yes, the transthoracic, this is the</p> <p>4 transthoracic, yes. Four plus, yes.</p> <p>5 Q. Four plus regurgitation, on what type</p> <p>6 of scale is that? Is that a --</p> <p>7 A. One to four.</p> <p>8 Q. So that would indicate that that was</p> <p>9 the most severe level of valvular regurgitation;</p> <p>10 correct?</p> <p>11 A. Yes.</p> <p>12 Q. What's the implications for four plus</p> <p>13 regurgitation in regard to the patient's cardiac</p> <p>14 function?</p> <p>15 A. That it is unlikely that medical</p> <p>16 management alone will resolve the problem.</p> <p>17 Q. And when a patient has four plus</p> <p>18 regurgitation, are they at high risk for cardiac</p> <p>19 decompensation?</p> <p>20 A. Again, high is a matter of</p> <p>21 definition. It's higher than if you didn't have</p> <p>22 any, but many people have four plus mitral</p> <p>23 regurgitation on a chronic basis.</p> <p>24 Q. But we are talking about somebody with</p> <p>25 acute prosthetic valve endocarditis that has four</p>

<p style="text-align: right;">Page 41</p> <p>1 plus mitral regurgitation. Is this particular 2 patient at high risk for sudden cardiac 3 decompensation? 4 A. I'm not sure again what high means. 5 They are ill and it means that they will need 6 valve surgery. Many patients have well 7 compensated severe mitral regurgitation because 8 of the medical intervention that they were 9 subjected to. 10 Q. In Mr. Colvin's case, given what you 11 know about his condition, was he at high risk for 12 decompensation? 13 A. Well, he presented with heart failure 14 which has responded very well to medical therapy, 15 so I would consider that he was at less risk than 16 than he was upon his arrival. 17 Q. Now, doctor, I would like you to turn 18 to the next page, which has the transesophageal 19 report on it. 20 A. Yes. 21 Q. And you have had an opportunity to 22 look at the transthoracic. Are the findings on 23 the transthoracic fairly consistent with what was 24 found on the transesophageal? 25 A. Yes.</p>	<p style="text-align: right;">Page 43</p> <p>1 endocarditis? 2 A. Yes. 3 Q. Yes, doctor? 4 A. Yes, I'm sorry. 5 Q. Based on that May 13th transthoracic 6 and transesophageal echo, should Gregory Colvin 7 have been referred for urgent valve replacement 8 surgery? 9 A. As I said, I believe that the best 10 time, the optimal time to repair the valve or 11 replace it, in this case, would be when all the 12 core morbidities have been adequately controlled 13 and the blood cultures have remained sterile. 14 Q. Well, I am asking you in Gregory 15 Colvin's case, he obviously had a valve coming 16 loose. He had vegetations. He still didn't have 17 positive blood cultures, but it was likely, you 18 said, that he would need surgery to replace that 19 valve. 20 A. Yes. 21 Q. Should he have been referred at that 22 point after the transesophageal echo for urgent 23 replacement of his heart valve? 24 A. No. The second heart operation -- 25 even the first one -- certainly second heart</p>
<p style="text-align: right;">Page 42</p> <p>1 Q. And the transesophageal gives you a 2 little more specific information; is that 3 correct? 4 A. It's better definition, yes. 5 Q. Are there any additional findings in 6 the transesophageal that were not present in the 7 transthoracic report? 8 A. They were able to give a precise 9 dimension of the vegetation, which I believe was 10 not present on the transthoracic -- and again 11 it's because of the definition of the study -- 12 1.3 by 10.8 centimeter. Otherwise, the findings 13 are congruent and not very different. 14 Q. With the valvular vegetations -- and I 15 believe the transesophageal also mentions that he 16 had rocking and dehiscence of his valve -- and 17 also the severe mitral regurgitation I think at 18 three plus to four plus, does that mean that his 19 heart valve was literally coming loose from the 20 heart where it had been secured? 21 A. It means that it is not attached as 22 well as it should, no question about it. 23 Q. And is it likely that with that 24 report, Gregory Colvin was going to need surgery 25 in order to correct his prosthetic valve</p>	<p style="text-align: right;">Page 44</p> <p>1 operations are rarely done on an urgent basis, 2 literally taking the patient from the 3 echocardiographic suite to the operating room. 4 Again, it's a matter of identifying what the 5 infective organism is, whether the blood cultures 6 are or are not positive. 7 I believe this was just the day of his 8 admission, and so they couldn't know yet whether 9 they are positive or not, because it takes a 10 number of days for it to show up. There was some 11 mild renal insufficiency, and again, you want to 12 take the patient to surgery at the time of his 13 optimal condition, not to wait too long but not 14 to rush right away. So I think that typically 15 patients are evaluated for a number of days 16 unless there is a reason for immediate surgery. 17 Q. Even though his valve was dehisced and 18 it was rocking -- 19 A. Yes. 20 Q. -- there was reason to delay the 21 surgery for him? 22 A. Very frequently, many times it takes 23 more than a week before surgery is performed; 24 particularly when the blood cultures remain 25 positive, because of the concern that replacing a</p>

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1 valve during bacteremia will cause reinfection of
2 the new prosthesis, so it would be unusual.
3 Q. Doctor, I would like you to turn to
4 your clinical note for us, if you would.
5 A. Yes.
6 Q. I would just like you to read through
7 it for me. Tell me what it is that you have
8 written there.
9 A. 5-15-98. CCU attending. H&P, which
10 stands for history and physical review.
11 51-year-old black man with prosthetic valve
12 endocarditis following mitral valve replacement
13 and tricuspid valve angioplasty from February of
14 1998.
15 Blood cultures negative. Question
16 mark. HACEK, in caps, which is a particular type
17 of infection.
18 Physical examination, no dyspnea at
19 this time. 117 over 65, the blood pressure.
20 Heart rate, 100. No bacterial endocarditis
21 stigmata, refers to skin findings. Lungs clear
22 to auscultation. Regular rhythm rate. Loud
23 mitral regurgitation murmur.
24 Impression, BE endocarditis,
25 prosthetic mitral valve replacement. Negative

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1 A. It occurred before arriving to the
2 intensive care unit, so the exact person is
3 unknown to me.
4 Q. Do you know whether or not the surgeon
5 or someone from the surgical service ever came
6 down and evaluated Gregory Colvin after admission
7 to the CICU?
8 A. After admission to the CICU?
9 Q. Yes.
10 A. Again, I saw him only for that
11 afternoon and did not come back to the intensive
12 care unit, so I don't know.
13 Q. Do you know if anybody from the
14 cardiac surgery service evaluated him before he
15 came down and you saw him?
16 A. I saw a note when I was reviewing the
17 chart with you from the surgical service on the
18 13th, I believe.
19 Q. Does Cleveland Clinic have a cardiac
20 surgical team on call 24 hours a day in case a
21 patient needs to go to surgery immediately?
22 A. Yes.
23 Q. And once a decision is made to send a
24 patient to surgery, how long does it take at The
25 Cleveland Clinic to get the patient into

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1 blood cultures, mild chronic renal
2 insufficiency.
3 Plan, antibiotics per. Swan Ganz and
4 intra-aortic balloon pumps if becomes
5 hemodynamically unstable, and then my signature.
6 Q. Any additional assessment findings
7 other than what you have included in your note
8 here? Was there anything else that you found in
9 regard to Gregory Colvin that you didn't write
10 down here in your note that you recall?
11 A. No. I do not recall that I would have
12 written it.
13 Q. And at the time that you saw Gregory
14 Colvin, did you believe that he needed urgent
15 surgery?
16 A. No.
17 Q. You agree, though, that it was highly
18 likely that he was going to need cardiac surgery?
19 A. The plan was to have surgery, yes.
20 Q. Did you take any action to refer him
21 for surgery?
22 A. No, the surgeons have already been
23 consulted.
24 Q. Who arranged for that surgical
25 consult, if you know?

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1 surgery?
2 MR. SKIVER: Objection. Under what
3 circumstances?
4 MS. TOSTI: His experience.
5 MR. SKIVER: Calls for speculation.
6 Q. If you have a patient in the CICU and
7 a decision is made to take him to surgery, how
8 long does it take before he is able to go to
9 surgery?
10 A. There are instances of 30 minutes if
11 it's needed. There are instances of an hour if
12 it's not urgent.
13 Q. Did you have any conversations that
14 you recall with Dr. Kruithoff regarding Gregory
15 Colvin at any time?
16 A. No, I do not recall.
17 Q. How about any conversations that you
18 recall with Dr. Paul Miller regarding Gregory
19 Colvin?
20 A. No, I do not recall.
21 Q. When you saw Gregory Colvin on the
22 15th, what was your understanding as to when he
23 would go to surgery?
24 A. I do not recall what I thought then,
25 but it is my understanding from looking at the

<p style="text-align: right;">Page 49</p> <p>1 notes and from everybody else's notes that 2 surgery was going to occur soon. 3 Q. Do you know what was meant by soon? 4 I'm only asking if you know, doctor. 5 A. No, I do not know. 6 Q. There is a report in the clinical 7 notes of an echocardiogram that was done on May 8 15th, I believe, for purposes of ruling out a 9 cardiac tamponade. Did you order that 10 echocardiogram? 11 A. No. 12 Q. Were there any indicators in his 13 condition that would raise a suspicion for 14 cardiac tamponade? 15 A. The only thing I can think of is the 16 fact that his INR or the level of anticoagulation 17 was high and I presumed that this was an 18 indication. It occurred after I saw the patient, 19 so I do not know exactly what led to it. 20 Q. You believe that the echo was done 21 after you saw the patient? 22 A. It appears to be. 23 Q. How can you tell that? 24 A. Because my note ends here and then 25 there is a note from somebody else. Then there is</p>	<p style="text-align: right;">Page 51</p> <p>1 Q. How long does it take for a 2 transesophageal, approximately? 3 A. Usually takes about 30 minutes by the 4 time the probe is put down. The patient needs to 5 be sedated and the probe is advanced into the 6 stomach and so on. 7 Q. Now, when Gregory Colvin came into the 8 unit, was he placed on hemodynamic monitoring? 9 A. All patients are placed on hemodynamic 10 monitoring. Not invasive hemodynamic 11 monitoring. Blood pressure is monitored 12 frequently, heart rate is monitored continuously. 13 Q. Did he have a Swan Ganz catheter in 14 place? 15 A. No. As I mentioned, Swan Ganz if he 16 becomes hemodynamically unstable. 17 Q. So was it your impression he wasn't 18 going to need that type of invasive monitoring 19 unless something else happened to him? 20 A. Yes. 21 Q. Now, Gregory Colvin had a change in 22 his condition, I believe, on the 16th. 23 A. Yes. 24 Q. Were you notified in any regard about 25 the change in his condition?</p>
<p style="text-align: right;">Page 50</p> <p>1 a note from 5-16 early in the morning, and this 2 again 5-15 appears out of sequence while the 3 other is a 5-16, so I can only presume that if 4 it's on a page after my note that it would have 5 occurred after. 6 Q. How can an echocardiogram be used to 7 rule out cardiac tamponade? 8 A. It identifies the presence of fluids 9 surrounding the heart and its consequences, the 10 function of the heart. 11 Q. Do you consider an echocardiogram to 12 be a reliable diagnostic tool in determining if 13 there is a cardiac tamponade? 14 A. Yes. 15 Q. And is that a test that is done in the 16 CICU? 17 A. It can be done portable, yes. An 18 echocardiographic machine is brought to the 19 patient's side. 20 Q. How long, if you are going to rule out 21 a cardiac tamponade, how long does it take to do 22 the tests specifically to rule out tamponade? 23 A. Five minutes. 24 Q. Is that true for transesophageal also? 25 A. No.</p>	<p style="text-align: right;">Page 52</p> <p>1 A. No. 2 Q. Did your responsibilities in the unit 3 end on the 15th and you turned them over to 4 someone else as attending? 5 A. Yes. 6 Q. I want to understand a little bit 7 better. Did you have a certain period of time 8 which you were attending and that the 15th 9 happened to be the day that you handed that 10 responsibility over to someone else? 11 A. That's how the rotations are; from the 12 1st to the 15th and the 16th to the 30th or 31st. 13 Q. So you had like a two week time 14 period? 15 A. Yes. 16 Q. And someone else assumed 17 responsibility on the 16th? 18 A. Yes. 19 Q. And you believe that was Dr. Francis? 20 A. Yes. 21 Q. So once you saw him on the 15th, you 22 had no further responsibilities for him then; is 23 that correct? 24 A. I was still in charge of the intensive 25 care unit for the night between the 15th and the</p>

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1 16th.
2 Q. Was that an on-call or were you
3 actually present in this instance?
4 A. No. I can be called if there is an
5 issue that needs my attention.
6 Q. Were you called at any time in regard
7 to Gregory Colvin after midnight, beginning May
8 16th?
9 A. I do not recall, but typically if I am
10 notified there is a note in the chart where it's
11 documented that they talked to me and I make
12 accommodations.
13 Q. Do you have any knowledge about his
14 care after the time that you saw him on the 15th
15 in regard to what happened to him, or what care
16 he received in the unit?
17 A. Not beyond reading the note that I
18 mentioned to you before for the 16th.
19 Q. And did you make any type of clinical
20 decisions regarding his care after you saw him on
21 the 15th?
22 A. Beyond my initial note?
23 Q. Yes.
24 A. No.
25 Q. And by that I mean, you indicated that

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1 A. I witness that myself at times that I
2 would like my patients to have surgery sooner,
3 but I believe it's normal.
4 Q. Are you aware of any problems with
5 misinformation being transmitted to surgeons
6 regarding patients who were referred for surgery?
7 A. I do not understand the question.
8 Q. Are you aware of any instances in
9 which there was misinformation being transmitted
10 by the scheduling department to the surgeons
11 about patients that were being referred to the
12 surgical service for surgery?
13 A. No.
14 Q. Do you know Dr. Saunders?
15 A. Yes. He left.
16 Q. Are you aware of any problems voiced
17 by any physicians regarding Dr. Saunders?
18 A. No. I worked with him closely.
19 Q. What is your understanding as to what
20 happened to Gregory Colvin after the time that
21 you cared for him?
22 A. From the note that I read from the
23 16th, it appears that he developed rapid atrial
24 fibrillation which led to cardiac decompensation.
25 Q. Didn't they take him and cardiovert

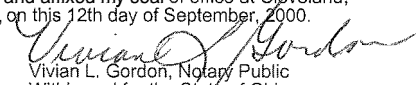
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1 you might be called and you have no recollection
2 of ever being called or participating any further
3 in Gregory Colvin's care?
4 A. Exactly.
5 Q. At any point in time, did you have any
6 conversations with Gregory Colvin's family?
7 A. No.
8 Q. At any point in time, did you have any
9 conversations with Dr. Saunders regarding Gregory
10 Colvin?
11 A. No, I do not recall.
12 Q. Have you ever heard any physicians
13 complain about the system for scheduling surgical
14 patients at The Cleveland Clinic?
15 A. As far as the ability to schedule or
16 the system? I'm not sure what the question is.
17 Q. Any type of complaints about the
18 system that Cleveland Clinic uses to schedule
19 surgical patients. Specifically I'm speaking of
20 cardiac surgery patients.
21 A. There are instances where there are
22 many patients who await surgery.
23 Q. Have you heard physicians complain
24 about not being able to get the patients
25 scheduled for surgery?

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1 him to correct the atrial fibrillation?
2 A. Can I review this? I don't recall
3 that part. You are asking before this happened
4 or after it happened?
5 Q. After.
6 A. Yes. It says that he was cardioverted
7 from atrial fibrillation to normal sinus rhythm.
8 Q. Wouldn't you expect if that was the
9 problem that his condition status would have
10 improved?
11 A. If the atrial fibrillation was the
12 sole reason for his deterioration -- frequently
13 the difficulty is the heart -- it depends how
14 many hours he was in atrial fibrillation, and at
15 times it requires additional support before the
16 whole spectrum reverses.
17 Q. Was his cardiac decompensation as a
18 result of his prosthetic valve endocarditis?
19 A. Ultimately, yes.
20 Q. Were you notified at all about Gregory
21 Colvin's death?
22 A. I do not recall. There is a
23 notification system that is circulated, and I do
24 not recall whether it was in place at that time
25 or not.

September 5, 2000

<p style="text-align: right;">Page 57</p> <p>1 Q. If you were not attending in the CICU, 2 there wouldn't be direct notification to you? 3 A. Exactly. 4 Q. Such as a phone call; correct? 5 A. Exactly. There would be a copy of a 6 memo that circulated. 7 Q. And you had no conversations with the 8 family after Gregory Colvin died; correct? 9 A. No. 10 Q. If Gregory Colvin had been taken to 11 surgery for valve replacement on or before May 12 15th, do you have an opinion as to whether his 13 death would have been preventable? 14 A. If the surgery were successful, yes. 15 Q. Do you have an opinion as to what 16 point in time his condition became irreversible? 17 A. No. 18 Q. Do you have an opinion as to whether 19 Gregory Colvin should have been taken to open 20 heart surgery sometime prior to his death? 21 A. Obviously the desired outcome, but I 22 don't think there was a point in time which would 23 have mandated emergency open heart surgery, 24 according to the notes that I read. 25 Q. If he had undergone appropriate</p>	<p style="text-align: right;">Page 59</p> <p>1 AFFIDAVIT 2 I have read the foregoing transcript from 3 page 1 through 58 and note the following 4 corrections: 5 PAGE LINE REQUESTED CHANGE 6 7 8 9 10 11 12 13 14 15 16 17 18 SORIN JAKOB BRENER, M.D. 19 Subscribed and sworn to before me this 20 day of , 2000. 21 22 23 Notary Public 24 25 My commission expires</p>
<p style="text-align: right;">Page 58</p> <p>1 antibiotic therapy, his infection cleared and he 2 had undergone successful valve replacement 3 surgery, do you have an opinion as to what his 4 reasonable life expectancy would have been? 5 MR. SKIVER: Objection. Go ahead, 6 doctor. 7 A. As I said, the immediate success of 8 repeat valve surgery is about 90 percent. And 9 the failure in the two to five years after that 10 is anywhere between 30 and 40 percent. There is 11 still substantial morbidity. 12 Q. Do you have any criticisms of any of 13 the care that was rendered to Gregory Colvin? 14 A. I was involved in it too little to 15 comment. I believe that this reflects the 16 standard of care in terms of careful monitoring 17 in an intensive care unit. 18 MS. TOSTI: I don't have any further 19 questions for you, doctor. 20 MR. POLITO: I have no questions. 21 MS. KINKOPF-ZAJAC: no questions. 22 MR. SKIVER: He will review it. 23 - - - 24 (Deposition concluded at 3:00 p.m.) 25 (Signature not waived.)</p>	<p style="text-align: right;">Page 60</p> <p>1 CERTIFICATE 2 State of Ohio, 3 SS: 4 County of Cuyahoga. 5 I, Vivian L. Gordon, a Notary Public within 6 and for the State of Ohio, duly commissioned and 7 qualified, do hereby certify that the within 8 named SORIN JAKOB BRENER, M.D. Was by me first 9 duly sworn to testify to the truth, the whole 10 truth and nothing but the truth in the cause 11 aforesaid; that the testimony as above set forth 12 was by me reduced to stenotypy, afterwards 13 transcribed, and that the foregoing is a true and 14 correct transcription of the testimony. 15 I do further certify that this deposition 16 was taken at the time and place specified and was 17 completed without adjournment; that I am not a 18 relative or attorney for either party or 19 otherwise interested in the event of this action. 20 IN WITNESS WHEREOF, I have hereunto set my 21 hand and affixed my seal of office at Cleveland, 22 Ohio, on this 12th day of September, 2000. 23  24 Vivian L. Gordon, Notary Public 25 Within and for the State of Ohio My commission expires June 8, 2004.</p>

15 (Pages 57 to 60)

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2 BY MS. TOSTI: 3 7
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4 Exhibit 1 was marked..... 8 13
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1 AFFIDAVIT

2 I have read the foregoing transcript from
3 page 1 through 58 and note the following
4 corrections:

5	PAGE	LINE	REQUESTED CHANGE
6	9	16	Interventional Typo
7	12	18	Braunwald, Topol's, The Heart Typo
8	18	3	Add skin before Stigmata - Transcription
9	24	25	Defined Transcription
10	26	4	Heart rate Transcription
11	28	9	Value ranging to 100 Transcription
12	31	15	Decompensation Transcription
13	33	11	As the attending, I feel Transcription
14	42	12	0.8 - not 10.8 Typo
15	43	12	Co-morbidities Transcription
16	45	2	Wouldn't Transcription
17	46	3	AM per ID Transcription

←
See
over
Verso
✓

18
19 Subscribed and sworn to before me this
20 day of 9/26, 2000.

21
22 *Laura D. Reinhard*
23 Notary Public

24
25 My commission expires 03/26/2005

LAURA D. REINHARD
Notary Public, State of Ohio, Cuy. Cty.
My Commission Expires 03/26/2005

page

~~line~~

18

46

11

19

53

12

1..

2 & 23

Otherwise instead of that
Recommendations

Transcription

"Staph" should be "staff"

Staff cardiologist
and any other lines
where it is used
incorrectly