

WEBVTT

NOTE duration: "00:56:40.343"

NOTE Confidence: 0.93632483

00:00:00.000 --> 00:00:01.120 I'll go ahead and get

NOTE Confidence: 0.93632483

00:00:01.120 --> 00:00:02.879 us started. So good evening.

NOTE Confidence: 0.93632483

00:00:02.879 --> 00:00:04.880 This is Smilo shares with

NOTE Confidence: 0.93632483

00:00:04.880 --> 00:00:06.019 primary care,

NOTE Confidence: 0.99932766

00:00:06.799 --> 00:00:08.420 which is a monthly

NOTE Confidence: 0.9998053

00:00:08.960 --> 00:00:09.460 series

NOTE Confidence: 0.95823085

00:00:10.639 --> 00:00:13.045 with primary care here at

NOTE Confidence: 0.95823085

00:00:13.045 --> 00:00:14.644 Northeast Medical Group and Yale

NOTE Confidence: 0.95823085

00:00:14.644 --> 00:00:15.865 New Haven Health System

NOTE Confidence: 0.8833659

00:00:16.404 --> 00:00:17.864 and our oncology

NOTE Confidence: 0.82112724

00:00:18.404 --> 00:00:19.945 Yale Cancer colleagues

NOTE Confidence: 0.74619365

00:00:20.324 --> 00:00:21.064 at SMILO.

NOTE Confidence: 0.996029

00:00:22.085 --> 00:00:23.785 We like to discuss topics

NOTE Confidence: 0.9823504

00:00:24.164 --> 00:00:26.000 where they may present in

NOTE Confidence: 0.9823504

00:00:26.000 --> 00:00:28.320 primary care. Primary care may  
NOTE Confidence: 0.9823504

00:00:28.320 --> 00:00:30.000 have some testing to do,  
NOTE Confidence: 0.9823504

00:00:30.000 --> 00:00:30.500 evaluation,  
NOTE Confidence: 0.9974182

00:00:31.279 --> 00:00:33.059 have to decide on referral  
NOTE Confidence: 0.9974182

00:00:33.120 --> 00:00:33.620 criteria,  
NOTE Confidence: 0.9522354

00:00:34.800 --> 00:00:36.879 and get a good sense  
NOTE Confidence: 0.9522354

00:00:36.879 --> 00:00:38.340 of what's going to happen.  
NOTE Confidence: 0.86867857

00:00:40.254 --> 00:00:41.074 We will  
NOTE Confidence: 0.9084905

00:00:41.774 --> 00:00:44.034 today be focusing on hematologic  
NOTE Confidence: 0.7501181

00:00:44.815 --> 00:00:45.315 issues,  
NOTE Confidence: 0.97184026

00:00:46.175 --> 00:00:47.534 with a special focus on  
NOTE Confidence: 0.97184026

00:00:47.534 --> 00:00:48.915 when things are too high,  
NOTE Confidence: 0.9937282

00:00:49.614 --> 00:00:51.214 and we'll get started there  
NOTE Confidence: 0.9937282

00:00:51.214 --> 00:00:52.434 in just a second.  
NOTE Confidence: 0.9243219

00:00:53.489 --> 00:00:55.010 But first, I wanna make  
NOTE Confidence: 0.9243219

00:00:55.010 --> 00:00:56.390 sure I introduce,

NOTE Confidence: 0.86550415  
00:00:57.250 --> 00:00:58.449 myself and,  
NOTE Confidence: 0.8982895  
00:00:59.010 --> 00:01:00.769 pass it over to, Anne  
NOTE Confidence: 0.8982895  
00:01:00.769 --> 00:01:01.269 Chang  
NOTE Confidence: 0.73073024  
00:01:01.649 --> 00:01:02.370 who is,  
NOTE Confidence: 0.9644532  
00:01:03.170 --> 00:01:05.170 in the Smilow Cancer Center  
NOTE Confidence: 0.9644532  
00:01:05.170 --> 00:01:06.310 and will introduce  
NOTE Confidence: 0.998747  
00:01:06.690 --> 00:01:08.229 her colleagues as well.  
NOTE Confidence: 0.9757371  
00:01:08.875 --> 00:01:10.555 So, I'm Karen Brown. I'm  
NOTE Confidence: 0.9757371  
00:01:10.555 --> 00:01:12.075 the medical director of primary  
NOTE Confidence: 0.9757371  
00:01:12.075 --> 00:01:13.675 care at Northeast Medical Group  
NOTE Confidence: 0.9757371  
00:01:13.675 --> 00:01:14.875 at Yale New Haven Health  
NOTE Confidence: 0.9757371  
00:01:14.875 --> 00:01:15.375 System.  
NOTE Confidence: 0.886161  
00:01:15.834 --> 00:01:17.135 And Frank Ciminielo  
NOTE Confidence: 0.980918  
00:01:17.755 --> 00:01:19.055 is my colleague,  
NOTE Confidence: 0.99810255  
00:01:19.755 --> 00:01:21.855 also a primary care physician  
NOTE Confidence: 0.97214013

00:01:22.475 --> 00:01:23.375 with a background  
NOTE Confidence: 0.96608216

00:01:23.950 --> 00:01:25.630 of a chemistry degree at  
NOTE Confidence: 0.96608216

00:01:25.630 --> 00:01:26.690 Georgetown University,  
NOTE Confidence: 0.9993963

00:01:27.790 --> 00:01:29.630 working as an HIV case  
NOTE Confidence: 0.9993963

00:01:29.630 --> 00:01:30.130 manager  
NOTE Confidence: 0.99108756

00:01:30.670 --> 00:01:31.709 back in what we would  
NOTE Confidence: 0.99108756

00:01:31.709 --> 00:01:33.310 call the day when there  
NOTE Confidence: 0.99108756

00:01:33.310 --> 00:01:33.709 was,  
NOTE Confidence: 0.99904555

00:01:34.110 --> 00:01:34.610 uncontrolled  
NOTE Confidence: 0.76463974

00:01:34.910 --> 00:01:35.410 HIV.  
NOTE Confidence: 0.9874777

00:01:36.215 --> 00:01:37.655 And then, went to medical  
NOTE Confidence: 0.9874777

00:01:37.655 --> 00:01:39.015 school at NYU and did  
NOTE Confidence: 0.9874777

00:01:39.015 --> 00:01:40.455 his residency at University of  
NOTE Confidence: 0.9874777

00:01:40.455 --> 00:01:40.955 Pennsylvania.  
NOTE Confidence: 0.86768854

00:01:41.735 --> 00:01:43.355 He did a clinician educator  
NOTE Confidence: 0.9618855

00:01:43.895 --> 00:01:45.515 fellowship and was on faculty

NOTE Confidence: 0.9618855  
00:01:45.575 --> 00:01:47.415 there for four years before  
NOTE Confidence: 0.9618855  
00:01:47.415 --> 00:01:49.435 moving to Connecticut and joining,  
NOTE Confidence: 0.91937727  
00:01:50.040 --> 00:01:51.560 PrimeMed, which is a medical  
NOTE Confidence: 0.91937727  
00:01:51.560 --> 00:01:52.759 group which is now part  
NOTE Confidence: 0.91937727  
00:01:52.759 --> 00:01:53.159 of,  
NOTE Confidence: 0.94259953  
00:01:53.560 --> 00:01:55.420 larger Northeast Medical Group.  
NOTE Confidence: 0.9958021  
00:01:55.799 --> 00:01:57.320 He's received an MBA from  
NOTE Confidence: 0.9958021  
00:01:57.320 --> 00:01:58.700 the Yale School of Management  
NOTE Confidence: 0.976458  
00:01:59.079 --> 00:02:00.280 and is now both the  
NOTE Confidence: 0.976458  
00:02:00.280 --> 00:02:02.325 regional medical director for the  
NOTE Confidence: 0.976458  
00:02:02.564 --> 00:02:03.704 Bridgeport region,  
NOTE Confidence: 0.8892187  
00:02:04.325 --> 00:02:05.685 as well as the president  
NOTE Confidence: 0.8892187  
00:02:05.685 --> 00:02:07.225 of the Prime Med Physicians  
NOTE Confidence: 0.8892187  
00:02:07.365 --> 00:02:07.865 PSA.  
NOTE Confidence: 0.97248846  
00:02:08.565 --> 00:02:09.444 He's on the board of  
NOTE Confidence: 0.97248846

00:02:09.444 --> 00:02:11.285 trustees and the CIN board  
NOTE Confidence: 0.97248846

00:02:11.285 --> 00:02:11.944 of directors.  
NOTE Confidence: 0.96833026

00:02:12.644 --> 00:02:14.245 And, he lives in Easton  
NOTE Confidence: 0.96833026

00:02:14.245 --> 00:02:15.750 with his wife who's an  
NOTE Confidence: 0.96833026

00:02:15.990 --> 00:02:17.669 OB GYN, so he always  
NOTE Confidence: 0.96833026

00:02:17.669 --> 00:02:19.530 has extra perspective to add  
NOTE Confidence: 0.9670574

00:02:19.830 --> 00:02:21.590 and, tells me that he's  
NOTE Confidence: 0.9670574

00:02:21.590 --> 00:02:22.490 feeling miserable  
NOTE Confidence: 0.99815243

00:02:22.870 --> 00:02:24.550 miserably at learning tennis in  
NOTE Confidence: 0.99815243

00:02:24.550 --> 00:02:26.250 a world of pickleball players.  
NOTE Confidence: 0.9824748

00:02:27.669 --> 00:02:28.790 Anne, I will pass it  
NOTE Confidence: 0.9824748

00:02:28.790 --> 00:02:30.090 over to you to introduce,  
NOTE Confidence: 0.9985512

00:02:30.470 --> 00:02:31.610 the rest of our speakers.  
NOTE Confidence: 0.82211125

00:02:32.625 --> 00:02:33.985 Okay. Thank you. Frank that  
NOTE Confidence: 0.82211125

00:02:33.985 --> 00:02:35.364 picture is a little old.  
NOTE Confidence: 0.78600156

00:02:36.944 --> 00:02:37.905 I think that's all right.

NOTE Confidence: 0.78600156  
00:02:37.905 --> 00:02:39.044 Doesn't do you justice.  
NOTE Confidence: 0.9439913  
00:02:39.984 --> 00:02:41.584 Thank you, Karen. This is  
NOTE Confidence: 0.9439913  
00:02:41.584 --> 00:02:42.325 such a  
NOTE Confidence: 0.9356517  
00:02:42.944 --> 00:02:44.385 pleasure to be here tonight.  
NOTE Confidence: 0.9356517  
00:02:44.385 --> 00:02:46.064 I'm a medical oncologist and  
NOTE Confidence: 0.9356517  
00:02:46.064 --> 00:02:48.620 also associate cancer center director  
NOTE Confidence: 0.94020057  
00:02:49.160 --> 00:02:51.240 for clinical initiatives. And tonight  
NOTE Confidence: 0.94020057  
00:02:51.240 --> 00:02:52.380 we have two SMILO  
NOTE Confidence: 0.8657263  
00:02:53.000 --> 00:02:54.220 colleagues of mine.  
NOTE Confidence: 0.8628307  
00:02:55.000 --> 00:02:56.940 Doctor. Kelsey Martin, who's an  
NOTE Confidence: 0.8628307  
00:02:57.080 --> 00:02:59.000 assistant professor of medicine in  
NOTE Confidence: 0.8628307  
00:02:59.000 --> 00:02:59.500 hematology.  
NOTE Confidence: 0.97700906  
00:03:00.255 --> 00:03:01.855 She received her medical degree  
NOTE Confidence: 0.97700906  
00:03:01.855 --> 00:03:03.055 from the Royal College of  
NOTE Confidence: 0.97700906  
00:03:03.055 --> 00:03:04.735 Surgeons in Dublin, Ireland and  
NOTE Confidence: 0.97700906

00:03:04.735 --> 00:03:05.875 completed her residency  
NOTE Confidence: 0.94456303

00:03:06.255 --> 00:03:07.615 in Internal Medicine at the  
NOTE Confidence: 0.94456303

00:03:07.615 --> 00:03:10.014 Jacobi Medical Center, Albert Einstein  
NOTE Confidence: 0.94456303

00:03:10.014 --> 00:03:11.294 College of Medicine in New  
NOTE Confidence: 0.94456303

00:03:11.294 --> 00:03:11.794 York.  
NOTE Confidence: 0.99016476

00:03:12.220 --> 00:03:14.239 She subsequently completed her subspecialty  
NOTE Confidence: 0.95615244

00:03:14.540 --> 00:03:15.680 training in hematology  
NOTE Confidence: 0.97643775

00:03:15.980 --> 00:03:17.739 and medical oncology at Lenox  
NOTE Confidence: 0.97643775

00:03:17.739 --> 00:03:19.180 Hill Hospital in New York  
NOTE Confidence: 0.97643775

00:03:19.180 --> 00:03:19.680 City,  
NOTE Confidence: 0.9637319

00:03:20.139 --> 00:03:21.340 and has been here at  
NOTE Confidence: 0.9637319

00:03:21.340 --> 00:03:22.720 Smilo since that time.  
NOTE Confidence: 0.9941236

00:03:23.099 --> 00:03:24.060 It's such a joy to  
NOTE Confidence: 0.9941236

00:03:24.060 --> 00:03:24.705 have you.  
NOTE Confidence: 0.95999265

00:03:25.185 --> 00:03:26.085 And also,  
NOTE Confidence: 0.9318754

00:03:27.105 --> 00:03:29.205 Doctor. Martin's clinical interests include,



NOTE Confidence: 0.98024  
00:03:30.065 --> 00:03:30.965 patient communication,  
NOTE Confidence: 0.9865458  
00:03:31.264 --> 00:03:31.764 hematology,  
NOTE Confidence: 0.98033816  
00:03:32.385 --> 00:03:32.885 hematologic  
NOTE Confidence: 0.99922705  
00:03:33.264 --> 00:03:33.764 disorders  
NOTE Confidence: 0.9498963  
00:03:34.065 --> 00:03:36.225 in women, cancer prevention, including  
NOTE Confidence: 0.9498963  
00:03:36.225 --> 00:03:38.085 the role of nutrition, obesity  
NOTE Confidence: 0.9498963  
00:03:38.225 --> 00:03:39.765 and the environment in cancer.  
NOTE Confidence: 0.9608591  
00:03:40.140 --> 00:03:41.579 She's actively involved in the  
NOTE Confidence: 0.9608591  
00:03:41.579 --> 00:03:42.860 Yale community as a member  
NOTE Confidence: 0.9608591  
00:03:42.860 --> 00:03:44.060 of status of women in  
NOTE Confidence: 0.9608591  
00:03:44.060 --> 00:03:45.980 medicine and the women faculty  
NOTE Confidence: 0.9608591  
00:03:45.980 --> 00:03:46.480 forum.  
NOTE Confidence: 0.9333849  
00:03:46.939 --> 00:03:48.379 And she's an highly engaged  
NOTE Confidence: 0.9333849  
00:03:48.379 --> 00:03:49.900 member of the American society  
NOTE Confidence: 0.9333849  
00:03:49.900 --> 00:03:50.560 of hematology  
NOTE Confidence: 0.9656308

00:03:51.099 --> 00:03:51.900 as a member of the  
NOTE Confidence: 0.9656308  
00:03:51.900 --> 00:03:53.680 committee and practice and representative  
NOTE Confidence: 0.9656308  
00:03:53.900 --> 00:03:54.720 for the AMA  
NOTE Confidence: 0.94258314  
00:03:55.185 --> 00:03:56.165 House of Delegates.  
NOTE Confidence: 0.97219664  
00:03:57.185 --> 00:03:58.944 Doctor. Martin's interested in how  
NOTE Confidence: 0.97219664  
00:03:58.944 --> 00:04:00.805 sex and gender influence health  
NOTE Confidence: 0.97219664  
00:04:00.944 --> 00:04:02.545 and collaborates with the women's  
NOTE Confidence: 0.97219664  
00:04:02.545 --> 00:04:04.065 health research at Yale. So  
NOTE Confidence: 0.97219664  
00:04:04.065 --> 00:04:04.965 thank you, Kelsey.  
NOTE Confidence: 0.95006084  
00:04:05.584 --> 00:04:06.625 And then I'd like to  
NOTE Confidence: 0.95006084  
00:04:06.625 --> 00:04:09.285 also introduce Doctor. Anish Sharda  
NOTE Confidence: 0.95006084  
00:04:09.530 --> 00:04:10.430 who's an assistant  
NOTE Confidence: 0.8476922  
00:04:10.730 --> 00:04:12.349 professor of medicine in hematology.  
NOTE Confidence: 0.9195467  
00:04:12.890 --> 00:04:14.250 And he cares for patients  
NOTE Confidence: 0.9195467  
00:04:14.250 --> 00:04:15.310 as part of the SMILO  
NOTE Confidence: 0.9195467  
00:04:15.530 --> 00:04:17.150 Classic Hematology Program,

NOTE Confidence: 0.93821543

00:04:17.690 --> 00:04:19.550 previously known as benign hematology.

NOTE Confidence: 0.93821543

00:04:19.610 --> 00:04:20.910 Now we call it classic.

NOTE Confidence: 0.94309103

00:04:21.610 --> 00:04:23.370 His clinical and research interests

NOTE Confidence: 0.94309103

00:04:23.370 --> 00:04:24.889 are in bleeding, clotting and

NOTE Confidence: 0.94309103

00:04:24.889 --> 00:04:27.764 plateless platelet disorders. His research,

NOTE Confidence: 0.96787465

00:04:30.544 --> 00:04:32.544 in vascular biology is, is

NOTE Confidence: 0.96787465

00:04:32.544 --> 00:04:33.685 funded by the NIH.

NOTE Confidence: 0.9637815

00:04:34.065 --> 00:04:35.745 He received his medical degree

NOTE Confidence: 0.9637815

00:04:35.745 --> 00:04:37.365 from the BP Koala

NOTE Confidence: 0.8133405

00:04:37.760 --> 00:04:39.779 Institute of Health Scientists in,

NOTE Confidence: 0.9216178

00:04:40.080 --> 00:04:42.080 Dharan, Nepal and completed his

NOTE Confidence: 0.9216178

00:04:42.080 --> 00:04:43.520 residency at the University of

NOTE Confidence: 0.9216178

00:04:43.520 --> 00:04:44.980 Minnesota Medical Center,

NOTE Confidence: 0.8823976

00:04:45.600 --> 00:04:47.200 followed by clinical and research

NOTE Confidence: 0.8823976

00:04:47.200 --> 00:04:49.779 fellowship and the Hemang fellowship

NOTE Confidence: 0.8823976

00:04:49.839 --> 00:04:51.760 at BI Deaconess Medical Center

NOTE Confidence: 0.8823976

00:04:51.760 --> 00:04:53.035 and Harvard Medical School in

NOTE Confidence: 0.8823976

00:04:53.035 --> 00:04:54.095 Boston. So

NOTE Confidence: 0.9883506

00:04:54.395 --> 00:04:56.335 welcome to both of you.

NOTE Confidence: 0.38876128

00:04:57.755 --> 00:04:58.255 And

NOTE Confidence: 0.94827896

00:04:58.635 --> 00:04:59.675 I'm gonna turn it over

NOTE Confidence: 0.94827896

00:04:59.675 --> 00:05:01.375 to doctor oops, sorry.

NOTE Confidence: 0.9508931

00:05:01.995 --> 00:05:03.035 Oh, I was just gonna

NOTE Confidence: 0.9508931

00:05:03.035 --> 00:05:04.154 say, we're gonna turn it

NOTE Confidence: 0.9508931

00:05:04.154 --> 00:05:05.675 over to doctor Chimenola to

NOTE Confidence: 0.9508931

00:05:05.675 --> 00:05:06.635 get us started with the

NOTE Confidence: 0.9508931

00:05:06.635 --> 00:05:07.135 cases.

NOTE Confidence: 0.9659155

00:05:07.630 --> 00:05:08.990 If you have questions as

NOTE Confidence: 0.9659155

00:05:08.990 --> 00:05:10.430 we go, please feel free

NOTE Confidence: 0.9659155

00:05:10.430 --> 00:05:11.630 to enter them in the

NOTE Confidence: 0.9659155

00:05:11.630 --> 00:05:13.150 q and a section and

NOTE Confidence: 0.9659155  
00:05:13.150 --> 00:05:14.589 we will, break at the  
NOTE Confidence: 0.9659155  
00:05:14.589 --> 00:05:16.589 appropriate point to answer them.  
NOTE Confidence: 0.9659155  
00:05:16.910 --> 00:05:18.029 It's it's part of what  
NOTE Confidence: 0.9659155  
00:05:18.029 --> 00:05:19.390 makes this series great is  
NOTE Confidence: 0.9659155  
00:05:19.390 --> 00:05:21.230 the ability to really answer  
NOTE Confidence: 0.9659155  
00:05:21.230 --> 00:05:23.089 questions real time throughout.  
NOTE Confidence: 0.94069326  
00:05:23.845 --> 00:05:24.884 And I see some of  
NOTE Confidence: 0.94069326  
00:05:24.884 --> 00:05:25.625 our regulars,  
NOTE Confidence: 0.95317143  
00:05:26.324 --> 00:05:27.525 and you guys are always  
NOTE Confidence: 0.95317143  
00:05:27.525 --> 00:05:28.645 very engaged. So thank you  
NOTE Confidence: 0.95317143  
00:05:28.645 --> 00:05:29.525 again. I know it's a  
NOTE Confidence: 0.95317143  
00:05:29.525 --> 00:05:31.224 busy time. Happy New Year,  
NOTE Confidence: 0.99540126  
00:05:31.844 --> 00:05:33.365 and we'll we'll get started.  
NOTE Confidence: 0.99540126  
00:05:33.365 --> 00:05:34.504 Thank you for attending.  
NOTE Confidence: 0.93652797  
00:05:35.620 --> 00:05:36.900 Yeah. Well, yeah. Yeah. Thank  
NOTE Confidence: 0.93652797

00:05:36.900 --> 00:05:37.720 you for attending.  
NOTE Confidence: 0.9954555

00:05:38.180 --> 00:05:39.160 Thank you for  
NOTE Confidence: 0.8372368

00:05:39.539 --> 00:05:40.600 having me. So,  
NOTE Confidence: 0.9123501

00:05:41.380 --> 00:05:43.539 these are two cases from  
NOTE Confidence: 0.9123501

00:05:43.539 --> 00:05:44.440 my panel.  
NOTE Confidence: 0.9991432

00:05:44.979 --> 00:05:46.199 The data is  
NOTE Confidence: 0.8098436

00:05:47.380 --> 00:05:48.979 a hundred percent like just  
NOTE Confidence: 0.8098436

00:05:48.979 --> 00:05:50.339 transferred over and you'll and  
NOTE Confidence: 0.8098436

00:05:50.339 --> 00:05:51.080 then you'll  
NOTE Confidence: 0.9771627

00:05:52.545 --> 00:05:54.065 you'll see where maybe I  
NOTE Confidence: 0.9771627

00:05:54.065 --> 00:05:54.945 could have done a little  
NOTE Confidence: 0.9771627

00:05:54.945 --> 00:05:56.085 more before referral,  
NOTE Confidence: 0.9781444

00:05:56.785 --> 00:05:57.745 as well. So these are  
NOTE Confidence: 0.9781444

00:05:57.745 --> 00:05:59.665 just, real cases I thought  
NOTE Confidence: 0.9781444

00:05:59.665 --> 00:06:01.345 would make the most sense  
NOTE Confidence: 0.9781444

00:06:01.345 --> 00:06:02.464 to to you all, the

NOTE Confidence: 0.9781444  
00:06:02.464 --> 00:06:04.480 audience, and and, hopefully,  
NOTE Confidence: 0.9960365  
00:06:05.020 --> 00:06:06.160 you agree. So,  
NOTE Confidence: 0.95165586  
00:06:06.700 --> 00:06:07.820 we're gonna talk about two  
NOTE Confidence: 0.95165586  
00:06:07.820 --> 00:06:09.420 cases where the blood counts  
NOTE Confidence: 0.95165586  
00:06:09.420 --> 00:06:10.460 are high. Right? We think  
NOTE Confidence: 0.95165586  
00:06:10.460 --> 00:06:12.140 about referring for a lot  
NOTE Confidence: 0.95165586  
00:06:12.140 --> 00:06:13.100 of lows, a lot of  
NOTE Confidence: 0.95165586  
00:06:13.100 --> 00:06:14.460 penis, but there's a lot  
NOTE Confidence: 0.95165586  
00:06:14.460 --> 00:06:15.200 of elevated  
NOTE Confidence: 0.9751708  
00:06:15.714 --> 00:06:17.875 and abnormal blood counts, when  
NOTE Confidence: 0.9751708  
00:06:17.875 --> 00:06:19.634 you start, looking. And there's  
NOTE Confidence: 0.9751708  
00:06:19.634 --> 00:06:21.175 a substantial amount of prework,  
NOTE Confidence: 0.99891883  
00:06:21.955 --> 00:06:23.154 that can be done prior  
NOTE Confidence: 0.99891883  
00:06:23.154 --> 00:06:23.815 to referral,  
NOTE Confidence: 0.9795475  
00:06:24.354 --> 00:06:25.955 which may actually eliminate the  
NOTE Confidence: 0.9795475

00:06:25.955 --> 00:06:27.014 need for a referral,  
NOTE Confidence: 0.9766687

00:06:27.555 --> 00:06:28.755 in some cases, but also  
NOTE Confidence: 0.9766687

00:06:28.755 --> 00:06:30.035 sort of identify people who  
NOTE Confidence: 0.9766687

00:06:30.035 --> 00:06:31.495 need more urgent referrals,  
NOTE Confidence: 0.91468734

00:06:31.850 --> 00:06:33.370 as well. And so we'll  
NOTE Confidence: 0.91468734

00:06:33.370 --> 00:06:34.810 go through, these cases. If  
NOTE Confidence: 0.91468734

00:06:34.810 --> 00:06:36.270 I get the next slide,  
NOTE Confidence: 0.91468734

00:06:36.410 --> 00:06:38.089 please. So the first case  
NOTE Confidence: 0.91468734

00:06:38.089 --> 00:06:39.630 was, is a gentleman  
NOTE Confidence: 0.96351385

00:06:40.490 --> 00:06:42.330 who, about eight years ago,  
NOTE Confidence: 0.96351385

00:06:42.330 --> 00:06:42.990 we saw,  
NOTE Confidence: 0.99573326

00:06:43.529 --> 00:06:44.589 for fatigue  
NOTE Confidence: 0.94465506

00:06:46.025 --> 00:06:46.525 and  
NOTE Confidence: 0.90360796

00:06:47.064 --> 00:06:49.164 not a significant medical problem.  
NOTE Confidence: 0.9502303

00:06:49.544 --> 00:06:50.904 History, just really high blood  
NOTE Confidence: 0.9502303

00:06:50.904 --> 00:06:52.264 pressure was his only active



NOTE Confidence: 0.9502303

00:06:52.264 --> 00:06:53.625 problem. He was at the

NOTE Confidence: 0.9502303

00:06:53.625 --> 00:06:55.404 time on lisinopril and hydrochlorothiazide,

NOTE Confidence: 0.9256368

00:06:56.824 --> 00:06:59.305 married, no real, significant social

NOTE Confidence: 0.9256368

00:06:59.305 --> 00:06:59.805 history,

NOTE Confidence: 0.93959785

00:07:00.389 --> 00:07:01.710 works as a social worker

NOTE Confidence: 0.93959785

00:07:01.710 --> 00:07:01.910 and,

NOTE Confidence: 0.88970315

00:07:03.110 --> 00:07:04.810 licensed clinical social worker.

NOTE Confidence: 0.8832819

00:07:05.589 --> 00:07:06.729 BMI was was

NOTE Confidence: 0.9237931

00:07:07.029 --> 00:07:09.430 technically over, overweight, but but

NOTE Confidence: 0.9237931

00:07:09.430 --> 00:07:10.490 but pretty good.

NOTE Confidence: 0.9666483

00:07:11.270 --> 00:07:12.150 And you can see his

NOTE Confidence: 0.9666483

00:07:12.150 --> 00:07:13.270 family history, which did sort

NOTE Confidence: 0.9666483

00:07:13.270 --> 00:07:13.590 of,

NOTE Confidence: 0.9111615

00:07:14.150 --> 00:07:15.210 include some

NOTE Confidence: 0.84775454

00:07:15.525 --> 00:07:16.985 some potential hematolite,

NOTE Confidence: 0.8428981

00:07:18.005 --> 00:07:19.065 heme or hemonc,  
NOTE Confidence: 0.9822407

00:07:19.845 --> 00:07:21.525 diseases. So he came in  
NOTE Confidence: 0.9822407

00:07:21.525 --> 00:07:22.345 for fatigue.  
NOTE Confidence: 0.94698465

00:07:22.885 --> 00:07:24.165 We ran simple perfect. We  
NOTE Confidence: 0.94698465

00:07:24.165 --> 00:07:25.125 ran some blood work and  
NOTE Confidence: 0.94698465

00:07:25.125 --> 00:07:26.985 found that, initially his hemoglobin  
NOTE Confidence: 0.94698465

00:07:27.285 --> 00:07:27.785 was,  
NOTE Confidence: 0.7510143

00:07:28.485 --> 00:07:28.985 elevated,  
NOTE Confidence: 0.99094176

00:07:30.050 --> 00:07:31.410 slightly. The rest of his  
NOTE Confidence: 0.99094176

00:07:31.410 --> 00:07:33.430 CBC was, generally unremarkable.  
NOTE Confidence: 0.93517816

00:07:34.770 --> 00:07:36.229 We actually stopped his hydrochlorothiazide,  
NOTE Confidence: 0.9867686

00:07:38.130 --> 00:07:40.770 and, rechecked, but the CBC  
NOTE Confidence: 0.9867686

00:07:40.770 --> 00:07:42.789 was relatively unchanged. The hemoglobin  
NOTE Confidence: 0.977074

00:07:43.354 --> 00:07:44.815 had stayed in the seventeen  
NOTE Confidence: 0.977074

00:07:45.035 --> 00:07:46.555 to seventeen point five range.  
NOTE Confidence: 0.977074

00:07:46.555 --> 00:07:47.055 So

NOTE Confidence: 0.95495707  
00:07:47.995 --> 00:07:50.074 mildly elevated. And other than  
NOTE Confidence: 0.95495707  
00:07:50.074 --> 00:07:51.835 the fatigue, really no other  
NOTE Confidence: 0.95495707  
00:07:51.835 --> 00:07:52.335 symptoms.  
NOTE Confidence: 0.928549  
00:07:53.115 --> 00:07:54.395 We, we started the workup,  
NOTE Confidence: 0.928549  
00:07:54.395 --> 00:07:55.595 which showed the normal iron  
NOTE Confidence: 0.928549  
00:07:55.595 --> 00:07:56.095 studies,  
NOTE Confidence: 0.86368823  
00:07:57.514 --> 00:07:58.655 that you saw before.  
NOTE Confidence: 0.92203414  
00:07:59.220 --> 00:08:00.660 And, and then sort of  
NOTE Confidence: 0.92203414  
00:08:00.660 --> 00:08:01.780 kind of what and we  
NOTE Confidence: 0.92203414  
00:08:01.780 --> 00:08:03.060 were at and those were  
NOTE Confidence: 0.92203414  
00:08:03.060 --> 00:08:03.560 unrevealing.  
NOTE Confidence: 0.9699258  
00:08:04.260 --> 00:08:05.140 And then sort of the  
NOTE Confidence: 0.9699258  
00:08:05.140 --> 00:08:06.100 plan was sort of, you  
NOTE Confidence: 0.9699258  
00:08:06.100 --> 00:08:07.620 know, what, what next? And  
NOTE Confidence: 0.9699258  
00:08:07.620 --> 00:08:08.120 so,  
NOTE Confidence: 0.94349617

00:08:08.660 --> 00:08:10.020 before we go back to,  
NOTE Confidence: 0.94349617

00:08:10.020 --> 00:08:11.460 to him, just sort of  
NOTE Confidence: 0.94349617

00:08:11.460 --> 00:08:12.760 a little bit of a,  
NOTE Confidence: 0.8543508

00:08:13.384 --> 00:08:14.125 a reintroduction  
NOTE Confidence: 0.95798963

00:08:14.664 --> 00:08:15.945 to people on the care  
NOTE Confidence: 0.95798963

00:08:15.945 --> 00:08:17.005 signature pathways.  
NOTE Confidence: 0.9970139

00:08:17.625 --> 00:08:18.585 And you can see that  
NOTE Confidence: 0.9970139

00:08:18.585 --> 00:08:19.405 in the last  
NOTE Confidence: 0.9664081

00:08:19.945 --> 00:08:21.805 few months, they've really,  
NOTE Confidence: 0.7088167

00:08:22.905 --> 00:08:23.405 increased  
NOTE Confidence: 0.94867116

00:08:23.945 --> 00:08:25.405 especially in some of the  
NOTE Confidence: 0.9967053

00:08:25.960 --> 00:08:26.780 basic hematologic  
NOTE Confidence: 0.9586462

00:08:27.160 --> 00:08:28.200 diseases. And you can you  
NOTE Confidence: 0.9586462

00:08:28.200 --> 00:08:30.060 can see some some here.  
NOTE Confidence: 0.8887714

00:08:31.800 --> 00:08:33.260 As most of you know,  
NOTE Confidence: 0.8887714

00:08:33.320 --> 00:08:35.260 the the care signature pathways

NOTE Confidence: 0.8805368  
00:08:35.880 --> 00:08:37.320 are pathways that are designed  
NOTE Confidence: 0.8805368  
00:08:37.320 --> 00:08:37.820 by,  
NOTE Confidence: 0.88520163  
00:08:38.342 --> 00:08:39.925 of a group of our  
NOTE Confidence: 0.88520163  
00:08:39.925 --> 00:08:40.425 local,  
NOTE Confidence: 0.98651856  
00:08:41.125 --> 00:08:42.345 clinicians and experts,  
NOTE Confidence: 0.97097313  
00:08:42.804 --> 00:08:44.005 to provide sort of best  
NOTE Confidence: 0.97097313  
00:08:44.005 --> 00:08:46.245 practices for a certain condition,  
NOTE Confidence: 0.97097313  
00:08:46.245 --> 00:08:48.405 a certain, problem. We probably  
NOTE Confidence: 0.97097313  
00:08:48.405 --> 00:08:50.085 all know it started or  
NOTE Confidence: 0.97097313  
00:08:50.085 --> 00:08:52.485 or, really gained some some  
NOTE Confidence: 0.97097313  
00:08:52.485 --> 00:08:54.184 fame with the COVID.  
NOTE Confidence: 0.9192319  
00:08:54.720 --> 00:08:56.100 But now is,  
NOTE Confidence: 0.7858081  
00:08:57.839 --> 00:08:58.660 the number,  
NOTE Confidence: 0.9494369  
00:08:59.519 --> 00:09:00.800 and then the depth of  
NOTE Confidence: 0.9494369  
00:09:00.800 --> 00:09:02.079 some of the information you  
NOTE Confidence: 0.9494369

00:09:02.079 --> 00:09:03.519 get from there is, is  
NOTE Confidence: 0.9494369

00:09:03.519 --> 00:09:05.199 incredible. And, and it's a  
NOTE Confidence: 0.9494369

00:09:05.199 --> 00:09:05.699 live,  
NOTE Confidence: 0.95538336

00:09:06.959 --> 00:09:08.079 a live document, so to  
NOTE Confidence: 0.95538336

00:09:08.079 --> 00:09:10.095 speak, where it it's continuing  
NOTE Confidence: 0.95538336

00:09:10.315 --> 00:09:11.135 to change.  
NOTE Confidence: 0.9909595

00:09:11.995 --> 00:09:12.815 And so  
NOTE Confidence: 0.9779561

00:09:13.515 --> 00:09:15.275 just, so these are some  
NOTE Confidence: 0.9779561

00:09:15.275 --> 00:09:16.175 of the new ones,  
NOTE Confidence: 0.96494776

00:09:16.635 --> 00:09:17.934 or some of them, including  
NOTE Confidence: 0.96494776

00:09:18.075 --> 00:09:20.415 some that are really relatively  
NOTE Confidence: 0.96494776

00:09:20.554 --> 00:09:21.835 brand new. Another reason we  
NOTE Confidence: 0.96494776

00:09:21.835 --> 00:09:23.035 pick some of these cases  
NOTE Confidence: 0.96494776

00:09:23.035 --> 00:09:23.995 was to highlight some of  
NOTE Confidence: 0.96494776

00:09:23.995 --> 00:09:26.010 the new care signature pathways.  
NOTE Confidence: 0.99153775

00:09:26.870 --> 00:09:27.670 If I can get to

NOTE Confidence: 0.99153775  
00:09:27.670 --> 00:09:29.530 the next slide, please. So,  
NOTE Confidence: 0.98300236  
00:09:30.150 --> 00:09:31.530 as you can see here,  
NOTE Confidence: 0.98300236  
00:09:31.830 --> 00:09:33.510 there's a pretty substantial care  
NOTE Confidence: 0.98300236  
00:09:33.510 --> 00:09:34.410 signature pathway,  
NOTE Confidence: 0.98404235  
00:09:35.190 --> 00:09:36.090 for an elevated,  
NOTE Confidence: 0.92816  
00:09:36.550 --> 00:09:37.050 hemoglobin.  
NOTE Confidence: 0.9600396  
00:09:38.465 --> 00:09:39.285 Should have mentioned  
NOTE Confidence: 0.9206803  
00:09:39.745 --> 00:09:41.345 in in the history part  
NOTE Confidence: 0.9206803  
00:09:41.345 --> 00:09:43.125 that his pulse ox had  
NOTE Confidence: 0.9206803  
00:09:43.184 --> 00:09:44.085 been consistently  
NOTE Confidence: 0.99781096  
00:09:44.545 --> 00:09:45.045 normal.  
NOTE Confidence: 0.9338819  
00:09:45.585 --> 00:09:47.285 We saw, I'm on the  
NOTE Confidence: 0.9338819  
00:09:47.505 --> 00:09:49.025 right side actually now some  
NOTE Confidence: 0.9338819  
00:09:49.025 --> 00:09:50.465 of the basic stuff. You  
NOTE Confidence: 0.9338819  
00:09:50.465 --> 00:09:51.845 know, he wasn't on testosterone,  
NOTE Confidence: 0.9543383

00:09:53.360 --> 00:09:55.120 as well. But if you  
NOTE Confidence: 0.9543383

00:09:55.120 --> 00:09:56.240 start looking and you can  
NOTE Confidence: 0.9543383

00:09:56.240 --> 00:09:57.200 see some of the things  
NOTE Confidence: 0.9543383

00:09:57.200 --> 00:09:58.000 that we had done now  
NOTE Confidence: 0.9543383

00:09:58.000 --> 00:09:59.200 this was twenty in my  
NOTE Confidence: 0.9543383

00:09:59.200 --> 00:10:00.720 defense, it was twenty fifteen,  
NOTE Confidence: 0.9543383

00:10:00.720 --> 00:10:01.840 so there wasn't a cancerous  
NOTE Confidence: 0.9543383

00:10:01.840 --> 00:10:02.880 pathway, but there was an  
NOTE Confidence: 0.9543383

00:10:02.880 --> 00:10:04.320 up to date. So we  
NOTE Confidence: 0.9543383

00:10:04.320 --> 00:10:05.360 did some of the workup.  
NOTE Confidence: 0.9543383

00:10:05.360 --> 00:10:06.160 As you can see, there's  
NOTE Confidence: 0.9543383

00:10:06.160 --> 00:10:07.120 probably a little bit more  
NOTE Confidence: 0.9543383

00:10:07.120 --> 00:10:08.175 that we should have done.  
NOTE Confidence: 0.9543383

00:10:08.255 --> 00:10:09.375 He certainly didn't need an  
NOTE Confidence: 0.9543383

00:10:09.375 --> 00:10:10.355 urgent referral,  
NOTE Confidence: 0.8410642

00:10:12.095 --> 00:10:13.535 but the care synergy pathway



NOTE Confidence: 0.8410642  
00:10:13.535 --> 00:10:14.755 really does sort of,  
NOTE Confidence: 0.9806145  
00:10:15.855 --> 00:10:16.995 I find to be incredibly  
NOTE Confidence: 0.9806145  
00:10:17.054 --> 00:10:17.554 helpful,  
NOTE Confidence: 0.98356074  
00:10:18.015 --> 00:10:19.455 for some, for a lot  
NOTE Confidence: 0.98356074  
00:10:19.455 --> 00:10:20.274 of the hematologic  
NOTE Confidence: 0.6092245  
00:10:20.894 --> 00:10:21.394 diseases  
NOTE Confidence: 0.9929857  
00:10:21.855 --> 00:10:22.595 in particular.  
NOTE Confidence: 0.944028  
00:10:25.440 --> 00:10:27.040 I'm I'm gonna, we'll go  
NOTE Confidence: 0.944028  
00:10:27.040 --> 00:10:27.860 to the next  
NOTE Confidence: 0.84552956  
00:10:28.399 --> 00:10:28.899 slide,  
NOTE Confidence: 0.9386131  
00:10:29.920 --> 00:10:32.100 and, I'm gonna pass this,  
NOTE Confidence: 0.7687911  
00:10:32.959 --> 00:10:33.459 forward,  
NOTE Confidence: 0.9824729  
00:10:34.959 --> 00:10:36.480 but, I'm gonna stick around  
NOTE Confidence: 0.9824729  
00:10:36.480 --> 00:10:38.019 if there's any questions from,  
NOTE Confidence: 0.9873227  
00:10:38.645 --> 00:10:39.304 for me.  
NOTE Confidence: 0.99561745

00:10:41.765 --> 00:10:42.265 Great.  
NOTE Confidence: 0.9696146

00:10:43.205 --> 00:10:44.405 Thank you, Frank. So,  
NOTE Confidence: 0.9736035

00:10:45.285 --> 00:10:46.425 I'm gonna go through,  
NOTE Confidence: 0.92720515

00:10:46.804 --> 00:10:48.184 initially, some definitions  
NOTE Confidence: 0.9927879

00:10:48.725 --> 00:10:49.385 of erythrocytosis,  
NOTE Confidence: 0.96245086

00:10:50.405 --> 00:10:51.445 just because I actually think  
NOTE Confidence: 0.96245086

00:10:51.445 --> 00:10:52.965 that's where the referral starts.  
NOTE Confidence: 0.96245086

00:10:52.965 --> 00:10:54.890 Sometimes different labs might have  
NOTE Confidence: 0.96245086

00:10:54.890 --> 00:10:56.110 different normal ranges,  
NOTE Confidence: 0.98538804

00:10:56.890 --> 00:10:58.730 which could flag something as  
NOTE Confidence: 0.98538804

00:10:58.730 --> 00:11:00.329 potentially being high when maybe  
NOTE Confidence: 0.98538804

00:11:00.329 --> 00:11:01.529 we don't consider it as  
NOTE Confidence: 0.98538804

00:11:01.529 --> 00:11:02.029 such.  
NOTE Confidence: 0.9481716

00:11:02.970 --> 00:11:03.450 But,  
NOTE Confidence: 0.98788285

00:11:04.010 --> 00:11:05.550 there are sex differences,  
NOTE Confidence: 0.982975

00:11:06.250 --> 00:11:07.709 in how we define arthrocytosis

NOTE Confidence: 0.96160966  
00:11:08.170 --> 00:11:09.595 and for sixteen point five  
NOTE Confidence: 0.96160966  
00:11:09.595 --> 00:11:10.795 grams per deciliter for males  
NOTE Confidence: 0.96160966  
00:11:10.795 --> 00:11:12.554 and sixteen grams per deciliter  
NOTE Confidence: 0.96160966  
00:11:12.554 --> 00:11:14.255 for females with the corresponding  
NOTE Confidence: 0.96160966  
00:11:14.394 --> 00:11:16.975 hematocrit, in parentheses following that.  
NOTE Confidence: 0.9925354  
00:11:17.355 --> 00:11:18.634 The main our main goal,  
NOTE Confidence: 0.9925354  
00:11:19.035 --> 00:11:20.394 for these cases is trying  
NOTE Confidence: 0.9925354  
00:11:20.394 --> 00:11:22.255 to distinguish primary arthrocytosis,  
NOTE Confidence: 0.9841196  
00:11:22.714 --> 00:11:24.660 which is really an autonomous  
NOTE Confidence: 0.9841196  
00:11:24.720 --> 00:11:26.640 production. And and for the  
NOTE Confidence: 0.9841196  
00:11:26.640 --> 00:11:28.000 sake of this discussion, that  
NOTE Confidence: 0.9841196  
00:11:28.000 --> 00:11:29.620 that really means, polycythemia  
NOTE Confidence: 0.94070613  
00:11:30.240 --> 00:11:31.200 vera, which is a a  
NOTE Confidence: 0.94070613  
00:11:31.200 --> 00:11:32.340 malignant disorder.  
NOTE Confidence: 0.96738344  
00:11:33.040 --> 00:11:34.320 Everything else which is more  
NOTE Confidence: 0.96738344

00:11:34.320 --> 00:11:36.020 common would fall into secondary

NOTE Confidence: 0.96738344

00:11:36.080 --> 00:11:36.580 erythrocytosis.

NOTE Confidence: 0.968684

00:11:36.960 --> 00:11:37.755 And these are,

NOTE Confidence: 0.95943564

00:11:38.395 --> 00:11:39.755 situations in which it's it's

NOTE Confidence: 0.95943564

00:11:39.755 --> 00:11:41.035 not autonomous or rather an

NOTE Confidence: 0.95943564

00:11:41.035 --> 00:11:43.035 external factor, which is leading

NOTE Confidence: 0.95943564

00:11:43.035 --> 00:11:44.395 to the booster red cell

NOTE Confidence: 0.95943564

00:11:44.395 --> 00:11:45.515 red blood cell production. And

NOTE Confidence: 0.95943564

00:11:45.515 --> 00:11:47.135 mainly, this is driven by,

NOTE Confidence: 0.9996629

00:11:47.675 --> 00:11:48.175 erythropoietin

NOTE Confidence: 0.9852262

00:11:48.715 --> 00:11:49.915 or EPO, and this can

NOTE Confidence: 0.9852262

00:11:49.915 --> 00:11:51.115 happen for a variety of

NOTE Confidence: 0.9852262

00:11:51.115 --> 00:11:51.615 reasons.

NOTE Confidence: 0.9755343

00:11:52.970 --> 00:11:54.350 Both of these can be

NOTE Confidence: 0.97896695

00:11:55.130 --> 00:11:56.570 classified in another way, either

NOTE Confidence: 0.97896695

00:11:56.570 --> 00:11:58.490 congenital or acquired. But in

NOTE Confidence: 0.97896695

00:11:58.490 --> 00:11:59.550 our adult,

NOTE Confidence: 0.9990809

00:12:00.809 --> 00:12:02.570 primary care practices, we're mostly

NOTE Confidence: 0.9990809

00:12:02.570 --> 00:12:04.429 gonna be discussing acquired

NOTE Confidence: 0.9153285

00:12:05.065 --> 00:12:05.565 causes.

NOTE Confidence: 0.9307235

00:12:07.225 --> 00:12:08.605 I'll just briefly mention,

NOTE Confidence: 0.9915613

00:12:09.225 --> 00:12:10.925 the idea of relative erythrocytosis,

NOTE Confidence: 0.9915613

00:12:11.225 --> 00:12:12.765 which I think is what,

NOTE Confidence: 0.8787774

00:12:14.025 --> 00:12:15.785 doctor Chimneyel was, like, discussing

NOTE Confidence: 0.8787774

00:12:15.785 --> 00:12:16.605 in his case,

NOTE Confidence: 0.9937452

00:12:17.625 --> 00:12:18.285 where they

NOTE Confidence: 0.9905009

00:12:18.720 --> 00:12:19.779 discontinued the,

NOTE Confidence: 0.92420363

00:12:20.880 --> 00:12:21.380 hydrochlorothiazide.

NOTE Confidence: 0.8557842

00:12:26.480 --> 00:12:26.980 The,

NOTE Confidence: 0.8790788

00:12:28.160 --> 00:12:29.199 you know, most of the

NOTE Confidence: 0.8790788

00:12:29.199 --> 00:12:30.320 time, when we're thinking about

NOTE Confidence: 0.8790788

00:12:30.320 --> 00:12:31.920 a relative of retrocytosis, right,  
NOTE Confidence: 0.8790788

00:12:31.920 --> 00:12:33.565 where the there's  
NOTE Confidence: 0.92205864

00:12:34.024 --> 00:12:35.144 a change in the plasma  
NOTE Confidence: 0.92205864

00:12:35.144 --> 00:12:36.605 volume creating this,  
NOTE Confidence: 0.9599186

00:12:37.225 --> 00:12:37.725 increase,  
NOTE Confidence: 0.90502363

00:12:38.265 --> 00:12:39.325 or apparent increase,  
NOTE Confidence: 0.97982424

00:12:40.105 --> 00:12:41.725 in the hemoglobin or hematocrit.  
NOTE Confidence: 0.9620136

00:12:42.184 --> 00:12:43.464 We might often be talking  
NOTE Confidence: 0.9620136

00:12:43.464 --> 00:12:45.304 about something transient such as  
NOTE Confidence: 0.9620136

00:12:45.304 --> 00:12:45.804 diuretics,  
NOTE Confidence: 0.9989033

00:12:46.505 --> 00:12:47.005 or  
NOTE Confidence: 0.9848222

00:12:47.459 --> 00:12:48.899 GI losses through, you know,  
NOTE Confidence: 0.9848222

00:12:48.899 --> 00:12:50.259 either vomiting or diarrhea, but  
NOTE Confidence: 0.9848222

00:12:50.259 --> 00:12:51.139 I just did wanna make  
NOTE Confidence: 0.9848222

00:12:51.139 --> 00:12:52.100 a brief mention that there  
NOTE Confidence: 0.9848222

00:12:52.100 --> 00:12:52.759 is a,

NOTE Confidence: 0.9856453  
00:12:53.620 --> 00:12:54.120 condition,  
NOTE Confidence: 0.9784883  
00:12:54.660 --> 00:12:56.500 called case box polycythemia, which  
NOTE Confidence: 0.9784883  
00:12:56.500 --> 00:12:57.220 can really be thought of  
NOTE Confidence: 0.9784883  
00:12:57.220 --> 00:12:58.500 as almost a chronic form  
NOTE Confidence: 0.9784883  
00:12:58.500 --> 00:13:00.199 of of relative polycythemia.  
NOTE Confidence: 0.9290268  
00:13:00.500 --> 00:13:01.379 We we might tend to  
NOTE Confidence: 0.9290268  
00:13:01.379 --> 00:13:02.355 see that in,  
NOTE Confidence: 0.9995733  
00:13:02.834 --> 00:13:04.054 males with hypertension  
NOTE Confidence: 0.9804183  
00:13:04.434 --> 00:13:06.375 who are obese. So sometimes,  
NOTE Confidence: 0.94842976  
00:13:07.475 --> 00:13:08.675 I personally find it's almost  
NOTE Confidence: 0.94842976  
00:13:08.675 --> 00:13:10.514 like a diagnosis exclusion, but  
NOTE Confidence: 0.94842976  
00:13:10.514 --> 00:13:11.475 something that we do keep  
NOTE Confidence: 0.94842976  
00:13:11.475 --> 00:13:12.915 in in mind. Go to  
NOTE Confidence: 0.94842976  
00:13:12.915 --> 00:13:13.815 the next slide.  
NOTE Confidence: 0.99731797  
00:13:15.510 --> 00:13:16.950 So, you know, one brief  
NOTE Confidence: 0.99731797

00:13:16.950 --> 00:13:18.010 slide here on polycythemia  
NOTE Confidence: 0.96928763

00:13:18.310 --> 00:13:19.350 vera because I think that's  
NOTE Confidence: 0.96928763

00:13:19.350 --> 00:13:19.850 often,  
NOTE Confidence: 0.97349435

00:13:20.710 --> 00:13:22.310 as a malignant condition, something,  
NOTE Confidence: 0.97349435

00:13:22.310 --> 00:13:23.750 of course, we don't wanna  
NOTE Confidence: 0.97349435

00:13:23.750 --> 00:13:24.250 miss.  
NOTE Confidence: 0.99458706

00:13:24.950 --> 00:13:26.330 And this is a,  
NOTE Confidence: 0.9908933

00:13:27.030 --> 00:13:28.170 cancer, a myeloproliferative  
NOTE Confidence: 0.98997915

00:13:28.630 --> 00:13:30.485 neoplasm that's really characterized by  
NOTE Confidence: 0.98997915

00:13:30.485 --> 00:13:32.184 an increase in erythrocyte mass.  
NOTE Confidence: 0.98997915

00:13:32.325 --> 00:13:33.785 Patients often have thrombotic,  
NOTE Confidence: 0.973397

00:13:34.245 --> 00:13:36.005 but sometimes bleeding complications and  
NOTE Confidence: 0.973397

00:13:36.005 --> 00:13:36.985 can have vasomotor  
NOTE Confidence: 0.99926305

00:13:37.684 --> 00:13:38.184 symptoms.  
NOTE Confidence: 0.8745522

00:13:40.245 --> 00:13:42.085 For simplicity's sake for this  
NOTE Confidence: 0.8745522

00:13:42.085 --> 00:13:42.585 discussion,



NOTE Confidence: 0.98010826  
00:13:43.410 --> 00:13:45.269 essentially, all patients with polycythemia  
NOTE Confidence: 0.92975676  
00:13:45.809 --> 00:13:46.850 there will have a JAK  
NOTE Confidence: 0.92975676  
00:13:46.850 --> 00:13:48.389 two mutation. So  
NOTE Confidence: 0.97821236  
00:13:49.089 --> 00:13:50.209 most of those are this  
NOTE Confidence: 0.97821236  
00:13:50.209 --> 00:13:51.329 JAK two v six one  
NOTE Confidence: 0.97821236  
00:13:51.329 --> 00:13:52.529 seven f mutation, and then  
NOTE Confidence: 0.97821236  
00:13:52.529 --> 00:13:53.589 a smaller percentage  
NOTE Confidence: 0.9437024  
00:13:54.050 --> 00:13:55.089 are kinda what we call  
NOTE Confidence: 0.9437024  
00:13:55.089 --> 00:13:56.630 other other JAK mutations.  
NOTE Confidence: 0.95516163  
00:13:57.345 --> 00:13:58.545 And so if somebody is  
NOTE Confidence: 0.95516163  
00:13:58.704 --> 00:14:00.165 has a JAK mutation  
NOTE Confidence: 0.99594086  
00:14:00.545 --> 00:14:01.045 negative,  
NOTE Confidence: 0.96772575  
00:14:02.144 --> 00:14:04.065 it's extremely unlikely that they  
NOTE Confidence: 0.96772575  
00:14:04.065 --> 00:14:04.964 would have polycythemia  
NOTE Confidence: 0.9992502  
00:14:05.345 --> 00:14:05.845 vera.  
NOTE Confidence: 0.9837497

00:14:08.704 --> 00:14:09.824 So this is a,  
NOTE Confidence: 0.99972284

00:14:10.385 --> 00:14:11.204 one proposed  
NOTE Confidence: 0.9217806

00:14:11.580 --> 00:14:12.540 approach, but,  
NOTE Confidence: 0.9243212

00:14:14.780 --> 00:14:15.980 you know, starting at the  
NOTE Confidence: 0.9243212

00:14:15.980 --> 00:14:17.340 top left, again, that has  
NOTE Confidence: 0.9243212

00:14:17.340 --> 00:14:18.860 just our definitions. This is,  
NOTE Confidence: 0.9243212

00:14:19.180 --> 00:14:20.240 taken from a,  
NOTE Confidence: 0.94164735

00:14:20.700 --> 00:14:22.060 European journal, so you can  
NOTE Confidence: 0.94164735

00:14:22.060 --> 00:14:23.260 notice the change in decimal  
NOTE Confidence: 0.94164735

00:14:23.260 --> 00:14:23.835 places. But,  
NOTE Confidence: 0.9960408

00:14:24.795 --> 00:14:26.075 you know, following the definitions  
NOTE Confidence: 0.9960408

00:14:26.075 --> 00:14:27.695 we outlined earlier for erythrocytosis,  
NOTE Confidence: 0.94976103

00:14:28.235 --> 00:14:30.095 again, first excluding that relative,  
NOTE Confidence: 0.99270463

00:14:30.955 --> 00:14:31.455 erythrocytosis,  
NOTE Confidence: 0.97480124

00:14:31.835 --> 00:14:32.875 which is really things like  
NOTE Confidence: 0.97480124

00:14:32.875 --> 00:14:33.375 dehydration,

NOTE Confidence: 0.9717315  
00:14:34.875 --> 00:14:35.675 you know, then we get  
NOTE Confidence: 0.9717315  
00:14:35.675 --> 00:14:36.795 to this next main fork  
NOTE Confidence: 0.9717315  
00:14:36.795 --> 00:14:38.250 in the road. And of  
NOTE Confidence: 0.9717315  
00:14:38.250 --> 00:14:39.690 the next kind of very  
NOTE Confidence: 0.9717315  
00:14:39.690 --> 00:14:40.890 useful test that can be  
NOTE Confidence: 0.9717315  
00:14:40.890 --> 00:14:43.870 done is the erythropoietin level.  
NOTE Confidence: 0.99294  
00:14:44.410 --> 00:14:45.690 And whether that turns out  
NOTE Confidence: 0.99294  
00:14:45.690 --> 00:14:47.370 to be high, low, or  
NOTE Confidence: 0.99294  
00:14:47.370 --> 00:14:48.430 normal, that helps,  
NOTE Confidence: 0.9963527  
00:14:48.970 --> 00:14:50.430 bring us into the next,  
NOTE Confidence: 0.98264384  
00:14:52.395 --> 00:14:53.195 most likely,  
NOTE Confidence: 0.9483717  
00:14:53.755 --> 00:14:55.115 leading us down the diagnostic  
NOTE Confidence: 0.9483717  
00:14:55.115 --> 00:14:56.315 pathway. And so if the  
NOTE Confidence: 0.9483717  
00:14:56.315 --> 00:14:57.995 erythropoietin level is high, we're  
NOTE Confidence: 0.9483717  
00:14:57.995 --> 00:14:59.935 really looking at these secondary  
NOTE Confidence: 0.9703277

00:15:00.475 --> 00:15:02.255 acquired causes. So not polycythemia

NOTE Confidence: 0.95924973

00:15:02.635 --> 00:15:03.675 vera, not the can not

NOTE Confidence: 0.95924973

00:15:03.675 --> 00:15:05.035 a cancerous condition, but something

NOTE Confidence: 0.95924973

00:15:05.035 --> 00:15:06.795 else driving EPO levels to

NOTE Confidence: 0.95924973

00:15:06.795 --> 00:15:07.410 be high.

NOTE Confidence: 0.8886964

00:15:07.810 --> 00:15:09.490 And often the main the

NOTE Confidence: 0.8886964

00:15:09.490 --> 00:15:09.970 main,

NOTE Confidence: 0.98166305

00:15:10.370 --> 00:15:12.050 reasons here are hypoxia and

NOTE Confidence: 0.98166305

00:15:12.050 --> 00:15:13.829 medical conditions that cause such

NOTE Confidence: 0.98166305

00:15:13.889 --> 00:15:14.629 and medications.

NOTE Confidence: 0.9874741

00:15:15.410 --> 00:15:17.110 We're rarely gonna see congenital,

NOTE Confidence: 0.9976945

00:15:17.649 --> 00:15:19.190 associated causes in practice.

NOTE Confidence: 0.9054123

00:15:20.264 --> 00:15:21.084 If the,

NOTE Confidence: 0.9589318

00:15:21.625 --> 00:15:23.385 erythropoietin level is low or

NOTE Confidence: 0.9589318

00:15:23.385 --> 00:15:24.584 very low, then that's where

NOTE Confidence: 0.9589318

00:15:24.584 --> 00:15:26.105 we often will next check

NOTE Confidence: 0.9589318  
00:15:26.105 --> 00:15:27.144 the JAK two,  
NOTE Confidence: 0.9943852  
00:15:27.865 --> 00:15:29.225 mutation testing. Again, if it's  
NOTE Confidence: 0.9943852  
00:15:29.225 --> 00:15:30.745 positive, that confirms that someone  
NOTE Confidence: 0.9943852  
00:15:30.745 --> 00:15:31.404 has polycythemia  
NOTE Confidence: 0.9987032  
00:15:31.865 --> 00:15:32.365 vera.  
NOTE Confidence: 0.9682441  
00:15:33.050 --> 00:15:34.830 If it's negative, we we,  
NOTE Confidence: 0.9800927  
00:15:36.170 --> 00:15:37.610 we'll we'll look for those  
NOTE Confidence: 0.9800927  
00:15:37.610 --> 00:15:38.589 other JAK mutations.  
NOTE Confidence: 0.9919288  
00:15:39.930 --> 00:15:40.430 And,  
NOTE Confidence: 0.99857956  
00:15:40.970 --> 00:15:42.330 again, if these are all  
NOTE Confidence: 0.99857956  
00:15:42.330 --> 00:15:42.830 negative,  
NOTE Confidence: 0.97134566  
00:15:43.290 --> 00:15:44.649 it makes it very unlikely  
NOTE Confidence: 0.97134566  
00:15:44.649 --> 00:15:46.430 the patient has polycythemia vera.  
NOTE Confidence: 0.97134566  
00:15:46.730 --> 00:15:47.870 Okay. Next slide.  
NOTE Confidence: 0.9606091  
00:15:49.285 --> 00:15:50.405 Okay. So, again, our in  
NOTE Confidence: 0.9606091

00:15:50.405 --> 00:15:51.765 terms of our diagnostic approach,

NOTE Confidence: 0.9606091

00:15:51.765 --> 00:15:53.525 the first most important, lab

NOTE Confidence: 0.9606091

00:15:53.525 --> 00:15:54.485 to check would be an

NOTE Confidence: 0.9606091

00:15:54.485 --> 00:15:54.985 erythropoietin

NOTE Confidence: 0.9902204

00:15:55.365 --> 00:15:55.865 level.

NOTE Confidence: 0.97699517

00:15:56.645 --> 00:15:58.005 And, again, if it's low,

NOTE Confidence: 0.97699517

00:15:58.005 --> 00:15:59.045 that really points us in

NOTE Confidence: 0.97699517

00:15:59.045 --> 00:16:00.805 the direction of placenta vera.

NOTE Confidence: 0.97699517

00:16:00.805 --> 00:16:02.085 And if it's normal or

NOTE Confidence: 0.97699517

00:16:02.085 --> 00:16:03.445 elevated, then we're going down

NOTE Confidence: 0.97699517

00:16:03.445 --> 00:16:04.345 the more common

NOTE Confidence: 0.99921113

00:16:04.780 --> 00:16:06.560 likelihood of secondary etiologies.

NOTE Confidence: 0.9531681

00:16:08.620 --> 00:16:09.500 So this is just a

NOTE Confidence: 0.9531681

00:16:09.500 --> 00:16:11.980 list of diseases that as

NOTE Confidence: 0.9531681

00:16:11.980 --> 00:16:12.960 primary care,

NOTE Confidence: 0.9967663

00:16:13.660 --> 00:16:14.160 providers,

NOTE Confidence: 0.99654216  
00:16:15.340 --> 00:16:16.780 you might commonly see in  
NOTE Confidence: 0.99654216  
00:16:16.780 --> 00:16:17.520 your practice,  
NOTE Confidence: 0.99342704  
00:16:18.620 --> 00:16:19.200 that can  
NOTE Confidence: 0.934058  
00:16:19.835 --> 00:16:21.755 that can, again, have a  
NOTE Confidence: 0.934058  
00:16:21.755 --> 00:16:22.255 erythrocytosis  
NOTE Confidence: 0.920996  
00:16:22.635 --> 00:16:23.995 and with either a normal  
NOTE Confidence: 0.920996  
00:16:23.995 --> 00:16:25.055 or increased erythropoietin  
NOTE Confidence: 0.955305  
00:16:25.435 --> 00:16:25.935 level.  
NOTE Confidence: 0.75976354  
00:16:28.155 --> 00:16:28.975 So cardiopulmonary  
NOTE Confidence: 0.9806707  
00:16:29.435 --> 00:16:31.115 disease and obstructive sleep apnea,  
NOTE Confidence: 0.9806707  
00:16:31.115 --> 00:16:32.235 I think, are quite  
NOTE Confidence: 0.9806707  
00:16:32.235 --> 00:16:33.680 common in our patient population,  
NOTE Confidence: 0.94769454  
00:16:34.540 --> 00:16:35.580 given that we don't live  
NOTE Confidence: 0.94769454  
00:16:35.580 --> 00:16:36.480 in a high altitude.  
NOTE Confidence: 0.8279263  
00:16:37.980 --> 00:16:39.120 Cigarette smoking,  
NOTE Confidence: 0.9667382

00:16:39.900 --> 00:16:40.960 often, I think,  
NOTE Confidence: 0.92394257  
00:16:42.380 --> 00:16:44.220 we might see either separate  
NOTE Confidence: 0.92394257  
00:16:44.220 --> 00:16:45.680 but often together with cardiopulmonary  
NOTE Confidence: 0.996021  
00:16:46.140 --> 00:16:46.640 diseases.  
NOTE Confidence: 0.95507926  
00:16:47.015 --> 00:16:47.895 And then I just wanted  
NOTE Confidence: 0.95507926  
00:16:47.895 --> 00:16:49.654 to bring attention to carbon  
NOTE Confidence: 0.95507926  
00:16:49.654 --> 00:16:51.175 monoxide poisoning as, of course,  
NOTE Confidence: 0.95507926  
00:16:51.175 --> 00:16:52.375 something we wouldn't wanna miss,  
NOTE Confidence: 0.95507926  
00:16:52.375 --> 00:16:53.495 and that can be identified  
NOTE Confidence: 0.95507926  
00:16:53.495 --> 00:16:54.775 on lab work. And then  
NOTE Confidence: 0.95507926  
00:16:54.775 --> 00:16:55.895 also a list of,  
NOTE Confidence: 0.9029821  
00:16:56.455 --> 00:16:57.495 medications here,  
NOTE Confidence: 0.8898392  
00:17:00.360 --> 00:17:01.660 Pointing out that SGLT  
NOTE Confidence: 0.8315924  
00:17:02.280 --> 00:17:02.780 SGLT  
NOTE Confidence: 0.90415055  
00:17:03.240 --> 00:17:03.740 two,  
NOTE Confidence: 0.9969063  
00:17:04.119 --> 00:17:04.619 inhibitors,



NOTE Confidence: 0.9616509  
00:17:04.920 --> 00:17:05.960 the drugs that end in  
NOTE Confidence: 0.9616509  
00:17:05.960 --> 00:17:06.460 neflozins,  
NOTE Confidence: 0.92236924  
00:17:07.480 --> 00:17:09.480 we're seeing an increased number  
NOTE Confidence: 0.92236924  
00:17:09.480 --> 00:17:11.020 of these prescribed as,  
NOTE Confidence: 0.98768765  
00:17:11.720 --> 00:17:12.984 in our patient population, and  
NOTE Confidence: 0.98768765  
00:17:12.984 --> 00:17:14.984 we do see erythrocytosis from  
NOTE Confidence: 0.98768765  
00:17:14.984 --> 00:17:15.945 these. So just keep that  
NOTE Confidence: 0.98768765  
00:17:15.945 --> 00:17:16.905 in mind, kind of doing  
NOTE Confidence: 0.98768765  
00:17:16.905 --> 00:17:18.184 a quick medication check when  
NOTE Confidence: 0.98768765  
00:17:18.184 --> 00:17:18.684 you  
NOTE Confidence: 0.90507615  
00:17:18.984 --> 00:17:20.825 notice a higher hemoglobin in  
NOTE Confidence: 0.90507615  
00:17:20.825 --> 00:17:22.205 your with your patients.  
NOTE Confidence: 0.996689  
00:17:23.065 --> 00:17:24.345 In addition to things like  
NOTE Confidence: 0.996689  
00:17:24.345 --> 00:17:24.845 testosterone,  
NOTE Confidence: 0.99739885  
00:17:25.145 --> 00:17:26.045 I'd say that's  
NOTE Confidence: 0.99968874

00:17:26.570 --> 00:17:27.070 also  
NOTE Confidence: 0.9200067  
00:17:27.530 --> 00:17:29.130 often prevalent in our patient  
NOTE Confidence: 0.9200067  
00:17:29.130 --> 00:17:29.630 population.  
NOTE Confidence: 0.915491  
00:17:31.290 --> 00:17:32.970 I personally don't see that  
NOTE Confidence: 0.915491  
00:17:32.970 --> 00:17:33.710 many patients,  
NOTE Confidence: 0.99669564  
00:17:35.210 --> 00:17:35.710 using,  
NOTE Confidence: 0.9490137  
00:17:36.970 --> 00:17:38.410 you know, EPO doping, but,  
NOTE Confidence: 0.9490137  
00:17:38.410 --> 00:17:39.450 of course, it it, I  
NOTE Confidence: 0.9490137  
00:17:39.450 --> 00:17:40.890 think, intuitively makes sense to  
NOTE Confidence: 0.9490137  
00:17:40.890 --> 00:17:41.950 think about that.  
NOTE Confidence: 0.9677413  
00:17:43.565 --> 00:17:44.765 If we talked about the  
NOTE Confidence: 0.9677413  
00:17:44.765 --> 00:17:45.265 relative,  
NOTE Confidence: 0.880446  
00:17:45.965 --> 00:17:46.465 erythrocytosis,  
NOTE Confidence: 0.9869564  
00:17:47.005 --> 00:17:47.805 and then if we see  
NOTE Confidence: 0.9869564  
00:17:47.805 --> 00:17:48.625 a high EPO,  
NOTE Confidence: 0.7785151  
00:17:49.325 --> 00:17:49.825 level,

NOTE Confidence: 0.9312222

00:17:51.085 --> 00:17:53.265 tumors, both malignant and benign,

NOTE Confidence: 0.9312222

00:17:53.405 --> 00:17:55.165 including, like, uterine fibroids, which

NOTE Confidence: 0.9312222

00:17:55.165 --> 00:17:56.205 is something I've seen in

NOTE Confidence: 0.9312222

00:17:56.205 --> 00:17:57.919 practice, can actually sudd secrete

NOTE Confidence: 0.9312222

00:17:57.919 --> 00:17:58.119 EPO.

NOTE Confidence: 0.8999782

00:18:00.760 --> 00:18:02.840 And then also renal conditions,

NOTE Confidence: 0.8999782

00:18:02.840 --> 00:18:04.840 so renal artery stenosis, renal

NOTE Confidence: 0.8999782

00:18:04.840 --> 00:18:06.040 cysts, and,

NOTE Confidence: 0.9879542

00:18:06.520 --> 00:18:07.800 and patients who have also

NOTE Confidence: 0.9879542

00:18:07.800 --> 00:18:09.800 had a, kidney transplant as

NOTE Confidence: 0.9879542

00:18:09.800 --> 00:18:10.300 well.

NOTE Confidence: 0.9961371

00:18:12.945 --> 00:18:13.905 So in terms of other

NOTE Confidence: 0.9961371

00:18:13.905 --> 00:18:15.424 labs to to check, in

NOTE Confidence: 0.9961371

00:18:15.424 --> 00:18:16.385 addition to those,

NOTE Confidence: 0.99878323

00:18:16.945 --> 00:18:17.984 iron studies, a lot of

NOTE Confidence: 0.99878323

00:18:17.984 --> 00:18:19.205 our patients with polycythemia  
NOTE Confidence: 0.93630934

00:18:19.744 --> 00:18:21.365 vera will have kinda low  
NOTE Confidence: 0.93630934

00:18:21.424 --> 00:18:22.484 iron at baseline,  
NOTE Confidence: 0.967433

00:18:23.984 --> 00:18:25.105 which was checked in your  
NOTE Confidence: 0.967433

00:18:25.105 --> 00:18:25.605 case.  
NOTE Confidence: 0.9032192

00:18:25.930 --> 00:18:27.470 And, also, a blood smear,  
NOTE Confidence: 0.98944396

00:18:28.090 --> 00:18:28.830 is useful,  
NOTE Confidence: 0.9901748

00:18:29.770 --> 00:18:30.730 really to look for some  
NOTE Confidence: 0.9901748

00:18:30.730 --> 00:18:31.850 of those kind of more  
NOTE Confidence: 0.9901748

00:18:31.850 --> 00:18:32.670 ominous markers,  
NOTE Confidence: 0.98669547

00:18:33.609 --> 00:18:34.270 sort of,  
NOTE Confidence: 0.9271629

00:18:35.450 --> 00:18:37.050 blasts, which could be seen.  
NOTE Confidence: 0.9271629

00:18:37.050 --> 00:18:38.330 It could highlight a potential  
NOTE Confidence: 0.9271629

00:18:38.330 --> 00:18:39.390 malignant condition  
NOTE Confidence: 0.941426

00:18:39.850 --> 00:18:40.350 or  
NOTE Confidence: 0.9497781

00:18:41.284 --> 00:18:42.184 what we call leukoerythroblastosis,

NOTE Confidence: 0.930518  
00:18:43.445 --> 00:18:44.565 just sort of these younger  
NOTE Confidence: 0.930518  
00:18:44.565 --> 00:18:46.244 precursor cells, so nucleated red  
NOTE Confidence: 0.930518  
00:18:46.244 --> 00:18:47.544 blood cells, for example.  
NOTE Confidence: 0.97895026  
00:18:48.725 --> 00:18:50.005 Again, just, this was, I  
NOTE Confidence: 0.97895026  
00:18:50.005 --> 00:18:51.044 guess, kinda outlined on the  
NOTE Confidence: 0.97895026  
00:18:51.044 --> 00:18:52.164 prior slide, but just in  
NOTE Confidence: 0.97895026  
00:18:52.164 --> 00:18:53.144 a different format.  
NOTE Confidence: 0.9701085  
00:18:55.000 --> 00:18:55.880 I think some of these  
NOTE Confidence: 0.9701085  
00:18:55.880 --> 00:18:57.799 are relatively common conditions in  
NOTE Confidence: 0.9701085  
00:18:57.799 --> 00:18:59.260 the primary care population.  
NOTE Confidence: 0.9758385  
00:19:01.159 --> 00:19:02.140 Just as you,  
NOTE Confidence: 0.97426116  
00:19:03.400 --> 00:19:04.940 after you've checked in erythropoietin  
NOTE Confidence: 0.95866185  
00:19:05.240 --> 00:19:06.119 and you see that it's  
NOTE Confidence: 0.95866185  
00:19:06.119 --> 00:19:07.785 either normal or high, and  
NOTE Confidence: 0.95866185  
00:19:07.785 --> 00:19:08.744 kinda try to go through  
NOTE Confidence: 0.95866185

00:19:08.744 --> 00:19:10.525 this list of different possibility.  
NOTE Confidence: 0.9224344

00:19:15.145 --> 00:19:16.685 And, again, we just wanted  
NOTE Confidence: 0.9224344

00:19:16.744 --> 00:19:17.405 to highlight,  
NOTE Confidence: 0.98727196

00:19:17.785 --> 00:19:19.305 particularly this last bullet point  
NOTE Confidence: 0.98727196

00:19:19.305 --> 00:19:20.425 here as we're seeing more  
NOTE Confidence: 0.98727196

00:19:20.425 --> 00:19:21.965 of these prescribed in practice.  
NOTE Confidence: 0.9976737

00:19:25.369 --> 00:19:26.590 When we're taking a history,  
NOTE Confidence: 0.9980181

00:19:27.690 --> 00:19:28.590 you know, I think,  
NOTE Confidence: 0.981146

00:19:29.050 --> 00:19:30.910 it largely is going to,  
NOTE Confidence: 0.93875664

00:19:32.170 --> 00:19:33.530 the medication list, obviously, we  
NOTE Confidence: 0.93875664

00:19:33.530 --> 00:19:34.250 might have in front of  
NOTE Confidence: 0.93875664

00:19:34.250 --> 00:19:35.369 us. We're we're gonna take  
NOTE Confidence: 0.93875664

00:19:35.369 --> 00:19:37.050 a smoking history, of course.  
NOTE Confidence: 0.93875664

00:19:37.050 --> 00:19:37.695 You know, do you have  
NOTE Confidence: 0.93875664

00:19:37.695 --> 00:19:39.135 a carbon monoxide monitor in  
NOTE Confidence: 0.93875664

00:19:39.135 --> 00:19:41.054 your home? And symptoms of,

NOTE Confidence: 0.93875664

00:19:41.054 --> 00:19:42.215 I think, sleep apnea are

NOTE Confidence: 0.93875664

00:19:42.215 --> 00:19:42.815 are quite,

NOTE Confidence: 0.9996029

00:19:43.215 --> 00:19:43.715 useful.

NOTE Confidence: 0.99916726

00:19:45.775 --> 00:19:47.395 And on our physical exam,

NOTE Confidence: 0.9983938

00:19:48.255 --> 00:19:49.154 you know, hypertension,

NOTE Confidence: 0.9787526

00:19:49.855 --> 00:19:50.355 plethora,

NOTE Confidence: 0.91523415

00:19:51.215 --> 00:19:51.855 signs of,

NOTE Confidence: 0.9556031

00:19:52.429 --> 00:19:54.030 scratching, itching from pruritus patients

NOTE Confidence: 0.9556031

00:19:54.030 --> 00:19:54.850 might experience.

NOTE Confidence: 0.9907906

00:19:56.190 --> 00:19:57.490 Certainly, if someone has splenomegaly,

NOTE Confidence: 0.9907906

00:19:57.710 --> 00:19:58.669 I think we're really gonna

NOTE Confidence: 0.9907906

00:19:58.669 --> 00:19:59.169 wanna

NOTE Confidence: 0.9684305

00:19:59.470 --> 00:20:00.590 wanna make sure we're ruling

NOTE Confidence: 0.9684305

00:20:00.590 --> 00:20:02.049 out any malignant etiology.

NOTE Confidence: 0.9974916

00:20:02.990 --> 00:20:04.429 So these are helpful things

NOTE Confidence: 0.9974916

00:20:04.429 --> 00:20:05.330 to look for.  
NOTE Confidence: 0.94405526

00:20:08.025 --> 00:20:09.145 So who should be referred  
NOTE Confidence: 0.94405526

00:20:09.145 --> 00:20:10.265 to hematology? So I I  
NOTE Confidence: 0.94405526

00:20:10.265 --> 00:20:11.544 would say my my my  
NOTE Confidence: 0.94405526

00:20:11.544 --> 00:20:12.905 recommendations would be anybody who  
NOTE Confidence: 0.94405526

00:20:12.905 --> 00:20:14.765 has a low erythropoietin level,  
NOTE Confidence: 0.9632174

00:20:17.465 --> 00:20:18.905 someone who has really long  
NOTE Confidence: 0.9632174

00:20:18.905 --> 00:20:20.125 standing erythrocytosis  
NOTE Confidence: 0.8647949

00:20:20.585 --> 00:20:21.690 or a clear family history  
NOTE Confidence: 0.8647949

00:20:22.090 --> 00:20:24.029 patient's younger because while they're  
NOTE Confidence: 0.8647949

00:20:24.250 --> 00:20:25.450 quite rare, there are,  
NOTE Confidence: 0.99176884

00:20:25.929 --> 00:20:26.970 we do have a handful  
NOTE Confidence: 0.99176884

00:20:26.970 --> 00:20:28.570 of patients with hereditary forms  
NOTE Confidence: 0.99176884

00:20:28.570 --> 00:20:29.309 of erythrocytosis,  
NOTE Confidence: 0.9418495

00:20:31.850 --> 00:20:33.210 certainly somebody who has a  
NOTE Confidence: 0.9418495

00:20:33.210 --> 00:20:34.269 JAK2 mutation.



NOTE Confidence: 0.99556977  
00:20:34.915 --> 00:20:36.195 And then I think that  
NOTE Confidence: 0.99556977  
00:20:36.195 --> 00:20:37.575 there are patients who,  
NOTE Confidence: 0.98437995  
00:20:38.835 --> 00:20:40.535 we might feel have symptoms  
NOTE Confidence: 0.98437995  
00:20:40.595 --> 00:20:41.734 related to erythrocytosis,  
NOTE Confidence: 0.95727396  
00:20:42.035 --> 00:20:43.635 which can be challenging to  
NOTE Confidence: 0.95727396  
00:20:43.635 --> 00:20:44.135 to  
NOTE Confidence: 0.98615074  
00:20:44.515 --> 00:20:45.015 manage.  
NOTE Confidence: 0.9941117  
00:20:45.555 --> 00:20:46.055 So  
NOTE Confidence: 0.9561772  
00:20:46.435 --> 00:20:48.035 headaches, for example, I'd say  
NOTE Confidence: 0.9561772  
00:20:48.035 --> 00:20:49.255 would be a very common  
NOTE Confidence: 0.9561772  
00:20:49.315 --> 00:20:49.815 symptom,  
NOTE Confidence: 0.9577518  
00:20:50.659 --> 00:20:52.039 kind of mental fogginess,  
NOTE Confidence: 0.9963414  
00:20:55.220 --> 00:20:56.179 would probably be a second  
NOTE Confidence: 0.9963414  
00:20:56.179 --> 00:20:57.380 thing I would think about.  
NOTE Confidence: 0.9433082  
00:20:57.779 --> 00:20:58.679 And so, certainly,  
NOTE Confidence: 0.9526133

00:20:59.220 --> 00:21:00.659 if there's concerns that symptoms

NOTE Confidence: 0.9526133

00:21:00.659 --> 00:21:01.859 patients have are related to

NOTE Confidence: 0.9526133

00:21:01.859 --> 00:21:03.140 erythrocytosis, I think we should

NOTE Confidence: 0.9526133

00:21:03.140 --> 00:21:04.260 see those patients, in my

NOTE Confidence: 0.9526133

00:21:04.260 --> 00:21:04.760 opinion.

NOTE Confidence: 0.9571164

00:21:07.445 --> 00:21:08.804 I have one brief thing

NOTE Confidence: 0.9571164

00:21:08.804 --> 00:21:10.025 on how we manage polycythemia

NOTE Confidence: 0.9571164

00:21:10.325 --> 00:21:11.784 vera only because it often

NOTE Confidence: 0.97728914

00:21:13.205 --> 00:21:14.325 in the past, how we

NOTE Confidence: 0.97728914

00:21:14.325 --> 00:21:16.404 manage polycythemia vera sort of

NOTE Confidence: 0.97728914

00:21:16.404 --> 00:21:17.684 trickled into how one

NOTE Confidence: 0.9615427

00:21:18.850 --> 00:21:20.210 Sometimes we might think we

NOTE Confidence: 0.9615427

00:21:20.210 --> 00:21:21.970 should manage other causes of

NOTE Confidence: 0.9615427

00:21:21.970 --> 00:21:22.470 arthrocytosis.

NOTE Confidence: 0.99271274

00:21:22.850 --> 00:21:24.450 But very briefly, these patients

NOTE Confidence: 0.99271274

00:21:24.450 --> 00:21:24.690 get,

NOTE Confidence: 0.94145864

00:21:25.330 --> 00:21:26.850 have phlebotomy to reduce their

NOTE Confidence: 0.94145864

00:21:26.850 --> 00:21:28.450 hematocrit often to a level

NOTE Confidence: 0.94145864

00:21:28.450 --> 00:21:29.750 of less than forty five.

NOTE Confidence: 0.94145864

00:21:29.809 --> 00:21:30.784 Most of these patients are

NOTE Confidence: 0.94145864

00:21:30.784 --> 00:21:32.544 on aspirin, and sometimes they,

NOTE Confidence: 0.94145864

00:21:32.945 --> 00:21:33.445 receive,

NOTE Confidence: 0.9962071

00:21:34.145 --> 00:21:34.645 like,

NOTE Confidence: 0.88737184

00:21:36.225 --> 00:21:38.005 phyto-reductive pills like hydroxyurea

NOTE Confidence: 0.9841652

00:21:39.744 --> 00:21:40.325 or others.

NOTE Confidence: 0.9859298

00:21:42.385 --> 00:21:44.645 So, but for secondary erythrocytosis,

NOTE Confidence: 0.97399646

00:21:45.585 --> 00:21:47.190 we we really should not

NOTE Confidence: 0.97399646

00:21:47.190 --> 00:21:49.030 be doing phlebotomy. It's really

NOTE Confidence: 0.97399646

00:21:49.030 --> 00:21:49.990 the, like, take home point

NOTE Confidence: 0.97399646

00:21:49.990 --> 00:21:50.470 of this.

NOTE Confidence: 0.9791629

00:21:51.429 --> 00:21:52.869 And the treatment is really

NOTE Confidence: 0.9791629

00:21:52.869 --> 00:21:54.630 directed at the underlying cause

NOTE Confidence: 0.9791629

00:21:54.630 --> 00:21:55.669 if we think it's even

NOTE Confidence: 0.9791629

00:21:55.669 --> 00:21:56.169 necessary,

NOTE Confidence: 0.9426502

00:21:59.325 --> 00:22:00.365 You know, especially when it

NOTE Confidence: 0.9426502

00:22:00.365 --> 00:22:02.625 comes to hypoxic pulmonary disease,

NOTE Confidence: 0.9716889

00:22:03.005 --> 00:22:03.885 right, we might see this

NOTE Confidence: 0.9716889

00:22:03.885 --> 00:22:05.005 in more advanced forms of

NOTE Confidence: 0.9716889

00:22:05.005 --> 00:22:06.465 COPD or OSA, and

NOTE Confidence: 0.97089386

00:22:06.845 --> 00:22:09.105 prognostic significance is not exactly

NOTE Confidence: 0.97089386

00:22:09.165 --> 00:22:10.605 clear. There's sort of mixed

NOTE Confidence: 0.97089386

00:22:10.605 --> 00:22:11.825 data in this space.

NOTE Confidence: 0.9784323

00:22:12.710 --> 00:22:13.830 And there's really no clear

NOTE Confidence: 0.9784323

00:22:13.830 --> 00:22:15.850 evidence that phlebotomy is necessary,

NOTE Confidence: 0.99103236

00:22:16.950 --> 00:22:18.630 or even effective at reducing

NOTE Confidence: 0.99103236

00:22:18.630 --> 00:22:20.310 thrombotic risk and could actually

NOTE Confidence: 0.99103236

00:22:20.310 --> 00:22:21.850 increase thrombotic risk.

NOTE Confidence: 0.83603066  
00:22:23.670 --> 00:22:24.410 And, certainly,  
NOTE Confidence: 0.92278886  
00:22:25.325 --> 00:22:26.525 to try to assess someone's  
NOTE Confidence: 0.92278886  
00:22:26.525 --> 00:22:27.725 thrombotic risk, you know, we  
NOTE Confidence: 0.92278886  
00:22:27.725 --> 00:22:29.005 need to think about other  
NOTE Confidence: 0.92278886  
00:22:29.005 --> 00:22:30.525 other risk other risk factors  
NOTE Confidence: 0.92278886  
00:22:30.525 --> 00:22:31.665 patients might have.  
NOTE Confidence: 0.97835946  
00:22:33.005 --> 00:22:34.205 We do know that when  
NOTE Confidence: 0.97835946  
00:22:34.205 --> 00:22:35.725 patients with OSA are on  
NOTE Confidence: 0.97835946  
00:22:35.725 --> 00:22:37.005 CPAP, it can reduce their  
NOTE Confidence: 0.97835946  
00:22:37.005 --> 00:22:37.505 withrocytosis.  
NOTE Confidence: 0.941954  
00:22:39.250 --> 00:22:40.789 But, otherwise, in terms  
NOTE Confidence: 0.91396356  
00:22:41.090 --> 00:22:43.010 of directed management to lower,  
NOTE Confidence: 0.91396356  
00:22:43.330 --> 00:22:44.690 the erythrocyt count, its data  
NOTE Confidence: 0.91396356  
00:22:44.690 --> 00:22:45.590 is less clear.  
NOTE Confidence: 0.94235706  
00:22:47.809 --> 00:22:49.169 One brief slide on testosterone  
NOTE Confidence: 0.94235706

00:22:49.169 --> 00:22:50.049 because I we see a  
NOTE Confidence: 0.94235706

00:22:50.049 --> 00:22:51.250 lot of these patients as  
NOTE Confidence: 0.94235706

00:22:51.250 --> 00:22:51.750 referrals.  
NOTE Confidence: 0.9740381

00:22:53.395 --> 00:22:54.994 We know testosterone can cause  
NOTE Confidence: 0.9740381

00:22:54.994 --> 00:22:55.494 arthrocytosis,  
NOTE Confidence: 0.96447045

00:22:57.155 --> 00:22:58.355 for a few reasons, but  
NOTE Confidence: 0.96447045

00:22:58.355 --> 00:22:59.315 probably initially due to a  
NOTE Confidence: 0.96447045

00:22:59.315 --> 00:23:00.934 rise in arthropoietin levels.  
NOTE Confidence: 0.9662818

00:23:04.115 --> 00:23:06.035 Often, patients have been referred  
NOTE Confidence: 0.9662818

00:23:06.035 --> 00:23:07.530 to sort of decide if  
NOTE Confidence: 0.9662818

00:23:07.530 --> 00:23:08.650 they should if they would  
NOTE Confidence: 0.9662818

00:23:08.650 --> 00:23:10.670 benefit from phlebotomy, and,  
NOTE Confidence: 0.9808407

00:23:12.490 --> 00:23:13.850 there's not really a clear  
NOTE Confidence: 0.9808407

00:23:13.850 --> 00:23:14.890 data to say we should  
NOTE Confidence: 0.9808407

00:23:14.890 --> 00:23:16.010 do that, and it may  
NOTE Confidence: 0.9808407

00:23:16.010 --> 00:23:17.390 actually make things worse.

NOTE Confidence: 0.93023175  
00:23:20.684 --> 00:23:22.125 So going back to the  
NOTE Confidence: 0.93023175  
00:23:22.285 --> 00:23:22.945 our case,  
NOTE Confidence: 0.99929446  
00:23:23.965 --> 00:23:25.005 I think that,  
NOTE Confidence: 0.9683259  
00:23:25.885 --> 00:23:27.405 you know, we the JAK  
NOTE Confidence: 0.9683259  
00:23:27.405 --> 00:23:29.164 two mutation was negative from  
NOTE Confidence: 0.9683259  
00:23:29.164 --> 00:23:30.285 what I recall, so we're  
NOTE Confidence: 0.9683259  
00:23:30.285 --> 00:23:31.484 now kinda going down this  
NOTE Confidence: 0.9683259  
00:23:31.484 --> 00:23:32.445 path of what we call  
NOTE Confidence: 0.9683259  
00:23:32.445 --> 00:23:33.505 secondary causes.  
NOTE Confidence: 0.96985286  
00:23:34.880 --> 00:23:36.000 For this patient, I would  
NOTE Confidence: 0.96985286  
00:23:36.000 --> 00:23:37.040 say it's really crucial to  
NOTE Confidence: 0.96985286  
00:23:37.040 --> 00:23:38.900 rule out medication related causes.  
NOTE Confidence: 0.92582494  
00:23:39.280 --> 00:23:40.720 Certainly check for carbon dioxide  
NOTE Confidence: 0.92582494  
00:23:40.720 --> 00:23:42.000 poisoning. And I think checking  
NOTE Confidence: 0.92582494  
00:23:42.000 --> 00:23:42.740 the erythropoietin  
NOTE Confidence: 0.99184316

00:23:43.040 --> 00:23:43.540 level,  
NOTE Confidence: 0.9925945  
00:23:44.000 --> 00:23:45.200 will help kinda guide us  
NOTE Confidence: 0.9925945  
00:23:45.200 --> 00:23:46.100 on next steps.  
NOTE Confidence: 0.94159406  
00:23:48.505 --> 00:23:49.945 Commonly, we might have a  
NOTE Confidence: 0.94159406  
00:23:49.945 --> 00:23:51.545 patient who has signs or  
NOTE Confidence: 0.94159406  
00:23:51.545 --> 00:23:53.225 symptoms suggestive of sleep apnea  
NOTE Confidence: 0.94159406  
00:23:53.225 --> 00:23:54.425 and a referral to pulmonary  
NOTE Confidence: 0.94159406  
00:23:54.425 --> 00:23:55.785 or sleep medicine sometimes can  
NOTE Confidence: 0.94159406  
00:23:55.785 --> 00:23:56.365 be useful.  
NOTE Confidence: 0.9755587  
00:23:57.625 --> 00:23:58.585 And I do not think  
NOTE Confidence: 0.9755587  
00:23:58.585 --> 00:24:00.045 there's any role for therapeutic  
NOTE Confidence: 0.9755587  
00:24:00.185 --> 00:24:01.625 phlebotomy in this type of  
NOTE Confidence: 0.9755587  
00:24:01.625 --> 00:24:02.125 case.  
NOTE Confidence: 0.9536772  
00:24:05.859 --> 00:24:07.059 Great. Thanks. Before we do  
NOTE Confidence: 0.9536772  
00:24:07.059 --> 00:24:08.100 case two, since this was  
NOTE Confidence: 0.9536772  
00:24:08.100 --> 00:24:08.980 eight years ago, I can



NOTE Confidence: 0.9536772  
00:24:08.980 --> 00:24:10.260 give you, like, the the  
NOTE Confidence: 0.9536772  
00:24:10.260 --> 00:24:12.100 final. So he did have  
NOTE Confidence: 0.9536772  
00:24:12.100 --> 00:24:13.940 a an epogen level before  
NOTE Confidence: 0.9536772  
00:24:13.940 --> 00:24:15.799 seeing hematology. It was negative.  
NOTE Confidence: 0.9358852  
00:24:17.059 --> 00:24:17.700 And then,  
NOTE Confidence: 0.95180243  
00:24:18.544 --> 00:24:20.404 he saw, Doctor. Persico,  
NOTE Confidence: 0.99151874  
00:24:21.265 --> 00:24:22.565 who did do the,  
NOTE Confidence: 0.948748  
00:24:23.105 --> 00:24:23.765 the carboxyhemoglobin  
NOTE Confidence: 0.96820104  
00:24:24.625 --> 00:24:25.924 study that was normal.  
NOTE Confidence: 0.89120966  
00:24:26.705 --> 00:24:28.005 And he did the CalR  
NOTE Confidence: 0.89120966  
00:24:28.225 --> 00:24:29.284 exon analysis  
NOTE Confidence: 0.960588  
00:24:29.664 --> 00:24:31.205 as well, which was negative.  
NOTE Confidence: 0.98772824  
00:24:32.090 --> 00:24:33.770 The workup eventually found that  
NOTE Confidence: 0.98772824  
00:24:33.770 --> 00:24:35.150 he had some, you know,  
NOTE Confidence: 0.9711155  
00:24:35.450 --> 00:24:37.050 mild to moderate sleep apnea,  
NOTE Confidence: 0.9711155

00:24:37.050 --> 00:24:38.109 and he's been on,  
NOTE Confidence: 0.8642767

00:24:38.970 --> 00:24:39.470 CPAP,  
NOTE Confidence: 0.8700054

00:24:39.850 --> 00:24:40.670 since. And his,  
NOTE Confidence: 0.98239464

00:24:41.530 --> 00:24:43.230 hemoglobin has been generally,  
NOTE Confidence: 0.9101066

00:24:43.930 --> 00:24:45.130 staying in, like, the sixteen  
NOTE Confidence: 0.9101066

00:24:45.130 --> 00:24:47.175 range. So, upper normal and  
NOTE Confidence: 0.9101066

00:24:47.255 --> 00:24:48.775 remained off because he didn't,  
NOTE Confidence: 0.9101066

00:24:48.775 --> 00:24:49.735 you know, we switched his  
NOTE Confidence: 0.9101066

00:24:49.735 --> 00:24:51.575 blood pressure around blood pressure  
NOTE Confidence: 0.9101066

00:24:51.575 --> 00:24:52.955 medicines around off the hydrochlorothiazide.  
NOTE Confidence: 0.99349856

00:24:53.575 --> 00:24:54.075 So,  
NOTE Confidence: 0.9642011

00:24:54.455 --> 00:24:55.335 and he may still have  
NOTE Confidence: 0.9642011

00:24:55.335 --> 00:24:56.295 a little bit of fatigue,  
NOTE Confidence: 0.9642011

00:24:56.295 --> 00:24:57.835 but, who who does?  
NOTE Confidence: 0.9110043

00:24:58.855 --> 00:25:00.455 So, thank you. The the  
NOTE Confidence: 0.9110043

00:25:00.455 --> 00:25:01.175 second case is,

NOTE Confidence: 0.9634057  
00:25:01.920 --> 00:25:03.920 this one, is actually sort  
NOTE Confidence: 0.9634057  
00:25:03.920 --> 00:25:04.900 of in the workup,  
NOTE Confidence: 0.84993935  
00:25:06.240 --> 00:25:07.220 now. It's a,  
NOTE Confidence: 0.90196574  
00:25:07.760 --> 00:25:08.880 seventy four year old woman.  
NOTE Confidence: 0.90196574  
00:25:08.880 --> 00:25:09.540 So recently  
NOTE Confidence: 0.91295254  
00:25:10.960 --> 00:25:12.660 just for a routine follow-up.  
NOTE Confidence: 0.91295254  
00:25:12.720 --> 00:25:14.720 She has, some chronic medical  
NOTE Confidence: 0.91295254  
00:25:14.720 --> 00:25:16.100 problems including obesity,  
NOTE Confidence: 0.9411072  
00:25:16.785 --> 00:25:18.565 AFib, hypertension, hyperlipidemia,  
NOTE Confidence: 0.99696285  
00:25:19.905 --> 00:25:21.845 remote history of adrenal insufficiency.  
NOTE Confidence: 0.9342513  
00:25:22.705 --> 00:25:23.925 You can see her medications.  
NOTE Confidence: 0.9342513  
00:25:24.145 --> 00:25:25.105 Most of them are old.  
NOTE Confidence: 0.9342513  
00:25:25.105 --> 00:25:25.845 The Gemteza,  
NOTE Confidence: 0.8716335  
00:25:26.545 --> 00:25:27.984 is, you know, maybe more  
NOTE Confidence: 0.8716335  
00:25:27.984 --> 00:25:28.484 new.  
NOTE Confidence: 0.93365943

00:25:29.585 --> 00:25:30.065 She,  
NOTE Confidence: 0.917304  
00:25:30.625 --> 00:25:32.520 was a former smoker, a  
NOTE Confidence: 0.917304  
00:25:32.600 --> 00:25:33.560 fair amount, as you can  
NOTE Confidence: 0.917304  
00:25:33.560 --> 00:25:34.700 see, ten to fifteen,  
NOTE Confidence: 0.87620664  
00:25:35.560 --> 00:25:36.380 pack year.  
NOTE Confidence: 0.9290324  
00:25:36.680 --> 00:25:38.300 And her family history also  
NOTE Confidence: 0.9290324  
00:25:38.359 --> 00:25:39.500 interestingly enough has  
NOTE Confidence: 0.94067883  
00:25:39.880 --> 00:25:40.460 a possible,  
NOTE Confidence: 0.9554987  
00:25:41.240 --> 00:25:41.740 hematologic,  
NOTE Confidence: 0.9480469  
00:25:43.000 --> 00:25:44.700 positive finding with the,  
NOTE Confidence: 0.8607256  
00:25:45.320 --> 00:25:47.020 what she says is her,  
NOTE Confidence: 0.8607256  
00:25:47.240 --> 00:25:47.740 her,  
NOTE Confidence: 0.94592136  
00:25:51.205 --> 00:25:52.905 father had, you know, elevated  
NOTE Confidence: 0.94592136  
00:25:53.045 --> 00:25:53.785 blood counts,  
NOTE Confidence: 0.860061  
00:25:54.244 --> 00:25:55.845 but didn't necessarily do  
NOTE Confidence: 0.9210445  
00:25:56.645 --> 00:25:58.025 she didn't know the diagnosis

NOTE Confidence: 0.957985  
00:25:58.725 --> 00:26:00.005 per se. So,  
NOTE Confidence: 0.9958976  
00:26:00.484 --> 00:26:01.465 so this is her.  
NOTE Confidence: 0.9423406  
00:26:03.109 --> 00:26:04.550 We did some, some blood  
NOTE Confidence: 0.9423406  
00:26:04.550 --> 00:26:06.230 work and, you can see  
NOTE Confidence: 0.9423406  
00:26:06.230 --> 00:26:07.830 her white count upper normal,  
NOTE Confidence: 0.9423406  
00:26:07.830 --> 00:26:08.330 hemoglobin  
NOTE Confidence: 0.8940203  
00:26:08.869 --> 00:26:09.369 normal,  
NOTE Confidence: 0.99632245  
00:26:10.070 --> 00:26:11.530 and platelets were elevated,  
NOTE Confidence: 0.9997824  
00:26:12.150 --> 00:26:12.650 repeated  
NOTE Confidence: 0.84418213  
00:26:13.270 --> 00:26:14.070 and were,  
NOTE Confidence: 0.9988748  
00:26:14.630 --> 00:26:16.410 pretty similar in the four  
NOTE Confidence: 0.99367374  
00:26:16.845 --> 00:26:18.684 fifty to five twenty five  
NOTE Confidence: 0.99367374  
00:26:18.684 --> 00:26:19.184 range.  
NOTE Confidence: 0.99348944  
00:26:20.125 --> 00:26:21.665 No evidence of kidney disease,  
NOTE Confidence: 0.8656547  
00:26:22.845 --> 00:26:23.744 liver disease,  
NOTE Confidence: 0.99855155

00:26:24.445 --> 00:26:25.345 did do an  
NOTE Confidence: 0.80284965  
00:26:25.645 --> 00:26:26.145 ultrasound,  
NOTE Confidence: 0.97956055  
00:26:26.765 --> 00:26:27.725 as part of the workup  
NOTE Confidence: 0.97956055  
00:26:27.725 --> 00:26:29.005 as well, which showed evidence  
NOTE Confidence: 0.97956055  
00:26:29.005 --> 00:26:30.365 of fatty liver, not surprising  
NOTE Confidence: 0.97956055  
00:26:30.365 --> 00:26:32.230 given her her medical history,  
NOTE Confidence: 0.97559404  
00:26:32.850 --> 00:26:34.530 and, no evidence of any,  
NOTE Confidence: 0.97559404  
00:26:35.010 --> 00:26:35.510 splenomegaly  
NOTE Confidence: 0.95412064  
00:26:35.970 --> 00:26:36.470 or,  
NOTE Confidence: 0.839105  
00:26:37.010 --> 00:26:37.670 or any,  
NOTE Confidence: 0.99831486  
00:26:38.850 --> 00:26:40.950 any abnormalities in the spleen.  
NOTE Confidence: 0.9444338  
00:26:43.250 --> 00:26:43.750 So,  
NOTE Confidence: 0.9555517  
00:26:44.475 --> 00:26:46.015 this one's on ongoing.  
NOTE Confidence: 0.9828774  
00:26:46.315 --> 00:26:47.215 So she,  
NOTE Confidence: 0.9059272  
00:26:48.075 --> 00:26:49.595 were next to order the,  
NOTE Confidence: 0.9059272  
00:26:49.835 --> 00:26:51.515 blood smear, but thought, unlike

NOTE Confidence: 0.9059272

00:26:51.515 --> 00:26:52.395 the other case, we can

NOTE Confidence: 0.9059272

00:26:52.395 --> 00:26:53.755 do sort of a a

NOTE Confidence: 0.9059272

00:26:53.755 --> 00:26:54.734 a fresh case.

NOTE Confidence: 0.93908674

00:26:55.435 --> 00:26:56.895 And you can see again,

NOTE Confidence: 0.8126709

00:26:57.595 --> 00:26:59.215 a a care signature pathway,

NOTE Confidence: 0.97581744

00:27:00.040 --> 00:27:01.000 showing no,

NOTE Confidence: 0.9993611

00:27:01.480 --> 00:27:01.980 real

NOTE Confidence: 0.9903834

00:27:02.440 --> 00:27:03.420 alarm symptoms,

NOTE Confidence: 0.96589565

00:27:03.880 --> 00:27:04.920 which is good, but a

NOTE Confidence: 0.96589565

00:27:04.920 --> 00:27:05.420 peripheral,

NOTE Confidence: 0.949256

00:27:05.880 --> 00:27:07.240 blood smear that sort of,

NOTE Confidence: 0.949256

00:27:07.560 --> 00:27:08.760 you know, ordered not done.

NOTE Confidence: 0.949256

00:27:08.760 --> 00:27:09.400 So you can see on

NOTE Confidence: 0.949256

00:27:09.400 --> 00:27:10.760 the bottom, you know, some

NOTE Confidence: 0.949256

00:27:10.760 --> 00:27:11.500 more worrisome,

NOTE Confidence: 0.9562943

00:27:12.945 --> 00:27:13.445 findings,  
NOTE Confidence: 0.9596957  
00:27:14.145 --> 00:27:15.424 that we haven't gotten to.  
NOTE Confidence: 0.9596957  
00:27:15.424 --> 00:27:16.545 Hopefully, won't get to, but  
NOTE Confidence: 0.9596957  
00:27:16.545 --> 00:27:18.005 haven't ruled out yet.  
NOTE Confidence: 0.9144208  
00:27:20.865 --> 00:27:22.005 So I'll pass,  
NOTE Confidence: 0.81979966  
00:27:22.465 --> 00:27:22.965 this,  
NOTE Confidence: 0.81197315  
00:27:23.265 --> 00:27:24.980 onto our expert and  
NOTE Confidence: 0.9665192  
00:27:26.000 --> 00:27:27.760 and, obviously, I'm around for  
NOTE Confidence: 0.9665192  
00:27:27.760 --> 00:27:28.260 questions.  
NOTE Confidence: 0.74971354  
00:27:31.520 --> 00:27:32.420 Thank you.  
NOTE Confidence: 0.97699606  
00:27:33.840 --> 00:27:35.140 So I think unlike  
NOTE Confidence: 0.99107057  
00:27:36.475 --> 00:27:37.855 erythrocytosis or polycythemia,  
NOTE Confidence: 0.908761  
00:27:38.715 --> 00:27:40.494 the workup of thrombocytosis  
NOTE Confidence: 0.77447015  
00:27:41.034 --> 00:27:43.034 is and I misspelled it  
NOTE Confidence: 0.77447015  
00:27:43.034 --> 00:27:43.534 here,  
NOTE Confidence: 0.8341453  
00:27:45.595 --> 00:27:46.635 the expert. But,



NOTE Confidence: 0.8968192  
00:27:48.875 --> 00:27:49.595 it's it's  
NOTE Confidence: 0.89703494  
00:27:50.850 --> 00:27:52.630 I think clinically in both  
NOTE Confidence: 0.89703494  
00:27:52.690 --> 00:27:54.450 the laboratory evaluation and,  
NOTE Confidence: 0.9398525  
00:27:55.010 --> 00:27:56.609 you know, different causes, it's  
NOTE Confidence: 0.9398525  
00:27:56.609 --> 00:27:57.669 just a lot more  
NOTE Confidence: 0.8810647  
00:27:58.049 --> 00:27:59.190 simple or simpler,  
NOTE Confidence: 0.9904963  
00:27:59.730 --> 00:28:00.230 and  
NOTE Confidence: 0.63593274  
00:28:00.530 --> 00:28:01.510 perhaps reflects  
NOTE Confidence: 0.77340686  
00:28:02.130 --> 00:28:02.789 the physiology  
NOTE Confidence: 0.90240926  
00:28:04.544 --> 00:28:05.585 because you know the platelet  
NOTE Confidence: 0.90240926  
00:28:05.585 --> 00:28:07.184 production and its regulation is  
NOTE Confidence: 0.90240926  
00:28:07.184 --> 00:28:07.845 so much  
NOTE Confidence: 0.97986513  
00:28:08.465 --> 00:28:08.965 simpler  
NOTE Confidence: 0.91632164  
00:28:09.744 --> 00:28:10.865 than red cells, you know  
NOTE Confidence: 0.91632164  
00:28:10.865 --> 00:28:12.544 there's no kidney involved, there's  
NOTE Confidence: 0.91632164

00:28:12.544 --> 00:28:13.744 no liver involved, and you  
NOTE Confidence: 0.91632164

00:28:13.744 --> 00:28:14.565 know there isn't  
NOTE Confidence: 0.88465947

00:28:14.865 --> 00:28:16.484 a you know feedback mechanism  
NOTE Confidence: 0.96182483

00:28:17.024 --> 00:28:17.524 that's  
NOTE Confidence: 0.93573534

00:28:18.304 --> 00:28:20.970 related to kind of oxygen  
NOTE Confidence: 0.93573534

00:28:20.970 --> 00:28:22.830 levels or hypoxia or hyperoxia.  
NOTE Confidence: 0.93573534

00:28:22.970 --> 00:28:23.470 And,  
NOTE Confidence: 0.9754739

00:28:23.930 --> 00:28:24.670 so thrombocytosis  
NOTE Confidence: 0.89931214

00:28:24.970 --> 00:28:26.030 is, especially  
NOTE Confidence: 0.92382157

00:28:28.570 --> 00:28:29.630 isolated thrombocytosis,  
NOTE Confidence: 0.9526966

00:28:30.090 --> 00:28:31.050 and and this is what  
NOTE Confidence: 0.9526966

00:28:31.050 --> 00:28:32.590 our our our  
NOTE Confidence: 0.9192524

00:28:32.905 --> 00:28:34.205 patient here has is,  
NOTE Confidence: 0.79799455

00:28:35.065 --> 00:28:36.045 is mostly  
NOTE Confidence: 0.9483092

00:28:36.505 --> 00:28:37.005 incidental.  
NOTE Confidence: 0.64306974

00:28:38.345 --> 00:28:38.845 And,

NOTE Confidence: 0.97414  
00:28:41.065 --> 00:28:42.025 with that, what I mean  
NOTE Confidence: 0.97414  
00:28:42.025 --> 00:28:43.225 is, you know, most of  
NOTE Confidence: 0.97414  
00:28:43.225 --> 00:28:43.885 the time,  
NOTE Confidence: 0.9233688  
00:28:44.265 --> 00:28:45.645 patients are not very symptomatic,  
NOTE Confidence: 0.9233688  
00:28:45.705 --> 00:28:47.245 and these are picked up,  
NOTE Confidence: 0.90702313  
00:28:47.810 --> 00:28:49.570 either, you know, routine labs.  
NOTE Confidence: 0.90702313  
00:28:49.570 --> 00:28:50.530 They they could be peri  
NOTE Confidence: 0.90702313  
00:28:50.530 --> 00:28:51.650 up. They could be just  
NOTE Confidence: 0.90702313  
00:28:51.650 --> 00:28:52.710 their handles, physicals,  
NOTE Confidence: 0.9661348  
00:28:54.130 --> 00:28:54.870 or otherwise.  
NOTE Confidence: 0.9504588  
00:28:55.810 --> 00:28:56.630 And and  
NOTE Confidence: 0.99547845  
00:28:56.930 --> 00:28:58.790 and to sum it up,  
NOTE Confidence: 0.9431283  
00:28:59.410 --> 00:29:00.450 most of the times when  
NOTE Confidence: 0.9431283  
00:29:00.450 --> 00:29:00.950 we're  
NOTE Confidence: 0.9923752  
00:29:01.835 --> 00:29:03.035 when when we're dealing with,  
NOTE Confidence: 0.9923752

00:29:03.275 --> 00:29:04.095 with thrombocytosis  
NOTE Confidence: 0.91396415

00:29:05.035 --> 00:29:05.535 or  
NOTE Confidence: 0.8324205

00:29:05.915 --> 00:29:07.595 especially a persistent, you know,  
NOTE Confidence: 0.8324205

00:29:07.595 --> 00:29:08.095 thrombocytosis  
NOTE Confidence: 0.9636649

00:29:08.475 --> 00:29:10.395 or elevated platelet counts, we  
NOTE Confidence: 0.9636649

00:29:10.395 --> 00:29:11.055 we wanna  
NOTE Confidence: 0.81179047

00:29:11.995 --> 00:29:12.495 perhaps,  
NOTE Confidence: 0.9869682

00:29:13.130 --> 00:29:14.410 you know, figure out whether  
NOTE Confidence: 0.9869682

00:29:14.410 --> 00:29:17.390 it's reactive or or, essential.  
NOTE Confidence: 0.98661727

00:29:18.490 --> 00:29:19.470 Next slide, please.  
NOTE Confidence: 0.96666354

00:29:21.770 --> 00:29:23.070 So when I'm,  
NOTE Confidence: 0.99819237

00:29:24.090 --> 00:29:24.590 seeing  
NOTE Confidence: 0.99233186

00:29:25.815 --> 00:29:26.475 a referral,  
NOTE Confidence: 0.9156189

00:29:27.815 --> 00:29:28.934 of course, you know, I  
NOTE Confidence: 0.9156189

00:29:28.934 --> 00:29:30.635 go through history and,  
NOTE Confidence: 0.92967975

00:29:31.335 --> 00:29:32.695 and and and that and

NOTE Confidence: 0.92967975

00:29:32.695 --> 00:29:33.735 just trying to see whether

NOTE Confidence: 0.92967975

00:29:33.735 --> 00:29:35.414 there are any symptoms, which,

NOTE Confidence: 0.92967975

00:29:35.654 --> 00:29:37.174 most of these patients typically

NOTE Confidence: 0.92967975

00:29:37.174 --> 00:29:37.674 don't.

NOTE Confidence: 0.98629713

00:29:37.975 --> 00:29:39.195 I I I feel

NOTE Confidence: 0.96475583

00:29:39.610 --> 00:29:40.990 patients with polycythemia

NOTE Confidence: 0.9202901

00:29:41.370 --> 00:29:44.090 or, other myeloprolifer neoplasms typically,

NOTE Confidence: 0.9246631

00:29:44.730 --> 00:29:45.870 tend tend to have,

NOTE Confidence: 0.9484636

00:29:46.490 --> 00:29:47.929 some more symptoms especially on,

NOTE Confidence: 0.9484636

00:29:47.929 --> 00:29:49.130 you know, when we get

NOTE Confidence: 0.9484636

00:29:49.130 --> 00:29:51.149 down to more direct questions.

NOTE Confidence: 0.9586236

00:29:52.325 --> 00:29:52.825 But

NOTE Confidence: 0.85855377

00:29:53.365 --> 00:29:54.905 but but you know thrombocytosis

NOTE Confidence: 0.9771355

00:29:55.365 --> 00:29:56.985 can also produce some vasomotor

NOTE Confidence: 0.94092155

00:29:57.285 --> 00:29:59.045 symptoms and I've certainly had

NOTE Confidence: 0.94092155

00:29:59.045 --> 00:30:01.305 people with with migraines or  
NOTE Confidence: 0.94092155

00:30:01.605 --> 00:30:02.265 with other  
NOTE Confidence: 0.9139916

00:30:02.565 --> 00:30:04.345 vasomotor symptoms that get better  
NOTE Confidence: 0.9139916

00:30:04.405 --> 00:30:06.485 with with treatment especially with  
NOTE Confidence: 0.9139916

00:30:06.485 --> 00:30:06.985 essential  
NOTE Confidence: 0.9850853

00:30:07.490 --> 00:30:07.990 thrombocytosis.  
NOTE Confidence: 0.9734914

00:30:09.570 --> 00:30:10.770 But in history, other than  
NOTE Confidence: 0.9734914

00:30:10.770 --> 00:30:11.890 that, I'm I'm just trying  
NOTE Confidence: 0.9734914

00:30:11.890 --> 00:30:13.190 to, figure out,  
NOTE Confidence: 0.92386127

00:30:14.930 --> 00:30:16.130 you know, whether the the  
NOTE Confidence: 0.92386127

00:30:16.130 --> 00:30:17.350 person is asplenic,  
NOTE Confidence: 0.93230313

00:30:17.730 --> 00:30:19.330 and and and happens less  
NOTE Confidence: 0.93230313

00:30:19.330 --> 00:30:21.250 so, but but certainly, you  
NOTE Confidence: 0.93230313

00:30:21.250 --> 00:30:22.610 know, we we see people  
NOTE Confidence: 0.93230313

00:30:22.610 --> 00:30:23.865 from, you know,  
NOTE Confidence: 0.8536245

00:30:24.345 --> 00:30:24.845 from,

NOTE Confidence: 0.92021704  
00:30:25.785 --> 00:30:26.925 time to time getting,  
NOTE Confidence: 0.9576209  
00:30:28.905 --> 00:30:30.185 either traumatic or, you know,  
NOTE Confidence: 0.9576209  
00:30:30.185 --> 00:30:30.685 other,  
NOTE Confidence: 0.9221064  
00:30:31.305 --> 00:30:32.825 re for for other reasons,  
NOTE Confidence: 0.9221064  
00:30:32.825 --> 00:30:34.425 getting splenectomy or and and  
NOTE Confidence: 0.9221064  
00:30:34.425 --> 00:30:35.760 our ACE clinic on that,  
NOTE Confidence: 0.9221064  
00:30:35.760 --> 00:30:36.980 and that will always,  
NOTE Confidence: 0.9351534  
00:30:38.240 --> 00:30:39.680 you know, cause kind of  
NOTE Confidence: 0.9351534  
00:30:39.680 --> 00:30:40.980 mild to moderate thrombocytosis.  
NOTE Confidence: 0.9720168  
00:30:42.080 --> 00:30:43.440 And then the trend is,  
NOTE Confidence: 0.9720168  
00:30:43.680 --> 00:30:45.460 really important because, you know,  
NOTE Confidence: 0.8425031  
00:30:47.280 --> 00:30:48.340 if if it's  
NOTE Confidence: 0.98192096  
00:30:48.720 --> 00:30:49.220 really,  
NOTE Confidence: 0.9743922  
00:30:51.655 --> 00:30:52.455 you know, you look back  
NOTE Confidence: 0.9743922  
00:30:52.455 --> 00:30:52.955 and,  
NOTE Confidence: 0.9793489

00:30:53.575 --> 00:30:54.075 someone  
NOTE Confidence: 0.952685

00:30:54.615 --> 00:30:56.295 lives lives around hundred, hundred  
NOTE Confidence: 0.952685

00:30:56.295 --> 00:30:57.335 and fifty or, you know,  
NOTE Confidence: 0.952685

00:30:57.335 --> 00:30:58.315 two hundred and,  
NOTE Confidence: 0.971148

00:30:58.935 --> 00:31:00.455 and, you know, and slowly,  
NOTE Confidence: 0.971148

00:31:00.455 --> 00:31:01.575 the numbers have been creeping  
NOTE Confidence: 0.971148

00:31:01.575 --> 00:31:03.335 up, and they've just recently  
NOTE Confidence: 0.971148

00:31:03.335 --> 00:31:04.455 have come up to maybe  
NOTE Confidence: 0.971148

00:31:04.455 --> 00:31:05.735 four fifty or five hundred  
NOTE Confidence: 0.971148

00:31:05.735 --> 00:31:07.010 range. You know, it kind  
NOTE Confidence: 0.971148

00:31:07.010 --> 00:31:08.289 of gives a sort of  
NOTE Confidence: 0.971148

00:31:08.289 --> 00:31:09.649 sense that maybe this is  
NOTE Confidence: 0.971148

00:31:09.649 --> 00:31:10.630 an essential thrombocytosis  
NOTE Confidence: 0.8735603

00:31:11.490 --> 00:31:13.169 and usually takes years to  
NOTE Confidence: 0.8735603

00:31:13.169 --> 00:31:14.470 kind of, double,  
NOTE Confidence: 0.96781135

00:31:15.649 --> 00:31:16.610 or, you know, the doubling



NOTE Confidence: 0.96781135  
00:31:16.610 --> 00:31:18.450 time is typically very, very  
NOTE Confidence: 0.96781135  
00:31:18.450 --> 00:31:19.975 slow. The trend is important.  
NOTE Confidence: 0.9536549  
00:31:20.515 --> 00:31:21.475 And then if I see  
NOTE Confidence: 0.9536549  
00:31:21.475 --> 00:31:23.315 some there's someone who perhaps  
NOTE Confidence: 0.9536549  
00:31:23.315 --> 00:31:24.355 goes up to six hundred,  
NOTE Confidence: 0.9536549  
00:31:24.355 --> 00:31:25.395 seven hundred and then goes  
NOTE Confidence: 0.9536549  
00:31:25.395 --> 00:31:26.435 back to normal and then,  
NOTE Confidence: 0.9536549  
00:31:26.435 --> 00:31:27.735 you know, goes back again,  
NOTE Confidence: 0.9536549  
00:31:27.735 --> 00:31:28.195 I,  
NOTE Confidence: 0.96155995  
00:31:28.755 --> 00:31:29.235 I,  
NOTE Confidence: 0.9378726  
00:31:29.555 --> 00:31:31.095 typically, like, you know,  
NOTE Confidence: 0.9832322  
00:31:31.715 --> 00:31:33.335 after finishing the workup,  
NOTE Confidence: 0.9893218  
00:31:33.715 --> 00:31:34.375 you know,  
NOTE Confidence: 0.9313566  
00:31:35.240 --> 00:31:36.280 realize that, you know, these  
NOTE Confidence: 0.9313566  
00:31:36.280 --> 00:31:38.060 are mostly kind of reactive,  
NOTE Confidence: 0.99822086

00:31:38.680 --> 00:31:39.180 thrombocytosis.  
NOTE Confidence: 0.56037474

00:31:41.160 --> 00:31:41.660 And  
NOTE Confidence: 0.9508942

00:31:41.960 --> 00:31:43.480 and then, you know, with  
NOTE Confidence: 0.9508942

00:31:43.480 --> 00:31:44.680 recent history of, you know,  
NOTE Confidence: 0.9508942

00:31:44.680 --> 00:31:46.540 surgery, sometimes, like, you know,  
NOTE Confidence: 0.9508942

00:31:46.760 --> 00:31:48.200 patients can have very extensive  
NOTE Confidence: 0.9508942

00:31:48.200 --> 00:31:49.960 surgery, especially orthopedic surgery is  
NOTE Confidence: 0.9508942

00:31:49.960 --> 00:31:51.315 very well described,  
NOTE Confidence: 0.92068577

00:31:52.655 --> 00:31:53.855 hip surgery for example hip  
NOTE Confidence: 0.92068577

00:31:53.855 --> 00:31:55.455 fracture surgery you know patients  
NOTE Confidence: 0.92068577

00:31:55.455 --> 00:31:56.115 can have  
NOTE Confidence: 0.93970215

00:31:56.415 --> 00:31:58.015 first thrombocytopenia and then you  
NOTE Confidence: 0.93970215

00:31:58.015 --> 00:31:59.695 know reactive thrombocytosis that can  
NOTE Confidence: 0.93970215

00:31:59.695 --> 00:32:00.675 last for months,  
NOTE Confidence: 0.92398524

00:32:01.775 --> 00:32:02.735 and and the same is  
NOTE Confidence: 0.92398524

00:32:02.735 --> 00:32:04.015 with chronic infections it could

NOTE Confidence: 0.92398524  
00:32:04.015 --> 00:32:05.135 be also myelitis or you  
NOTE Confidence: 0.92398524  
00:32:05.135 --> 00:32:06.435 know other chronic infections  
NOTE Confidence: 0.93970835  
00:32:07.110 --> 00:32:08.870 Even acute infection, viral infection,  
NOTE Confidence: 0.93970835  
00:32:08.870 --> 00:32:10.470 you would see only, you  
NOTE Confidence: 0.93970835  
00:32:10.470 --> 00:32:11.670 know, ITP or, you know,  
NOTE Confidence: 0.93970835  
00:32:11.670 --> 00:32:12.170 thrombocytopenia  
NOTE Confidence: 0.90314835  
00:32:12.710 --> 00:32:13.750 kind of syndrome, but a  
NOTE Confidence: 0.90314835  
00:32:13.750 --> 00:32:14.250 thrombocytosis  
NOTE Confidence: 0.9027762  
00:32:14.630 --> 00:32:15.930 that could last for weeks,  
NOTE Confidence: 0.9027762  
00:32:16.230 --> 00:32:17.430 weeks to months and and  
NOTE Confidence: 0.9027762  
00:32:17.430 --> 00:32:19.770 then other, chronic inflammatory states,  
NOTE Confidence: 0.95465994  
00:32:20.150 --> 00:32:22.465 especially rheumatologic diseases. But but  
NOTE Confidence: 0.95465994  
00:32:22.465 --> 00:32:22.965 even  
NOTE Confidence: 0.94208384  
00:32:23.664 --> 00:32:24.164 milder,  
NOTE Confidence: 0.9790897  
00:32:25.504 --> 00:32:26.804 general sort of  
NOTE Confidence: 0.8984043

00:32:27.184 --> 00:32:28.544 or, you know, in in  
NOTE Confidence: 0.8984043

00:32:28.544 --> 00:32:29.044 inflammatory  
NOTE Confidence: 0.9465534

00:32:29.424 --> 00:32:31.205 kind of conditions, even diabetes  
NOTE Confidence: 0.9465534

00:32:31.264 --> 00:32:31.764 or,  
NOTE Confidence: 0.90120614

00:32:32.225 --> 00:32:33.745 or a poorly controlled diabetes  
NOTE Confidence: 0.90120614

00:32:33.745 --> 00:32:34.804 or or others.  
NOTE Confidence: 0.95464283

00:32:35.850 --> 00:32:37.450 And then, some medications as  
NOTE Confidence: 0.95464283

00:32:37.450 --> 00:32:38.650 well. I mean, I've certainly  
NOTE Confidence: 0.95464283

00:32:38.650 --> 00:32:39.150 seen,  
NOTE Confidence: 0.97000533

00:32:40.490 --> 00:32:41.710 patients getting steroids.  
NOTE Confidence: 0.9961434

00:32:42.890 --> 00:32:43.770 The last one I saw  
NOTE Confidence: 0.9961434

00:32:43.770 --> 00:32:44.670 was, you know,  
NOTE Confidence: 0.78436214

00:32:45.050 --> 00:32:45.950 a person getting,  
NOTE Confidence: 0.997572

00:32:46.985 --> 00:32:47.805 you know, I think  
NOTE Confidence: 0.93525404

00:32:48.425 --> 00:32:50.185 epidurals and and every time,  
NOTE Confidence: 0.93525404

00:32:50.185 --> 00:32:51.225 you know, it go up

NOTE Confidence: 0.93525404

00:32:51.225 --> 00:32:52.105 and then come down. And

NOTE Confidence: 0.93525404

00:32:52.105 --> 00:32:53.305 then six months later, you

NOTE Confidence: 0.93525404

00:32:53.305 --> 00:32:54.185 know, it'll go up and

NOTE Confidence: 0.93525404

00:32:54.185 --> 00:32:55.385 come down. So, definitely, you

NOTE Confidence: 0.93525404

00:32:55.385 --> 00:32:56.765 know, steroids can do that.

NOTE Confidence: 0.93525404

00:32:56.905 --> 00:32:58.365 Stimulants also I've seen,

NOTE Confidence: 0.9502632

00:32:59.450 --> 00:33:00.750 especially with methylphenidate.

NOTE Confidence: 0.9678008

00:33:01.930 --> 00:33:03.290 It's not being reported, but,

NOTE Confidence: 0.9678008

00:33:03.290 --> 00:33:04.570 you know, I think I've

NOTE Confidence: 0.9678008

00:33:04.570 --> 00:33:05.690 seen a bunch of patients

NOTE Confidence: 0.9678008

00:33:05.690 --> 00:33:06.970 who really go on it.

NOTE Confidence: 0.9678008

00:33:06.970 --> 00:33:08.270 The patients go high,

NOTE Confidence: 0.94497997

00:33:08.970 --> 00:33:10.410 and then, you know, and

NOTE Confidence: 0.94497997

00:33:10.410 --> 00:33:11.290 then they're off of it

NOTE Confidence: 0.94497997

00:33:11.290 --> 00:33:12.250 and and it comes down.

NOTE Confidence: 0.94497997

00:33:12.250 --> 00:33:12.705 So,  
NOTE Confidence: 0.97014797  
00:33:13.345 --> 00:33:14.085 and then,  
NOTE Confidence: 0.9518502  
00:33:14.544 --> 00:33:15.505 and then there are other,  
NOTE Confidence: 0.9518502  
00:33:15.505 --> 00:33:16.865 you know, chemotherapeutic agents. And  
NOTE Confidence: 0.9518502  
00:33:16.865 --> 00:33:18.065 gemcitabine is a big one  
NOTE Confidence: 0.9518502  
00:33:18.065 --> 00:33:18.865 where, you know, you could  
NOTE Confidence: 0.9518502  
00:33:18.865 --> 00:33:20.005 have really extreme thrombocytosis,  
NOTE Confidence: 0.97290534  
00:33:20.945 --> 00:33:22.404 but those those would be  
NOTE Confidence: 0.97290534  
00:33:22.544 --> 00:33:23.044 rare.  
NOTE Confidence: 0.8535692  
00:33:24.544 --> 00:33:25.745 And then, then coming to  
NOTE Confidence: 0.8535692  
00:33:25.745 --> 00:33:27.424 the laboratory workup and so,  
NOTE Confidence: 0.8535692  
00:33:27.424 --> 00:33:28.005 you know,  
NOTE Confidence: 0.9408829  
00:33:29.490 --> 00:33:30.850 you know, they've had at  
NOTE Confidence: 0.9408829  
00:33:30.850 --> 00:33:32.130 least a few CBC, but,  
NOTE Confidence: 0.9408829  
00:33:32.130 --> 00:33:33.810 you know, that's what, we  
NOTE Confidence: 0.9408829  
00:33:33.810 --> 00:33:34.770 end up getting in smear.

NOTE Confidence: 0.9408829  
00:33:34.770 --> 00:33:36.770 And smear becomes very important  
NOTE Confidence: 0.9408829  
00:33:36.770 --> 00:33:37.270 because,  
NOTE Confidence: 0.9954866  
00:33:39.730 --> 00:33:40.470 many times,  
NOTE Confidence: 0.9037695  
00:33:41.145 --> 00:33:42.445 you know, thrombocytosis  
NOTE Confidence: 0.9306202  
00:33:42.905 --> 00:33:43.885 also causes,  
NOTE Confidence: 0.9536624  
00:33:45.225 --> 00:33:46.365 how do I put this,  
NOTE Confidence: 0.99099004  
00:33:46.665 --> 00:33:48.205 some degree of pseudothrombocytopenia.  
NOTE Confidence: 0.94385654  
00:33:50.825 --> 00:33:51.865 And what I mean by  
NOTE Confidence: 0.94385654  
00:33:51.865 --> 00:33:52.665 that is, like, you know,  
NOTE Confidence: 0.94385654  
00:33:52.665 --> 00:33:53.785 you'd see a platelet count  
NOTE Confidence: 0.94385654  
00:33:53.785 --> 00:33:54.600 of five hundred or six  
NOTE Confidence: 0.94385654  
00:33:54.679 --> 00:33:55.960 hundred reported platelet count of  
NOTE Confidence: 0.94385654  
00:33:55.960 --> 00:33:56.679 five, six hundred, and then  
NOTE Confidence: 0.94385654  
00:33:56.679 --> 00:33:57.640 you look under the smear  
NOTE Confidence: 0.94385654  
00:33:57.640 --> 00:33:58.440 and there are many, many,  
NOTE Confidence: 0.94385654

00:33:58.440 --> 00:34:00.200 many clumps. And so especially  
NOTE Confidence: 0.94385654

00:34:00.200 --> 00:34:01.799 with the central thrombocytosis. And  
NOTE Confidence: 0.94385654

00:34:01.799 --> 00:34:02.299 so  
NOTE Confidence: 0.9694464

00:34:02.600 --> 00:34:03.480 so the, you know, the  
NOTE Confidence: 0.9694464

00:34:03.480 --> 00:34:05.080 platelet count the actual platelet  
NOTE Confidence: 0.9694464

00:34:05.080 --> 00:34:07.240 count is is way much  
NOTE Confidence: 0.9694464

00:34:07.240 --> 00:34:08.140 higher. And,  
NOTE Confidence: 0.99652433

00:34:08.600 --> 00:34:09.420 and I  
NOTE Confidence: 0.96291804

00:34:10.025 --> 00:34:10.844 sort of, like,  
NOTE Confidence: 0.9879109

00:34:11.145 --> 00:34:12.265 you know, see that a  
NOTE Confidence: 0.9879109

00:34:12.265 --> 00:34:13.565 lot more with with,  
NOTE Confidence: 0.9022719

00:34:14.025 --> 00:34:15.245 with, inflammatory,  
NOTE Confidence: 0.99109554

00:34:16.985 --> 00:34:17.485 states.  
NOTE Confidence: 0.90172416

00:34:18.105 --> 00:34:19.385 But, anyway, smear is pretty  
NOTE Confidence: 0.90172416

00:34:19.385 --> 00:34:19.885 useful,  
NOTE Confidence: 0.92333764

00:34:20.344 --> 00:34:21.625 especially you're also looking for



NOTE Confidence: 0.92333764  
00:34:21.625 --> 00:34:23.225 other atypical, you know, cells  
NOTE Confidence: 0.92333764  
00:34:23.225 --> 00:34:24.480 or, you know, sometimes they're  
NOTE Confidence: 0.92333764  
00:34:24.480 --> 00:34:25.600 not reported or they're within  
NOTE Confidence: 0.92333764  
00:34:25.600 --> 00:34:27.360 the normal range and and,  
NOTE Confidence: 0.92333764  
00:34:27.600 --> 00:34:29.200 and you appreciate, you know,  
NOTE Confidence: 0.92333764  
00:34:29.200 --> 00:34:30.020 they maybe,  
NOTE Confidence: 0.64667237  
00:34:30.560 --> 00:34:31.760 or question this poise or  
NOTE Confidence: 0.64667237  
00:34:31.760 --> 00:34:32.260 or,  
NOTE Confidence: 0.95636356  
00:34:33.200 --> 00:34:34.400 so smear becomes very important.  
NOTE Confidence: 0.95636356  
00:34:34.400 --> 00:34:36.020 And then and then ferritin,  
NOTE Confidence: 0.9327403  
00:34:36.400 --> 00:34:37.440 and with with that, what  
NOTE Confidence: 0.9327403  
00:34:37.440 --> 00:34:38.400 I mean is iron iron  
NOTE Confidence: 0.9327403  
00:34:38.400 --> 00:34:39.705 studies, I personally just, you  
NOTE Confidence: 0.9327403  
00:34:39.705 --> 00:34:41.625 know, get ferritin, and that's  
NOTE Confidence: 0.9327403  
00:34:41.625 --> 00:34:43.005 my iron panel. But,  
NOTE Confidence: 0.99254274

00:34:43.625 --> 00:34:45.885 but, you know, in in  
NOTE Confidence: 0.99254274

00:34:46.025 --> 00:34:46.525 outpatients,  
NOTE Confidence: 0.9918328

00:34:46.825 --> 00:34:48.185 the most common cause of,  
NOTE Confidence: 0.9918328

00:34:48.505 --> 00:34:49.165 of thrombocytosis  
NOTE Confidence: 0.5759155

00:34:50.025 --> 00:34:50.685 is is,  
NOTE Confidence: 0.9597764

00:34:51.305 --> 00:34:52.665 is iron deficiency and, you  
NOTE Confidence: 0.9597764

00:34:52.665 --> 00:34:54.260 know, now the the biology  
NOTE Confidence: 0.9597764

00:34:54.260 --> 00:34:55.540 and the mechanism behind it  
NOTE Confidence: 0.9597764

00:34:55.540 --> 00:34:56.099 is also,  
NOTE Confidence: 0.9939809

00:34:56.500 --> 00:34:57.480 very well known.  
NOTE Confidence: 0.9725072

00:34:58.500 --> 00:34:59.619 In fact, you can kind  
NOTE Confidence: 0.9725072

00:34:59.619 --> 00:35:01.060 of divide the humanity into  
NOTE Confidence: 0.9725072

00:35:01.060 --> 00:35:01.940 two, those who would, you  
NOTE Confidence: 0.9725072

00:35:01.940 --> 00:35:03.320 know, really have thrombocytosis  
NOTE Confidence: 0.94364893

00:35:03.700 --> 00:35:04.660 and those who wouldn't with  
NOTE Confidence: 0.94364893

00:35:04.660 --> 00:35:06.494 iron deficiency. And so, so

NOTE Confidence: 0.94364893

00:35:06.494 --> 00:35:07.214 this is, you know, you

NOTE Confidence: 0.94364893

00:35:07.214 --> 00:35:08.594 know, perhaps the most common,

NOTE Confidence: 0.99775934

00:35:08.974 --> 00:35:09.474 cause

NOTE Confidence: 0.8362523

00:35:10.015 --> 00:35:11.315 with, iron deficiency being,

NOTE Confidence: 0.9982224

00:35:11.614 --> 00:35:13.154 for for thrombocytosis.

NOTE Confidence: 0.9900446

00:35:13.454 --> 00:35:14.974 And then once, you know,

NOTE Confidence: 0.9900446

00:35:14.974 --> 00:35:15.954 you've really,

NOTE Confidence: 0.92708826

00:35:17.454 --> 00:35:19.295 really ruled out all of

NOTE Confidence: 0.92708826

00:35:19.295 --> 00:35:20.160 this, which is, you know,

NOTE Confidence: 0.92708826

00:35:20.160 --> 00:35:22.559 normal inflammation, infection, surgery even,

NOTE Confidence: 0.92708826

00:35:22.559 --> 00:35:23.780 you know, three months ago.

NOTE Confidence: 0.9661469

00:35:25.440 --> 00:35:26.319 They're up to date with

NOTE Confidence: 0.9661469

00:35:26.319 --> 00:35:28.180 cancer screening and and everything.

NOTE Confidence: 0.9661469

00:35:28.239 --> 00:35:28.739 And,

NOTE Confidence: 0.9958296

00:35:29.040 --> 00:35:30.719 then, you know, the the

NOTE Confidence: 0.9958296

00:35:30.719 --> 00:35:31.219 likelihood  
NOTE Confidence: 0.90029

00:35:31.599 --> 00:35:32.660 of a persistent  
NOTE Confidence: 0.99017674

00:35:33.040 --> 00:35:33.540 thrombocytosis  
NOTE Confidence: 0.9982742

00:35:36.614 --> 00:35:37.114 being  
NOTE Confidence: 0.839481

00:35:37.495 --> 00:35:38.795 essential thrombocytosis  
NOTE Confidence: 0.9482966

00:35:39.094 --> 00:35:39.755 or thrombocythemia,  
NOTE Confidence: 0.9067595

00:35:41.895 --> 00:35:42.635 is, you  
NOTE Confidence: 0.91822857

00:35:43.094 --> 00:35:44.315 know, is more.  
NOTE Confidence: 0.8158523

00:35:45.015 --> 00:35:45.515 So,  
NOTE Confidence: 0.98667717

00:35:45.975 --> 00:35:47.015 and and then, you know,  
NOTE Confidence: 0.98667717

00:35:47.015 --> 00:35:47.915 that's really,  
NOTE Confidence: 0.9930123

00:35:49.255 --> 00:35:49.755 really,  
NOTE Confidence: 0.97800374

00:35:50.375 --> 00:35:50.875 diagnosed  
NOTE Confidence: 0.9341669

00:35:51.430 --> 00:35:51.930 by,  
NOTE Confidence: 0.957993

00:35:52.390 --> 00:35:53.830 by mutation testing. So fifty  
NOTE Confidence: 0.957993

00:35:53.830 --> 00:35:55.110 percent of them those will

NOTE Confidence: 0.957993  
00:35:55.110 --> 00:35:56.070 have JAK two v six  
NOTE Confidence: 0.957993  
00:35:56.070 --> 00:35:57.290 one seven f mutation,  
NOTE Confidence: 0.9540304  
00:35:57.590 --> 00:35:58.550 and then about, you know,  
NOTE Confidence: 0.9540304  
00:35:58.550 --> 00:36:00.010 thirty percent will have CALR.  
NOTE Confidence: 0.94598716  
00:36:00.630 --> 00:36:01.430 And then, you know, five  
NOTE Confidence: 0.94598716  
00:36:01.430 --> 00:36:02.630 to ten percent will have  
NOTE Confidence: 0.94598716  
00:36:02.630 --> 00:36:04.489 the MIPL or MPL mutation.  
NOTE Confidence: 0.94598716  
00:36:04.630 --> 00:36:05.475 So, you know, that makes  
NOTE Confidence: 0.94598716  
00:36:05.475 --> 00:36:06.515 it eighty, eighty five percent,  
NOTE Confidence: 0.94598716  
00:36:06.515 --> 00:36:07.335 and the remaining,  
NOTE Confidence: 0.9207023  
00:36:07.955 --> 00:36:09.075 would, you know, require a  
NOTE Confidence: 0.9207023  
00:36:09.075 --> 00:36:10.035 bone or biopsy,  
NOTE Confidence: 0.9713268  
00:36:10.355 --> 00:36:11.095 for diagnosis.  
NOTE Confidence: 0.94337803  
00:36:11.635 --> 00:36:12.995 And and, you know, and  
NOTE Confidence: 0.94337803  
00:36:12.995 --> 00:36:14.195 these days, we are we  
NOTE Confidence: 0.94337803

00:36:14.195 --> 00:36:16.195 are with sending a bigger  
NOTE Confidence: 0.94337803

00:36:16.195 --> 00:36:17.795 myeloid, you know, panels. We  
NOTE Confidence: 0.94337803

00:36:17.795 --> 00:36:19.095 are, we are finding,  
NOTE Confidence: 0.9835953

00:36:19.739 --> 00:36:21.020 other rare mutations that are  
NOTE Confidence: 0.9835953

00:36:21.020 --> 00:36:22.480 associated with essential thrombocytosis.  
NOTE Confidence: 0.99301445

00:36:22.860 --> 00:36:23.520 And so  
NOTE Confidence: 0.98798704

00:36:23.820 --> 00:36:24.560 so that's,  
NOTE Confidence: 0.983071

00:36:25.420 --> 00:36:27.440 that's really the laboratory workup.  
NOTE Confidence: 0.9616135

00:36:29.180 --> 00:36:30.160 Next slide, please.  
NOTE Confidence: 0.966143

00:36:31.605 --> 00:36:33.145 And so just summarizing,  
NOTE Confidence: 0.9405675

00:36:33.445 --> 00:36:34.325 you know, what I just  
NOTE Confidence: 0.9405675

00:36:34.325 --> 00:36:35.545 said, you know, most common  
NOTE Confidence: 0.9405675

00:36:35.765 --> 00:36:37.605 etiology is iron deficiency, and  
NOTE Confidence: 0.9405675

00:36:37.605 --> 00:36:38.985 so your iron panel,  
NOTE Confidence: 0.90306866

00:36:40.485 --> 00:36:42.085 is is, you know it  
NOTE Confidence: 0.90306866

00:36:42.085 --> 00:36:43.545 probably will rule out,

NOTE Confidence: 0.96850127

00:36:43.844 --> 00:36:45.890 you know, good, you know,

NOTE Confidence: 0.96850127

00:36:45.950 --> 00:36:47.309 twenty, thirty, thirty percent of

NOTE Confidence: 0.96850127

00:36:47.309 --> 00:36:47.969 the cases,

NOTE Confidence: 0.9214129

00:36:48.589 --> 00:36:50.190 and then followed by by

NOTE Confidence: 0.9214129

00:36:50.190 --> 00:36:52.109 reactive or secondary cases such

NOTE Confidence: 0.9214129

00:36:52.109 --> 00:36:53.069 as, you know, post up

NOTE Confidence: 0.9214129

00:36:53.069 --> 00:36:54.430 status or, you know, in

NOTE Confidence: 0.9214129

00:36:54.430 --> 00:36:56.289 in chronic inflammatory conditions.

NOTE Confidence: 0.99733233

00:36:56.910 --> 00:36:57.650 Many times,

NOTE Confidence: 0.9079612

00:36:58.029 --> 00:36:59.325 we'd finish on the whole

NOTE Confidence: 0.9079612

00:36:59.325 --> 00:37:00.844 workup including bone marrow biopsy

NOTE Confidence: 0.9079612

00:37:00.844 --> 00:37:02.285 in a younger person and

NOTE Confidence: 0.9079612

00:37:02.285 --> 00:37:02.685 and,

NOTE Confidence: 0.9966448

00:37:03.085 --> 00:37:04.625 and not, you know, not

NOTE Confidence: 0.9562602

00:37:04.925 --> 00:37:06.525 really get a diagnosis. And

NOTE Confidence: 0.9562602

00:37:06.525 --> 00:37:07.425 and and that's  
NOTE Confidence: 0.9713511

00:37:07.805 --> 00:37:10.125 that's, you know, that's perhaps  
NOTE Confidence: 0.9713511

00:37:10.125 --> 00:37:11.425 because of, you know,  
NOTE Confidence: 0.9726739

00:37:12.150 --> 00:37:12.950 I have, you know, kind  
NOTE Confidence: 0.9726739

00:37:12.950 --> 00:37:14.630 of, you know, seen people  
NOTE Confidence: 0.9726739

00:37:14.630 --> 00:37:16.069 developing diabetes or, you know,  
NOTE Confidence: 0.9726739

00:37:16.069 --> 00:37:16.890 very general  
NOTE Confidence: 0.8713304

00:37:17.190 --> 00:37:18.969 kind of mild chronic inflammatory  
NOTE Confidence: 0.93622935

00:37:19.430 --> 00:37:20.089 sort of,  
NOTE Confidence: 0.9591881

00:37:20.869 --> 00:37:23.109 states. And then once, these  
NOTE Confidence: 0.9591881

00:37:23.109 --> 00:37:24.069 have been ruled out, then,  
NOTE Confidence: 0.9591881

00:37:24.069 --> 00:37:25.450 you know, a  
NOTE Confidence: 0.88547933

00:37:25.910 --> 00:37:27.130 workup for  
NOTE Confidence: 0.9760504

00:37:27.805 --> 00:37:28.305 for,  
NOTE Confidence: 0.797839

00:37:29.005 --> 00:37:29.505 myeloproliferative  
NOTE Confidence: 0.95628226

00:37:30.844 --> 00:37:31.344 neoplasm,



NOTE Confidence: 0.95728236  
00:37:31.965 --> 00:37:33.725 is is justified. And, you  
NOTE Confidence: 0.95728236  
00:37:33.725 --> 00:37:34.785 know, that can just,  
NOTE Confidence: 0.94897383  
00:37:35.325 --> 00:37:36.844 be started off with JAK2  
NOTE Confidence: 0.94897383  
00:37:36.844 --> 00:37:37.344 mutation,  
NOTE Confidence: 0.9320204  
00:37:37.965 --> 00:37:39.085 and then reflects to other  
NOTE Confidence: 0.9320204  
00:37:39.085 --> 00:37:40.445 mutations followed by a pulmonary  
NOTE Confidence: 0.9320204  
00:37:40.445 --> 00:37:40.945 biopsy.  
NOTE Confidence: 0.9557816  
00:37:44.660 --> 00:37:45.940 Alright. No. Thank you. So  
NOTE Confidence: 0.9557816  
00:37:45.940 --> 00:37:46.900 this like I said, this  
NOTE Confidence: 0.9557816  
00:37:46.900 --> 00:37:48.339 case is sort of ongoing.  
NOTE Confidence: 0.9557816  
00:37:48.339 --> 00:37:49.780 I'm suspecting we won't find  
NOTE Confidence: 0.9557816  
00:37:49.780 --> 00:37:50.579 the cause, but we have  
NOTE Confidence: 0.9557816  
00:37:50.579 --> 00:37:51.320 the smear,  
NOTE Confidence: 0.98768437  
00:37:52.180 --> 00:37:53.380 still coming on. And and  
NOTE Confidence: 0.98768437  
00:37:53.380 --> 00:37:54.265 then just,  
NOTE Confidence: 0.999851

00:37:54.825 --> 00:37:55.325 one  
NOTE Confidence: 0.9935044  
00:37:55.705 --> 00:37:57.465 final plug on on the  
NOTE Confidence: 0.9935044  
00:37:57.465 --> 00:37:58.765 pathway. So,  
NOTE Confidence: 0.9901169  
00:37:59.225 --> 00:38:00.105 you know, when you're putting  
NOTE Confidence: 0.9901169  
00:38:00.185 --> 00:38:01.145 at least for me, when  
NOTE Confidence: 0.9901169  
00:38:01.145 --> 00:38:03.005 I'm putting in the smear  
NOTE Confidence: 0.9901169  
00:38:03.065 --> 00:38:04.344 order, if I if you  
NOTE Confidence: 0.9901169  
00:38:04.344 --> 00:38:06.205 type in peripheral smear, it  
NOTE Confidence: 0.9901169  
00:38:06.265 --> 00:38:07.645 it doesn't always show,  
NOTE Confidence: 0.9843865  
00:38:08.025 --> 00:38:09.225 on the order what you  
NOTE Confidence: 0.9843865  
00:38:09.225 --> 00:38:09.725 want.  
NOTE Confidence: 0.9888935  
00:38:10.370 --> 00:38:11.890 But if you click on  
NOTE Confidence: 0.9888935  
00:38:11.890 --> 00:38:13.510 it from the pathway,  
NOTE Confidence: 0.9750306  
00:38:14.130 --> 00:38:15.410 it pops up. And so  
NOTE Confidence: 0.9750306  
00:38:15.410 --> 00:38:16.210 for those of you taking  
NOTE Confidence: 0.9750306  
00:38:16.210 --> 00:38:18.070 notes at home, it's peripheral

NOTE Confidence: 0.9750306  
00:38:18.130 --> 00:38:19.350 smear for pathology.  
NOTE Confidence: 0.9994404  
00:38:19.969 --> 00:38:21.030 If you type in  
NOTE Confidence: 0.89779985  
00:38:21.410 --> 00:38:21.910 peripheral,  
NOTE Confidence: 0.9427882  
00:38:22.930 --> 00:38:24.790 blood or peripheral blood smear,  
NOTE Confidence: 0.9427882  
00:38:25.035 --> 00:38:26.875 you actually doesn't always show  
NOTE Confidence: 0.9427882  
00:38:26.875 --> 00:38:27.855 up in EPIC.  
NOTE Confidence: 0.9616073  
00:38:28.395 --> 00:38:29.135 So another,  
NOTE Confidence: 0.9870066  
00:38:29.914 --> 00:38:31.194 plug on on on the  
NOTE Confidence: 0.9870066  
00:38:31.194 --> 00:38:32.335 pathway for,  
NOTE Confidence: 0.94717526  
00:38:33.994 --> 00:38:34.875 in some ways, it may  
NOTE Confidence: 0.94717526  
00:38:34.875 --> 00:38:36.075 be sometimes worth the time  
NOTE Confidence: 0.94717526  
00:38:36.075 --> 00:38:37.355 to go in just to  
NOTE Confidence: 0.94717526  
00:38:37.355 --> 00:38:38.255 make the ordering,  
NOTE Confidence: 0.998514  
00:38:38.954 --> 00:38:39.420 easier.  
NOTE Confidence: 0.9709958  
00:38:39.980 --> 00:38:40.719 And so,  
NOTE Confidence: 0.9934971

00:38:41.819 --> 00:38:43.260 but, like I said, her  
NOTE Confidence: 0.9934971

00:38:43.260 --> 00:38:44.960 case is ongoing. I'm suspecting,  
NOTE Confidence: 0.98344266

00:38:45.819 --> 00:38:47.420 since she's been relatively stable  
NOTE Confidence: 0.98344266

00:38:47.420 --> 00:38:48.540 in the four fifty to  
NOTE Confidence: 0.98344266

00:38:48.540 --> 00:38:49.739 five twenty five range that  
NOTE Confidence: 0.98344266

00:38:49.739 --> 00:38:51.599 we will probably not find  
NOTE Confidence: 0.98344266

00:38:51.739 --> 00:38:52.239 anything,  
NOTE Confidence: 0.8982029

00:38:53.020 --> 00:38:53.520 pathologic.  
NOTE Confidence: 0.8986207

00:38:54.755 --> 00:38:56.755 But I'm happy to when  
NOTE Confidence: 0.8986207

00:38:56.755 --> 00:38:58.275 I'm back, if people want,  
NOTE Confidence: 0.8986207

00:38:58.515 --> 00:39:00.215 give a another update.  
NOTE Confidence: 0.97246355

00:39:02.195 --> 00:39:03.555 I don't I have been  
NOTE Confidence: 0.97246355

00:39:03.555 --> 00:39:04.835 following the chat. I don't  
NOTE Confidence: 0.97246355

00:39:04.835 --> 00:39:06.295 know if there's any questions.  
NOTE Confidence: 0.93616766

00:39:06.915 --> 00:39:08.114 Otherwise, I'm gonna pass them  
NOTE Confidence: 0.93616766

00:39:08.114 --> 00:39:09.415 back back over.

NOTE Confidence: 0.96670383  
00:39:10.779 --> 00:39:12.219 Yeah. No. We have not  
NOTE Confidence: 0.96670383  
00:39:12.219 --> 00:39:13.440 gotten any questions,  
NOTE Confidence: 0.9584539  
00:39:14.140 --> 00:39:15.579 although we had a a  
NOTE Confidence: 0.9584539  
00:39:15.579 --> 00:39:17.099 couple of other things that  
NOTE Confidence: 0.9584539  
00:39:17.099 --> 00:39:18.059 we didn't know if we  
NOTE Confidence: 0.9584539  
00:39:18.059 --> 00:39:19.099 were gonna have time to  
NOTE Confidence: 0.9584539  
00:39:19.099 --> 00:39:20.460 discuss, and and so maybe  
NOTE Confidence: 0.9584539  
00:39:20.460 --> 00:39:21.119 we can,  
NOTE Confidence: 0.9966239  
00:39:21.579 --> 00:39:23.099 pull those in. And if  
NOTE Confidence: 0.9966239  
00:39:23.099 --> 00:39:24.859 you do have questions, please  
NOTE Confidence: 0.9966239  
00:39:24.859 --> 00:39:26.685 enter them in the q  
NOTE Confidence: 0.9966239  
00:39:26.685 --> 00:39:27.265 and a.  
NOTE Confidence: 0.74906117  
00:39:28.205 --> 00:39:29.245 Well, I have one. If  
NOTE Confidence: 0.74906117  
00:39:29.245 --> 00:39:31.085 that's something too. Yeah. Thanks  
NOTE Confidence: 0.74906117  
00:39:31.085 --> 00:39:32.465 for going. Yeah. Okay. Good.  
NOTE Confidence: 0.8733034

00:39:33.245 --> 00:39:34.685 Yeah. No. You mine mine  
NOTE Confidence: 0.8733034

00:39:34.685 --> 00:39:35.645 is a question, so it's  
NOTE Confidence: 0.8733034

00:39:35.645 --> 00:39:36.685 a complete change. So you  
NOTE Confidence: 0.8733034

00:39:36.685 --> 00:39:36.765 do  
NOTE Confidence: 0.9567528

00:39:37.725 --> 00:39:39.005 Okay. I I was actually  
NOTE Confidence: 0.9567528

00:39:39.005 --> 00:39:40.500 gonna ask, because I probably  
NOTE Confidence: 0.9567528

00:39:40.500 --> 00:39:41.540 missed it in your case  
NOTE Confidence: 0.9567528

00:39:41.540 --> 00:39:42.980 and maybe to doctor Sharda  
NOTE Confidence: 0.9567528

00:39:42.980 --> 00:39:43.640 as well,  
NOTE Confidence: 0.9085981

00:39:46.739 --> 00:39:48.180 about if your patient's body  
NOTE Confidence: 0.9085981

00:39:48.180 --> 00:39:49.780 mass index and if they're  
NOTE Confidence: 0.9085981

00:39:49.780 --> 00:39:51.060 obese. You might have said  
NOTE Confidence: 0.9085981

00:39:51.060 --> 00:39:52.020 that, and I missed it.  
NOTE Confidence: 0.9085981

00:39:52.020 --> 00:39:52.760 But I think  
NOTE Confidence: 0.939854

00:39:53.300 --> 00:39:54.894 yeah. Good question. I think  
NOTE Confidence: 0.939854

00:39:54.894 --> 00:39:55.855 I see that a lot

NOTE Confidence: 0.939854  
00:39:55.855 --> 00:39:57.214 in practice as part of  
NOTE Confidence: 0.939854  
00:39:57.214 --> 00:39:57.714 this  
NOTE Confidence: 0.69244534  
00:39:59.214 --> 00:39:59.714 inflammatory  
NOTE Confidence: 0.85728574  
00:40:00.575 --> 00:40:01.394 state. Right.  
NOTE Confidence: 0.9423076  
00:40:02.015 --> 00:40:03.454 Yeah. Yeah. And I I,  
NOTE Confidence: 0.9423076  
00:40:03.775 --> 00:40:04.815 no. I I complete her  
NOTE Confidence: 0.9423076  
00:40:04.815 --> 00:40:06.355 BMI is thirty seven,  
NOTE Confidence: 0.9884467  
00:40:07.509 --> 00:40:08.549 and that's why I think  
NOTE Confidence: 0.9884467  
00:40:08.549 --> 00:40:09.589 we're not gonna find a  
NOTE Confidence: 0.9884467  
00:40:09.589 --> 00:40:10.730 pathological cause.  
NOTE Confidence: 0.94134533  
00:40:11.190 --> 00:40:12.549 This wasn't a a question,  
NOTE Confidence: 0.94134533  
00:40:12.549 --> 00:40:13.509 but it makes me think  
NOTE Confidence: 0.94134533  
00:40:13.509 --> 00:40:14.650 of something like,  
NOTE Confidence: 0.85751486  
00:40:15.589 --> 00:40:17.289 we didn't talk about, leukocytosis,  
NOTE Confidence: 0.9984712  
00:40:17.989 --> 00:40:18.489 but  
NOTE Confidence: 0.9355345

00:40:18.805 --> 00:40:19.844 I I sort of feel  
NOTE Confidence: 0.9355345

00:40:19.844 --> 00:40:20.725 and I and I haven't  
NOTE Confidence: 0.9355345

00:40:20.725 --> 00:40:21.844 looked this up. So I  
NOTE Confidence: 0.9355345

00:40:21.844 --> 00:40:22.965 I this is obvious to  
NOTE Confidence: 0.9355345

00:40:22.965 --> 00:40:24.505 everyone else. I I apologize  
NOTE Confidence: 0.9355345

00:40:24.645 --> 00:40:26.085 that that a fair amount  
NOTE Confidence: 0.9355345

00:40:26.085 --> 00:40:27.364 of people with, you know,  
NOTE Confidence: 0.9355345

00:40:27.364 --> 00:40:28.825 higher levels of obesity  
NOTE Confidence: 0.9227397

00:40:29.445 --> 00:40:31.205 seem to have like a  
NOTE Confidence: 0.9227397

00:40:31.205 --> 00:40:32.825 white counts of ten to  
NOTE Confidence: 0.91531605

00:40:33.480 --> 00:40:35.160 twelve, you know, nothing that's  
NOTE Confidence: 0.91531605

00:40:35.160 --> 00:40:36.440 sort of triggering a workup,  
NOTE Confidence: 0.91531605

00:40:36.440 --> 00:40:37.880 but seems to have. And  
NOTE Confidence: 0.91531605

00:40:37.880 --> 00:40:39.000 so I wonder, like you  
NOTE Confidence: 0.91531605

00:40:39.000 --> 00:40:40.119 said, if there's another sort  
NOTE Confidence: 0.91531605

00:40:40.119 --> 00:40:41.400 of, like, and you said,



NOTE Confidence: 0.91531605  
00:40:41.400 --> 00:40:42.440 like maybe there's a little  
NOTE Confidence: 0.91531605  
00:40:42.440 --> 00:40:43.660 bit of non pathologic  
NOTE Confidence: 0.96304023  
00:40:44.280 --> 00:40:45.180 chronic inflammation  
NOTE Confidence: 0.9366716  
00:40:45.560 --> 00:40:47.000 that's driving some of these,  
NOTE Confidence: 0.9967583  
00:40:47.735 --> 00:40:48.235 thrombocytosis  
NOTE Confidence: 0.98170257  
00:40:48.614 --> 00:40:49.495 that may be causing a  
NOTE Confidence: 0.98170257  
00:40:49.495 --> 00:40:50.395 little bit of leukocytosis  
NOTE Confidence: 0.9594556  
00:40:50.695 --> 00:40:51.655 because I do see that  
NOTE Confidence: 0.9594556  
00:40:51.655 --> 00:40:53.094 a lot. So good question  
NOTE Confidence: 0.9594556  
00:40:53.094 --> 00:40:54.715 about the the the BMI.  
NOTE Confidence: 0.9594556  
00:40:54.935 --> 00:40:56.455 Yeah. Hers was is thirty  
NOTE Confidence: 0.9594556  
00:40:56.455 --> 00:40:56.955 seven.  
NOTE Confidence: 0.9390021  
00:40:59.495 --> 00:41:00.375 Yeah. And yes, I think  
NOTE Confidence: 0.9390021  
00:41:00.375 --> 00:41:01.094 we see a lot of  
NOTE Confidence: 0.9390021  
00:41:01.094 --> 00:41:02.395 patients with leukocytosis  
NOTE Confidence: 0.997337

00:41:03.080 --> 00:41:03.640 who are,  
NOTE Confidence: 0.95941186

00:41:04.120 --> 00:41:05.500 with an elevated BMI,  
NOTE Confidence: 0.99174744

00:41:05.800 --> 00:41:07.180 and there's increasing,  
NOTE Confidence: 0.99260414

00:41:07.719 --> 00:41:09.500 I think, literature on that,  
NOTE Confidence: 0.9147542

00:41:11.000 --> 00:41:11.880 that I've looked at that  
NOTE Confidence: 0.9147542

00:41:11.880 --> 00:41:12.440 I think is,  
NOTE Confidence: 0.9975978

00:41:13.160 --> 00:41:14.950 really fascinating. So yeah.  
NOTE Confidence: 0.86032116

00:41:17.605 --> 00:41:19.285 We have a a comment  
NOTE Confidence: 0.86032116

00:41:19.285 --> 00:41:20.505 from Mary Anne Davies.  
NOTE Confidence: 0.9675707

00:41:21.844 --> 00:41:22.985 Thank you for a fabulous  
NOTE Confidence: 0.9675707

00:41:23.125 --> 00:41:24.565 presentation and thrilled that you  
NOTE Confidence: 0.9675707

00:41:24.565 --> 00:41:26.344 highlight the care signature pathways  
NOTE Confidence: 0.9675707

00:41:26.485 --> 00:41:27.685 and the value for primary  
NOTE Confidence: 0.9675707

00:41:27.685 --> 00:41:28.805 care. Mary Anne, thanks for  
NOTE Confidence: 0.9675707

00:41:28.805 --> 00:41:29.685 the work that you and  
NOTE Confidence: 0.9675707

00:41:29.685 --> 00:41:30.665 your team do

NOTE Confidence: 0.95424944  
00:41:30.989 --> 00:41:32.510 on the signature care pathway,  
NOTE Confidence: 0.95424944  
00:41:32.510 --> 00:41:33.870 and thank you for sharing  
NOTE Confidence: 0.95424944  
00:41:33.870 --> 00:41:35.950 the slides that we some  
NOTE Confidence: 0.95424944  
00:41:35.950 --> 00:41:36.989 of the slides that we  
NOTE Confidence: 0.95424944  
00:41:36.989 --> 00:41:39.090 used. So thank you. Yeah.  
NOTE Confidence: 0.9727694  
00:41:39.630 --> 00:41:40.670 No. And they're they're well  
NOTE Confidence: 0.9727694  
00:41:40.670 --> 00:41:42.050 done. I agree with Frank.  
NOTE Confidence: 0.93788755  
00:41:42.905 --> 00:41:44.185 Yeah. Yeah. And and the  
NOTE Confidence: 0.93788755  
00:41:44.185 --> 00:41:45.385 fact that they're living and  
NOTE Confidence: 0.93788755  
00:41:45.385 --> 00:41:45.704 get,  
NOTE Confidence: 0.7050968  
00:41:46.265 --> 00:41:46.765 updated.  
NOTE Confidence: 0.9706316  
00:41:47.464 --> 00:41:48.825 So right. We we highlighted  
NOTE Confidence: 0.9706316  
00:41:48.825 --> 00:41:49.785 these topics because there was  
NOTE Confidence: 0.9706316  
00:41:49.785 --> 00:41:50.744 a couple of new ones,  
NOTE Confidence: 0.9706316  
00:41:50.744 --> 00:41:52.905 but they they'll change as  
NOTE Confidence: 0.9706316

00:41:52.905 --> 00:41:54.025 as need be, which is  
NOTE Confidence: 0.9706316

00:41:54.025 --> 00:41:54.844 which is great.  
NOTE Confidence: 0.9392949

00:41:58.180 --> 00:41:58.820 But I don't know if  
NOTE Confidence: 0.9392949

00:41:58.820 --> 00:42:00.100 there's no other questions at  
NOTE Confidence: 0.9392949

00:42:00.100 --> 00:42:00.980 a time. I did have  
NOTE Confidence: 0.9392949

00:42:00.980 --> 00:42:02.340 one question. We see a  
NOTE Confidence: 0.9392949

00:42:02.340 --> 00:42:04.020 lot of elevated fair, you  
NOTE Confidence: 0.9392949

00:42:04.020 --> 00:42:06.020 know, through all these, all  
NOTE Confidence: 0.9392949

00:42:06.020 --> 00:42:07.460 both of these cases, right?  
NOTE Confidence: 0.9392949

00:42:07.460 --> 00:42:08.580 The workup was let's get  
NOTE Confidence: 0.9392949

00:42:08.580 --> 00:42:09.640 some iron studies.  
NOTE Confidence: 0.9941981

00:42:10.100 --> 00:42:10.600 And  
NOTE Confidence: 0.8394037

00:42:10.900 --> 00:42:11.780 I will say,  
NOTE Confidence: 0.9840463

00:42:12.100 --> 00:42:13.480 in primary care,  
NOTE Confidence: 0.9611543

00:42:14.035 --> 00:42:15.315 I do see a lot  
NOTE Confidence: 0.9611543

00:42:15.315 --> 00:42:16.935 of iron studies that show

NOTE Confidence: 0.9611543  
00:42:16.995 --> 00:42:18.455 an elevated ferritin  
NOTE Confidence: 0.8937598  
00:42:19.315 --> 00:42:20.375 and, and  
NOTE Confidence: 0.7399415  
00:42:20.675 --> 00:42:21.175 often  
NOTE Confidence: 0.9228538  
00:42:21.795 --> 00:42:23.635 my mind goes to, could,  
NOTE Confidence: 0.9228538  
00:42:23.635 --> 00:42:24.295 is this  
NOTE Confidence: 0.92290384  
00:42:24.915 --> 00:42:25.415 hemochromatosis  
NOTE Confidence: 0.948854  
00:42:26.435 --> 00:42:27.155 and do I need to  
NOTE Confidence: 0.948854  
00:42:27.155 --> 00:42:28.135 worry about hemochromatosis?  
NOTE Confidence: 0.93123835  
00:42:28.675 --> 00:42:30.490 And so, I had a  
NOTE Confidence: 0.93123835  
00:42:30.490 --> 00:42:32.430 question of, of, you know,  
NOTE Confidence: 0.93123835  
00:42:32.490 --> 00:42:33.930 you know what would be  
NOTE Confidence: 0.93123835  
00:42:33.930 --> 00:42:35.550 maybe the best marker  
NOTE Confidence: 0.9591293  
00:42:35.850 --> 00:42:37.130 or trigger that you would  
NOTE Confidence: 0.9591293  
00:42:37.130 --> 00:42:39.610 wanna share, with your primary  
NOTE Confidence: 0.9591293  
00:42:39.610 --> 00:42:40.110 care  
NOTE Confidence: 0.9911236

00:42:40.410 --> 00:42:41.385 colleagues of  
NOTE Confidence: 0.98937976

00:42:41.705 --> 00:42:43.225 when is it worth the  
NOTE Confidence: 0.98937976

00:42:43.225 --> 00:42:44.844 the the testing for hemochromatosis?  
NOTE Confidence: 0.7833681

00:42:49.225 --> 00:42:49.725 I  
NOTE Confidence: 0.93697304

00:42:50.105 --> 00:42:51.145 I think by an iron  
NOTE Confidence: 0.93697304

00:42:51.145 --> 00:42:52.825 saturation of more than forty  
NOTE Confidence: 0.93697304

00:42:52.825 --> 00:42:54.605 five percent is usually a,  
NOTE Confidence: 0.9587893

00:42:56.750 --> 00:42:58.750 a better test to kinda  
NOTE Confidence: 0.9587893

00:42:58.750 --> 00:42:59.969 screen for hemochromatosis.  
NOTE Confidence: 0.9674308

00:43:00.590 --> 00:43:01.330 So I think,  
NOTE Confidence: 0.96253675

00:43:02.030 --> 00:43:03.469 but certainly other ways that  
NOTE Confidence: 0.96253675

00:43:03.469 --> 00:43:04.430 someone might come to us  
NOTE Confidence: 0.96253675

00:43:04.430 --> 00:43:05.710 too. I mean, sometimes patients  
NOTE Confidence: 0.96253675

00:43:05.710 --> 00:43:06.270 have had,  
NOTE Confidence: 0.9393526

00:43:06.910 --> 00:43:07.950 you know, an MRI. And  
NOTE Confidence: 0.9393526

00:43:07.950 --> 00:43:08.989 if there's sort of iron

NOTE Confidence: 0.9393526  
00:43:08.989 --> 00:43:10.109 deposition of on, like, a  
NOTE Confidence: 0.9393526  
00:43:10.109 --> 00:43:11.154 liver MRI, I think that's  
NOTE Confidence: 0.9393526  
00:43:11.154 --> 00:43:11.654 certainly  
NOTE Confidence: 0.9710727  
00:43:12.035 --> 00:43:13.075 like, we think about that  
NOTE Confidence: 0.9710727  
00:43:13.075 --> 00:43:14.454 as well. But the ferritin,  
NOTE Confidence: 0.9710727  
00:43:14.515 --> 00:43:15.094 you know,  
NOTE Confidence: 0.99622726  
00:43:15.714 --> 00:43:16.535 in a similar  
NOTE Confidence: 0.9601907  
00:43:17.234 --> 00:43:18.194 thing and has a lot  
NOTE Confidence: 0.9601907  
00:43:18.194 --> 00:43:19.315 of sort of reactive you  
NOTE Confidence: 0.9601907  
00:43:19.315 --> 00:43:20.355 know, as an acute phase  
NOTE Confidence: 0.9601907  
00:43:20.355 --> 00:43:21.234 reactant, we might see a  
NOTE Confidence: 0.9601907  
00:43:21.234 --> 00:43:22.994 high ferritin or from liver  
NOTE Confidence: 0.9601907  
00:43:22.994 --> 00:43:24.055 diseases and  
NOTE Confidence: 0.88788  
00:43:24.500 --> 00:43:25.319 and other spaces, alcohol.  
NOTE Confidence: 0.86596924  
00:43:27.140 --> 00:43:28.260 I don't know, doctor Sharda,  
NOTE Confidence: 0.86596924

00:43:28.260 --> 00:43:29.079 your thoughts.

NOTE Confidence: 0.98589027

00:43:30.980 --> 00:43:32.420 No. I agree. And and

NOTE Confidence: 0.98589027

00:43:32.420 --> 00:43:33.780 and then it becomes tough

NOTE Confidence: 0.98589027

00:43:33.780 --> 00:43:34.920 because, you know,

NOTE Confidence: 0.95273495

00:43:36.420 --> 00:43:36.920 because,

NOTE Confidence: 0.93854254

00:43:37.700 --> 00:43:39.105 the the you know, many

NOTE Confidence: 0.93854254

00:43:39.105 --> 00:43:40.725 times we end up seeing,

NOTE Confidence: 0.9477544

00:43:41.344 --> 00:43:41.825 seeing,

NOTE Confidence: 0.917021

00:43:43.185 --> 00:43:45.344 people who've already had, mutation

NOTE Confidence: 0.917021

00:43:45.344 --> 00:43:46.225 testing and then, you know,

NOTE Confidence: 0.917021

00:43:46.225 --> 00:43:47.745 they have either the h

NOTE Confidence: 0.917021

00:43:47.745 --> 00:43:48.864 sixty three d or just,

NOTE Confidence: 0.917021

00:43:48.864 --> 00:43:50.305 you know, they're heterozygous and

NOTE Confidence: 0.917021

00:43:50.305 --> 00:43:51.265 then, you know, you're just

NOTE Confidence: 0.917021

00:43:51.265 --> 00:43:52.465 stuck with someone with a

NOTE Confidence: 0.917021

00:43:52.465 --> 00:43:54.005 ferritin of seven eight hundred



NOTE Confidence: 0.8561363  
00:43:54.380 --> 00:43:56.000 who perhaps is, you know,  
NOTE Confidence: 0.8818578  
00:43:56.300 --> 00:43:57.420 if you follow the, you  
NOTE Confidence: 0.8818578  
00:43:57.420 --> 00:43:58.380 know, if you're a tourist  
NOTE Confidence: 0.8818578  
00:43:58.380 --> 00:43:59.520 and follow the textbook,  
NOTE Confidence: 0.95324177  
00:44:00.219 --> 00:44:01.260 you, you know, you shouldn't  
NOTE Confidence: 0.95324177  
00:44:01.260 --> 00:44:02.480 be phlebotomizing  
NOTE Confidence: 0.9560171  
00:44:03.420 --> 00:44:04.780 and but, you know, you  
NOTE Confidence: 0.9560171  
00:44:04.780 --> 00:44:05.739 end up do you know,  
NOTE Confidence: 0.9560171  
00:44:05.739 --> 00:44:07.005 you're just stuck there in  
NOTE Confidence: 0.9560171  
00:44:07.005 --> 00:44:08.125 the middle. But, yeah, ferritin  
NOTE Confidence: 0.9560171  
00:44:08.125 --> 00:44:08.625 becomes  
NOTE Confidence: 0.94622505  
00:44:09.085 --> 00:44:10.684 really tough too. And it's  
NOTE Confidence: 0.94622505  
00:44:10.684 --> 00:44:12.605 got very half longer, much  
NOTE Confidence: 0.94622505  
00:44:12.605 --> 00:44:14.464 longer half life, I feel.  
NOTE Confidence: 0.99141204  
00:44:15.244 --> 00:44:16.364 I guess, you know, not  
NOTE Confidence: 0.99141204

00:44:16.364 --> 00:44:17.325 half life in terms of  
NOTE Confidence: 0.99141204

00:44:17.325 --> 00:44:18.444 the protein, but, like, you  
NOTE Confidence: 0.99141204

00:44:18.444 --> 00:44:19.760 know, just physiologically  
NOTE Confidence: 0.5446054

00:44:20.300 --> 00:44:20.800 because  
NOTE Confidence: 0.91748863

00:44:21.420 --> 00:44:23.180 after acute infections, I I  
NOTE Confidence: 0.91748863

00:44:23.180 --> 00:44:24.800 think, you know, in surgeries,  
NOTE Confidence: 0.91748863

00:44:24.860 --> 00:44:26.140 ferritin is gonna be high  
NOTE Confidence: 0.91748863

00:44:26.140 --> 00:44:27.340 for a very long time.  
NOTE Confidence: 0.91748863

00:44:27.340 --> 00:44:28.540 And so then it becomes  
NOTE Confidence: 0.91748863

00:44:28.540 --> 00:44:30.060 hard to, you know, obese  
NOTE Confidence: 0.91748863

00:44:30.060 --> 00:44:31.360 peep you know, individuals,  
NOTE Confidence: 0.99404997

00:44:31.739 --> 00:44:32.239 diabetes,  
NOTE Confidence: 0.92872494

00:44:33.055 --> 00:44:34.415 having surgery, or, you know,  
NOTE Confidence: 0.92872494

00:44:34.415 --> 00:44:35.855 foot infection. You know? It  
NOTE Confidence: 0.92872494

00:44:35.855 --> 00:44:37.635 just becomes very difficult,  
NOTE Confidence: 0.9152445

00:44:38.015 --> 00:44:39.235 at some point. Yeah.

NOTE Confidence: 0.98804396  
00:44:41.614 --> 00:44:43.055 Yeah. That that so that  
NOTE Confidence: 0.98804396  
00:44:43.055 --> 00:44:44.594 that was another good pearl.  
NOTE Confidence: 0.7129718  
00:44:44.910 --> 00:44:46.130 That in the SGLT  
NOTE Confidence: 0.9632914  
00:44:46.430 --> 00:44:47.170 two inhibitors,  
NOTE Confidence: 0.8303625  
00:44:48.109 --> 00:44:49.549 those are some good pearls,  
NOTE Confidence: 0.8303625  
00:44:49.710 --> 00:44:50.849 to lymph by.  
NOTE Confidence: 0.9474859  
00:44:51.950 --> 00:44:53.329 Yeah. I'm I'm curious.  
NOTE Confidence: 0.96480006  
00:44:54.030 --> 00:44:55.630 Now I know that this  
NOTE Confidence: 0.96480006  
00:44:55.630 --> 00:44:57.410 could be an entire presentation  
NOTE Confidence: 0.9364316  
00:44:57.869 --> 00:44:58.849 in and of itself,  
NOTE Confidence: 0.9747569  
00:44:59.904 --> 00:45:00.704 but, you know, we talked  
NOTE Confidence: 0.9747569  
00:45:00.704 --> 00:45:02.484 about high platelets. And,  
NOTE Confidence: 0.9988187  
00:45:03.105 --> 00:45:04.724 you know, now that patients  
NOTE Confidence: 0.9988187  
00:45:04.785 --> 00:45:06.805 can see their own results  
NOTE Confidence: 0.909908  
00:45:07.505 --> 00:45:08.645 in my chart,  
NOTE Confidence: 0.9946121

00:45:09.424 --> 00:45:10.464 we get a lot of  
NOTE Confidence: 0.9946121

00:45:10.464 --> 00:45:12.085 very pointed questions.  
NOTE Confidence: 0.9817005

00:45:12.469 --> 00:45:13.589 You know, the ferritin would  
NOTE Confidence: 0.9817005

00:45:13.589 --> 00:45:14.410 be an example  
NOTE Confidence: 0.98049957

00:45:14.950 --> 00:45:16.630 on platelets. And, you know,  
NOTE Confidence: 0.98049957

00:45:16.630 --> 00:45:18.309 are you sure there's nothing  
NOTE Confidence: 0.98049957

00:45:18.309 --> 00:45:19.750 wrong? And I wanna see  
NOTE Confidence: 0.98049957

00:45:19.750 --> 00:45:21.029 a a specialist. I mean,  
NOTE Confidence: 0.98049957

00:45:21.029 --> 00:45:21.989 it it's a kind of  
NOTE Confidence: 0.98049957

00:45:21.989 --> 00:45:24.309 interesting situation where we you  
NOTE Confidence: 0.98049957

00:45:24.309 --> 00:45:25.589 know, things that we never  
NOTE Confidence: 0.98049957

00:45:25.589 --> 00:45:26.650 had to completely  
NOTE Confidence: 0.9700828

00:45:27.085 --> 00:45:28.445 explain, we we now have  
NOTE Confidence: 0.9700828

00:45:28.445 --> 00:45:29.105 to explain.  
NOTE Confidence: 0.9669073

00:45:29.805 --> 00:45:31.005 And, you know, there's always  
NOTE Confidence: 0.9669073

00:45:31.005 --> 00:45:32.125 a a kind of fear

NOTE Confidence: 0.9669073  
00:45:32.125 --> 00:45:33.405 of, like, are we dismissing  
NOTE Confidence: 0.9669073  
00:45:33.405 --> 00:45:35.005 something when it gets called  
NOTE Confidence: 0.9669073  
00:45:35.005 --> 00:45:35.825 up that way.  
NOTE Confidence: 0.97442436  
00:45:36.364 --> 00:45:37.245 And and the other thing  
NOTE Confidence: 0.97442436  
00:45:37.245 --> 00:45:38.045 that comes up a lot  
NOTE Confidence: 0.97442436  
00:45:38.045 --> 00:45:39.085 is, you know, these kind  
NOTE Confidence: 0.97442436  
00:45:39.085 --> 00:45:39.745 of intermittent,  
NOTE Confidence: 0.9750339  
00:45:40.045 --> 00:45:42.760 very mildly low platelet counts,  
NOTE Confidence: 0.9893006  
00:45:43.540 --> 00:45:44.819 where, you know, if you  
NOTE Confidence: 0.9893006  
00:45:44.819 --> 00:45:46.020 can actually do a smear  
NOTE Confidence: 0.9893006  
00:45:46.020 --> 00:45:47.619 and see clumping, you're like,  
NOTE Confidence: 0.9893006  
00:45:47.619 --> 00:45:49.960 amen. Hallelujah. Nothing to do.  
NOTE Confidence: 0.9215093  
00:45:51.140 --> 00:45:52.200 But but otherwise,  
NOTE Confidence: 0.977142  
00:45:52.819 --> 00:45:54.020 again, I I don't think  
NOTE Confidence: 0.977142  
00:45:54.020 --> 00:45:56.020 people bleed until they go  
NOTE Confidence: 0.977142

00:45:56.020 --> 00:45:56.520 significantly  
NOTE Confidence: 0.9640318

00:45:56.980 --> 00:45:58.114 lower, but what should be  
NOTE Confidence: 0.9640318

00:45:58.114 --> 00:46:00.194 our threshold for doing a  
NOTE Confidence: 0.9640318

00:46:00.194 --> 00:46:00.694 workup?  
NOTE Confidence: 0.9814164

00:46:01.315 --> 00:46:02.275 And and what should we  
NOTE Confidence: 0.9814164

00:46:02.275 --> 00:46:04.035 tell patients when it's just  
NOTE Confidence: 0.9814164

00:46:04.035 --> 00:46:05.234 really not a problem? They're  
NOTE Confidence: 0.9814164

00:46:05.234 --> 00:46:06.855 only very mildly lower.  
NOTE Confidence: 0.9349343

00:46:11.500 --> 00:46:12.619 Anish, I think it's your  
NOTE Confidence: 0.9349343

00:46:12.619 --> 00:46:14.460 turn. Okay. Yeah. You're up.  
NOTE Confidence: 0.9349343

00:46:14.460 --> 00:46:15.579 No. I agree. And I  
NOTE Confidence: 0.9349343

00:46:15.579 --> 00:46:17.039 think I think,  
NOTE Confidence: 0.99636084

00:46:17.980 --> 00:46:19.180 I I don't I I  
NOTE Confidence: 0.99636084

00:46:19.180 --> 00:46:20.299 don't think there's even a  
NOTE Confidence: 0.99636084

00:46:20.299 --> 00:46:21.680 term called minimal thrombocytopenia,  
NOTE Confidence: 0.94928604

00:46:22.140 --> 00:46:23.260 but I tend to use

NOTE Confidence: 0.94928604  
00:46:23.260 --> 00:46:24.559 it even in my description  
NOTE Confidence: 0.94928604  
00:46:24.619 --> 00:46:25.119 and  
NOTE Confidence: 0.9535878  
00:46:25.635 --> 00:46:26.435 because, you know, if you  
NOTE Confidence: 0.9535878  
00:46:26.515 --> 00:46:27.715 again, if you're a purist  
NOTE Confidence: 0.9535878  
00:46:27.715 --> 00:46:29.015 like I am,  
NOTE Confidence: 0.91453403  
00:46:29.635 --> 00:46:31.015 you know, definition of thrombocytopenia  
NOTE Confidence: 0.91453403  
00:46:31.235 --> 00:46:32.435 is less than hundred actually  
NOTE Confidence: 0.91453403  
00:46:32.435 --> 00:46:33.315 because, you know, people have  
NOTE Confidence: 0.91453403  
00:46:33.315 --> 00:46:34.915 gotten together and actually the  
NOTE Confidence: 0.91453403  
00:46:34.915 --> 00:46:35.735 world thrombocytopenia  
NOTE Confidence: 0.9286958  
00:46:36.195 --> 00:46:37.635 whatever, so, you know, is  
NOTE Confidence: 0.9286958  
00:46:37.635 --> 00:46:38.915 less than one hundred. But  
NOTE Confidence: 0.9286958  
00:46:38.915 --> 00:46:40.295 if you see the  
NOTE Confidence: 0.95478094  
00:46:40.800 --> 00:46:42.239 CBC and what you know,  
NOTE Confidence: 0.95478094  
00:46:42.239 --> 00:46:43.880 any lab, they would Yeah.  
NOTE Confidence: 0.95478094

00:46:44.080 --> 00:46:45.680 Still report normal as one  
NOTE Confidence: 0.95478094

00:46:45.680 --> 00:46:46.719 forty, one fifty, one to  
NOTE Confidence: 0.95478094

00:46:46.719 --> 00:46:48.160 sixty, whatever their, you know,  
NOTE Confidence: 0.95478094

00:46:48.160 --> 00:46:48.980 lower ranges.  
NOTE Confidence: 0.99647796

00:46:49.600 --> 00:46:50.420 And so  
NOTE Confidence: 0.99390656

00:46:50.880 --> 00:46:52.080 I and it's a lot  
NOTE Confidence: 0.99390656

00:46:52.239 --> 00:46:53.600 you know, it's more common  
NOTE Confidence: 0.99390656

00:46:53.600 --> 00:46:54.100 than  
NOTE Confidence: 0.9968778

00:46:54.735 --> 00:46:55.875 than thrombocytosis  
NOTE Confidence: 0.9185541

00:46:56.575 --> 00:46:58.495 or I would say, at  
NOTE Confidence: 0.9185541

00:46:58.495 --> 00:47:00.195 least in my experience. And  
NOTE Confidence: 0.9890146

00:47:00.495 --> 00:47:01.615 and and I agree. I  
NOTE Confidence: 0.9890146

00:47:01.615 --> 00:47:02.815 mean, it becomes I I  
NOTE Confidence: 0.9890146

00:47:02.815 --> 00:47:04.195 think they just need reassurance.  
NOTE Confidence: 0.96481735

00:47:05.855 --> 00:47:07.215 I, you know, I I  
NOTE Confidence: 0.96481735

00:47:07.375 --> 00:47:08.415 we see plenty of it.



NOTE Confidence: 0.96481735  
00:47:08.415 --> 00:47:09.295 I I see plenty of  
NOTE Confidence: 0.96481735  
00:47:09.295 --> 00:47:10.195 it for referrals.  
NOTE Confidence: 0.7864604  
00:47:11.430 --> 00:47:11.930 But,  
NOTE Confidence: 0.9583617  
00:47:12.630 --> 00:47:13.750 but they, you know, it  
NOTE Confidence: 0.9583617  
00:47:13.750 --> 00:47:15.430 just needs they just need  
NOTE Confidence: 0.9583617  
00:47:15.430 --> 00:47:17.190 reassurance because I agree with  
NOTE Confidence: 0.9583617  
00:47:17.190 --> 00:47:18.010 you that  
NOTE Confidence: 0.9522347  
00:47:18.390 --> 00:47:19.530 that, you know,  
NOTE Confidence: 0.88771737  
00:47:20.469 --> 00:47:20.969 usually,  
NOTE Confidence: 0.9415475  
00:47:21.270 --> 00:47:22.710 there's no bleeding even at  
NOTE Confidence: 0.9415475  
00:47:22.710 --> 00:47:24.070 fifty. Or, you know, fifty  
NOTE Confidence: 0.9415475  
00:47:24.070 --> 00:47:25.055 is a you know, you  
NOTE Confidence: 0.9415475  
00:47:25.055 --> 00:47:26.255 can get a hip hip  
NOTE Confidence: 0.9415475  
00:47:26.255 --> 00:47:27.614 replacement. I mean, you know,  
NOTE Confidence: 0.9415475  
00:47:27.614 --> 00:47:28.114 so,  
NOTE Confidence: 0.94941396

00:47:29.295 --> 00:47:31.135 you know, it's usually been  
NOTE Confidence: 0.94941396

00:47:31.135 --> 00:47:32.575 the most the risk of  
NOTE Confidence: 0.94941396

00:47:32.575 --> 00:47:33.935 major bleeding is five percent  
NOTE Confidence: 0.94941396

00:47:33.935 --> 00:47:35.715 with less than twenty. So  
NOTE Confidence: 0.94035846

00:47:36.015 --> 00:47:36.975 so, you know, the the  
NOTE Confidence: 0.94035846

00:47:37.055 --> 00:47:38.255 you you don't there's a  
NOTE Confidence: 0.94035846

00:47:38.255 --> 00:47:39.530 lot of redundancy and, you  
NOTE Confidence: 0.94035846

00:47:39.530 --> 00:47:40.190 know, there's  
NOTE Confidence: 0.8144647

00:47:40.489 --> 00:47:41.310 so usually,  
NOTE Confidence: 0.9365341

00:47:42.010 --> 00:47:43.450 hundred you know, if they're  
NOTE Confidence: 0.9365341

00:47:43.450 --> 00:47:44.989 great really greater than hundred  
NOTE Confidence: 0.94272774

00:47:45.369 --> 00:47:47.210 and you have repeated it,  
NOTE Confidence: 0.94272774

00:47:47.210 --> 00:47:48.329 you know, and it's still  
NOTE Confidence: 0.94272774

00:47:48.329 --> 00:47:49.450 greater than hundred and or  
NOTE Confidence: 0.94272774

00:47:49.450 --> 00:47:51.450 it bounces around, it really,  
NOTE Confidence: 0.94272774

00:47:51.450 --> 00:47:52.750 I think, is very reassuring.

NOTE Confidence: 0.9732696  
00:47:53.805 --> 00:47:55.085 And, you know, and and  
NOTE Confidence: 0.9732696  
00:47:55.085 --> 00:47:56.045 that you know, one one  
NOTE Confidence: 0.9732696  
00:47:56.045 --> 00:47:57.165 could just be clear that,  
NOTE Confidence: 0.9732696  
00:47:57.165 --> 00:47:57.665 actually,  
NOTE Confidence: 0.94982964  
00:47:58.285 --> 00:47:59.885 the real, you know, we  
NOTE Confidence: 0.94982964  
00:47:59.885 --> 00:48:01.805 call low platelets, you know,  
NOTE Confidence: 0.94982964  
00:48:01.964 --> 00:48:03.085 on the medicine you know,  
NOTE Confidence: 0.94982964  
00:48:03.085 --> 00:48:04.605 from the real definition is  
NOTE Confidence: 0.94982964  
00:48:04.605 --> 00:48:05.665 less than one hundred.  
NOTE Confidence: 0.6333549  
00:48:07.645 --> 00:48:08.145 So  
NOTE Confidence: 0.9061628  
00:48:10.180 --> 00:48:12.239 That is another great pearl.  
NOTE Confidence: 0.9061628  
00:48:12.300 --> 00:48:13.920 We have, like, just pearls  
NOTE Confidence: 0.9061628  
00:48:14.140 --> 00:48:16.000 flowing. These are really wonderful  
NOTE Confidence: 0.9061628  
00:48:16.060 --> 00:48:17.339 because, you know,  
NOTE Confidence: 0.94646144  
00:48:17.660 --> 00:48:18.540 I don't know about you,  
NOTE Confidence: 0.94646144

00:48:18.540 --> 00:48:20.219 Frank. I see, you know,  
NOTE Confidence: 0.94646144

00:48:20.219 --> 00:48:21.660 CBCs. I, you know, I  
NOTE Confidence: 0.94646144

00:48:21.660 --> 00:48:22.719 probably look at,  
NOTE Confidence: 0.9871738

00:48:23.020 --> 00:48:24.705 I don't know, twenty, thirty  
NOTE Confidence: 0.9871738

00:48:24.705 --> 00:48:25.985 a day. You know, it's  
NOTE Confidence: 0.9871738

00:48:25.985 --> 00:48:27.025 a lot, and and they  
NOTE Confidence: 0.9871738

00:48:27.025 --> 00:48:28.385 all have things just outside  
NOTE Confidence: 0.9871738

00:48:28.385 --> 00:48:29.045 of normal.  
NOTE Confidence: 0.93549204

00:48:30.305 --> 00:48:31.585 And so, this is very  
NOTE Confidence: 0.93549204

00:48:31.585 --> 00:48:32.085 helpful,  
NOTE Confidence: 0.9704903

00:48:32.625 --> 00:48:33.665 to not kind of over  
NOTE Confidence: 0.9704903

00:48:33.665 --> 00:48:35.025 refer things that are, you  
NOTE Confidence: 0.9704903

00:48:35.025 --> 00:48:36.565 know, pretty clearly fine.  
NOTE Confidence: 0.8322561

00:48:37.250 --> 00:48:38.450 Yeah. I think that I  
NOTE Confidence: 0.8322561

00:48:38.450 --> 00:48:39.650 I agree with everything doctor  
NOTE Confidence: 0.8322561

00:48:39.650 --> 00:48:40.369 Shutter just said. And I

NOTE Confidence: 0.8322561  
00:48:40.369 --> 00:48:41.190 think that,  
NOTE Confidence: 0.98690176  
00:48:42.369 --> 00:48:43.170 like, the  
NOTE Confidence: 0.87965864  
00:48:43.809 --> 00:48:45.410 sometimes, like, just in terms  
NOTE Confidence: 0.87965864  
00:48:45.410 --> 00:48:46.210 of what to say to  
NOTE Confidence: 0.87965864  
00:48:46.210 --> 00:48:47.650 patients, you know, and, you  
NOTE Confidence: 0.87965864  
00:48:47.650 --> 00:48:48.550 know, just  
NOTE Confidence: 0.9351932  
00:48:48.930 --> 00:48:50.450 some some patients, I think,  
NOTE Confidence: 0.9472119  
00:48:51.405 --> 00:48:52.445 accept that idea of, like,  
NOTE Confidence: 0.9472119  
00:48:52.445 --> 00:48:53.405 you could have a surgery  
NOTE Confidence: 0.9472119  
00:48:53.405 --> 00:48:54.445 at this level. You know?  
NOTE Confidence: 0.9472119  
00:48:54.445 --> 00:48:55.405 And then that's, I think,  
NOTE Confidence: 0.9472119  
00:48:55.405 --> 00:48:56.685 just, like, clinically, people could  
NOTE Confidence: 0.9472119  
00:48:56.765 --> 00:48:58.125 that somehow resonates with people.  
NOTE Confidence: 0.9472119  
00:48:58.125 --> 00:48:58.765 I think, you know, if  
NOTE Confidence: 0.9472119  
00:48:58.765 --> 00:49:00.945 there's assuming it's just isolated  
NOTE Confidence: 0.9472119

00:49:01.005 --> 00:49:01.505 thrombocytopenia  
NOTE Confidence: 0.937825

00:49:02.125 --> 00:49:03.905 and not there's no other  
NOTE Confidence: 0.9622801

00:49:04.410 --> 00:49:05.690 kind of cell lines. I  
NOTE Confidence: 0.9622801

00:49:05.690 --> 00:49:06.569 think the age of the  
NOTE Confidence: 0.9622801

00:49:06.569 --> 00:49:08.410 patient. Right? Like and then  
NOTE Confidence: 0.9622801

00:49:08.410 --> 00:49:09.690 I guess just as I'm  
NOTE Confidence: 0.9622801

00:49:09.690 --> 00:49:11.150 sure we do, you know,  
NOTE Confidence: 0.9622801

00:49:11.210 --> 00:49:12.489 even if it was mildly  
NOTE Confidence: 0.9622801

00:49:12.489 --> 00:49:13.130 low, I guess I would  
NOTE Confidence: 0.9622801

00:49:13.130 --> 00:49:13.930 just add that if it  
NOTE Confidence: 0.9622801

00:49:13.930 --> 00:49:15.369 was recently much higher than,  
NOTE Confidence: 0.9622801

00:49:15.369 --> 00:49:16.730 like, maybe I would maybe  
NOTE Confidence: 0.9622801

00:49:16.730 --> 00:49:18.170 I personally would monitor it.  
NOTE Confidence: 0.9622801

00:49:18.170 --> 00:49:18.829 And then  
NOTE Confidence: 0.9329569

00:49:19.245 --> 00:49:19.885 I don't know. I look  
NOTE Confidence: 0.9329569

00:49:19.885 --> 00:49:21.425 at the mean platelet volume,

NOTE Confidence: 0.9329569  
00:49:21.485 --> 00:49:22.445 which, you know, might be  
NOTE Confidence: 0.9329569  
00:49:22.445 --> 00:49:23.085 one of the things that  
NOTE Confidence: 0.9329569  
00:49:23.085 --> 00:49:24.445 the other gets disregarded. But  
NOTE Confidence: 0.9329569  
00:49:24.445 --> 00:49:25.585 if it's a little bit  
NOTE Confidence: 0.9329569  
00:49:25.725 --> 00:49:26.765 high, I mean, sometimes I  
NOTE Confidence: 0.9329569  
00:49:26.765 --> 00:49:28.045 think that's kind of these  
NOTE Confidence: 0.9329569  
00:49:28.045 --> 00:49:29.885 autoimmune ish people. Not that  
NOTE Confidence: 0.9329569  
00:49:29.885 --> 00:49:31.165 anything needs to be done,  
NOTE Confidence: 0.9329569  
00:49:31.165 --> 00:49:31.665 but  
NOTE Confidence: 0.9905072  
00:49:33.590 --> 00:49:35.110 I think that that's something  
NOTE Confidence: 0.9905072  
00:49:35.110 --> 00:49:35.830 we see a lot in  
NOTE Confidence: 0.9905072  
00:49:35.830 --> 00:49:36.950 practice. But I think it's,  
NOTE Confidence: 0.9175348  
00:49:39.430 --> 00:49:41.050 yeah, I think just sort  
NOTE Confidence: 0.97004867  
00:49:41.430 --> 00:49:43.030 of how we reassure patients  
NOTE Confidence: 0.97004867  
00:49:43.030 --> 00:49:44.150 in general is hard. I  
NOTE Confidence: 0.97004867

00:49:44.150 --> 00:49:44.969 think that  
NOTE Confidence: 0.8598128

00:49:45.765 --> 00:49:46.885 it's a difficult  
NOTE Confidence: 0.94368124

00:49:48.404 --> 00:49:49.204 there's a lot of things  
NOTE Confidence: 0.94368124

00:49:49.204 --> 00:49:50.805 on a CBC that we  
NOTE Confidence: 0.94368124

00:49:50.805 --> 00:49:52.005 don't really probably look at  
NOTE Confidence: 0.94368124

00:49:52.005 --> 00:49:53.204 in such great detail, but  
NOTE Confidence: 0.94368124

00:49:53.204 --> 00:49:54.984 to patients that MCHC  
NOTE Confidence: 0.9982994

00:49:55.364 --> 00:49:56.585 is crucial to their,  
NOTE Confidence: 0.99947506

00:49:56.885 --> 00:49:57.385 you  
NOTE Confidence: 0.88523537

00:49:57.924 --> 00:49:59.364 know, well-being. And that's hard,  
NOTE Confidence: 0.88523537

00:49:59.364 --> 00:50:00.244 I think, too. It's just  
NOTE Confidence: 0.88523537

00:50:00.244 --> 00:50:01.500 like the number of data  
NOTE Confidence: 0.88523537

00:50:01.500 --> 00:50:03.420 points. You know? I think  
NOTE Confidence: 0.88523537

00:50:03.420 --> 00:50:04.460 if I may, like, I  
NOTE Confidence: 0.88523537

00:50:04.460 --> 00:50:04.960 think,  
NOTE Confidence: 0.9621549

00:50:08.620 --> 00:50:09.580 but just wanted to bring



NOTE Confidence: 0.9621549  
00:50:09.580 --> 00:50:10.780 it up. But that, like,  
NOTE Confidence: 0.9621549  
00:50:10.780 --> 00:50:12.060 you know, for for someone  
NOTE Confidence: 0.9621549  
00:50:12.060 --> 00:50:13.580 we're dealing with who's really  
NOTE Confidence: 0.9621549  
00:50:13.580 --> 00:50:14.940 not being reassured and would  
NOTE Confidence: 0.9621549  
00:50:14.940 --> 00:50:16.320 really like, you know,  
NOTE Confidence: 0.83827764  
00:50:16.665 --> 00:50:19.005 like, even one sentence from,  
NOTE Confidence: 0.83827764  
00:50:19.065 --> 00:50:20.665 you know, for from a  
NOTE Confidence: 0.83827764  
00:50:20.665 --> 00:50:21.165 specialist.  
NOTE Confidence: 0.9536239  
00:50:21.785 --> 00:50:22.445 I think,  
NOTE Confidence: 0.98717344  
00:50:23.625 --> 00:50:24.985 for cases like that where,  
NOTE Confidence: 0.98717344  
00:50:24.985 --> 00:50:26.364 you know, it's very borderline  
NOTE Confidence: 0.98717344  
00:50:26.505 --> 00:50:27.005 thrombocytosis  
NOTE Confidence: 0.9754203  
00:50:27.545 --> 00:50:28.905 or a very borderline, you  
NOTE Confidence: 0.9754203  
00:50:28.905 --> 00:50:30.010 know, thrombocytopenia.  
NOTE Confidence: 0.97587883  
00:50:30.950 --> 00:50:32.469 I think eConsult is a  
NOTE Confidence: 0.97587883

00:50:32.469 --> 00:50:33.369 very nice  
NOTE Confidence: 0.9473497

00:50:33.910 --> 00:50:35.270 pathway too, and,  
NOTE Confidence: 0.98724204

00:50:35.750 --> 00:50:36.550 and I'm not sure, you  
NOTE Confidence: 0.98724204

00:50:36.550 --> 00:50:37.690 know, if it's, you know,  
NOTE Confidence: 0.9984213

00:50:38.710 --> 00:50:39.450 to what  
NOTE Confidence: 0.96379304

00:50:39.910 --> 00:50:41.109 extent kind of, you know,  
NOTE Confidence: 0.96379304

00:50:41.109 --> 00:50:42.489 it's it it goes  
NOTE Confidence: 0.9490204

00:50:42.945 --> 00:50:44.065 out into this, you know,  
NOTE Confidence: 0.9490204

00:50:44.065 --> 00:50:45.344 world, like, in the the  
NOTE Confidence: 0.9490204

00:50:45.344 --> 00:50:47.265 whole system, outer system. But  
NOTE Confidence: 0.9490204

00:50:47.265 --> 00:50:48.465 I certainly do it, you  
NOTE Confidence: 0.9490204

00:50:48.465 --> 00:50:49.505 know, a few weeks, a  
NOTE Confidence: 0.9490204

00:50:49.505 --> 00:50:50.325 year, and,  
NOTE Confidence: 0.9794973

00:50:51.025 --> 00:50:51.985 and those are you know,  
NOTE Confidence: 0.9794973

00:50:51.985 --> 00:50:53.025 they take two, three minutes.  
NOTE Confidence: 0.9794973

00:50:53.025 --> 00:50:53.844 I mean and,

NOTE Confidence: 0.9872879

00:50:54.385 --> 00:50:55.745 and, you know, someone signs

NOTE Confidence: 0.9872879

00:50:55.745 --> 00:50:56.864 their life that, you know,

NOTE Confidence: 0.9872879

00:50:56.864 --> 00:50:57.969 this is fine. You know?

NOTE Confidence: 0.9872879

00:50:57.969 --> 00:50:58.930 And so I I I

NOTE Confidence: 0.9872879

00:50:58.930 --> 00:51:00.370 think that that could, you

NOTE Confidence: 0.9872879

00:51:00.370 --> 00:51:01.810 know, be reassuring to everyone

NOTE Confidence: 0.9872879

00:51:01.810 --> 00:51:03.350 and save everyone's time,

NOTE Confidence: 0.9705915

00:51:03.730 --> 00:51:05.170 including patients and, you know,

NOTE Confidence: 0.9705915

00:51:05.170 --> 00:51:06.130 because, you know, you know,

NOTE Confidence: 0.9705915

00:51:06.130 --> 00:51:06.850 it could take a long

NOTE Confidence: 0.9705915

00:51:06.850 --> 00:51:07.810 time to get a referral

NOTE Confidence: 0.9705915

00:51:07.810 --> 00:51:08.950 for something like that.

NOTE Confidence: 0.9986404

00:51:09.810 --> 00:51:11.750 That is another very helpful

NOTE Confidence: 0.9997556

00:51:12.050 --> 00:51:12.550 suggestion.

NOTE Confidence: 0.93397725

00:51:13.775 --> 00:51:15.315 So we have, a a

NOTE Confidence: 0.93397725

00:51:15.455 --> 00:51:17.795 question from an anonymous attendee,  
NOTE Confidence: 0.9619132

00:51:18.735 --> 00:51:20.595 and, it says, what pathways  
NOTE Confidence: 0.9619132

00:51:20.655 --> 00:51:21.395 are available?  
NOTE Confidence: 0.9788517

00:51:22.015 --> 00:51:23.955 I only saw iron deficiency.  
NOTE Confidence: 0.991301

00:51:24.255 --> 00:51:25.614 So all of the ones  
NOTE Confidence: 0.991301

00:51:25.614 --> 00:51:26.815 that we showed are in  
NOTE Confidence: 0.991301

00:51:26.815 --> 00:51:27.315 there.  
NOTE Confidence: 0.8110366

00:51:28.700 --> 00:51:28.859 Actually,  
NOTE Confidence: 0.5098155

00:51:29.500 --> 00:51:31.039 we can to that?  
NOTE Confidence: 0.997337

00:51:31.739 --> 00:51:32.239 Yeah.  
NOTE Confidence: 0.9111601

00:51:32.700 --> 00:51:33.819 Oh, yeah. The give us  
NOTE Confidence: 0.9111601

00:51:33.819 --> 00:51:35.180 a table of contents of  
NOTE Confidence: 0.9111601

00:51:35.180 --> 00:51:36.619 that. It was, like, seven  
NOTE Confidence: 0.9111601

00:51:36.700 --> 00:51:38.160 slide seventeen or something.  
NOTE Confidence: 0.92970324

00:51:39.900 --> 00:51:40.400 Renee,  
NOTE Confidence: 0.95845705

00:51:40.859 --> 00:51:41.920 are you able to

NOTE Confidence: 0.7762842  
00:51:44.825 --> 00:51:46.444 She might have stepped away.  
NOTE Confidence: 0.8996194  
00:51:51.065 --> 00:51:52.025 I'll try to share it,  
NOTE Confidence: 0.8996194  
00:51:52.025 --> 00:51:54.045 but let's see. Yeah. Okay.  
NOTE Confidence: 0.8996194  
00:51:54.105 --> 00:51:55.885 Here it comes. Good. Always.  
NOTE Confidence: 0.9623297  
00:51:57.110 --> 00:51:58.469 Yeah. And if you can  
NOTE Confidence: 0.9623297  
00:51:58.469 --> 00:51:59.450 make that bigger.  
NOTE Confidence: 0.9965258  
00:52:03.350 --> 00:52:04.330 So we have  
NOTE Confidence: 0.9992337  
00:52:05.590 --> 00:52:06.090 thrombocytosis,  
NOTE Confidence: 0.99970865  
00:52:06.950 --> 00:52:07.450 lymphocytosis,  
NOTE Confidence: 0.99049854  
00:52:09.204 --> 00:52:10.265 ferritin evaluation,  
NOTE Confidence: 0.99647003  
00:52:10.805 --> 00:52:11.704 and erythrocytosis  
NOTE Confidence: 0.9580866  
00:52:12.565 --> 00:52:13.625 are what I'm reading  
NOTE Confidence: 0.98949444  
00:52:14.005 --> 00:52:15.204 with my face right up  
NOTE Confidence: 0.98949444  
00:52:15.204 --> 00:52:16.025 to the computer  
NOTE Confidence: 0.7723934  
00:52:17.364 --> 00:52:17.924 and bleeding  
NOTE Confidence: 0.88567907

00:52:18.405 --> 00:52:19.944 concern for bleeding disorder.  
NOTE Confidence: 0.9108159

00:52:22.290 --> 00:52:23.590 And and these were launched,  
NOTE Confidence: 0.98470074

00:52:23.890 --> 00:52:25.330 they're they're a little simpler  
NOTE Confidence: 0.98470074

00:52:25.330 --> 00:52:26.130 than some of the other  
NOTE Confidence: 0.98470074

00:52:26.130 --> 00:52:26.630 pathways,  
NOTE Confidence: 0.9824171

00:52:27.410 --> 00:52:28.450 and and so they were  
NOTE Confidence: 0.9824171

00:52:28.450 --> 00:52:29.489 kind of launched. There there's  
NOTE Confidence: 0.9824171

00:52:29.489 --> 00:52:30.530 actually some more ready to  
NOTE Confidence: 0.9824171

00:52:30.530 --> 00:52:31.510 go in hematology,  
NOTE Confidence: 0.85045063

00:52:32.210 --> 00:52:33.315 if, people,  
NOTE Confidence: 0.9520633

00:52:33.954 --> 00:52:35.155 find these helpful, which I  
NOTE Confidence: 0.9520633

00:52:35.155 --> 00:52:35.954 I think we've had a  
NOTE Confidence: 0.9520633

00:52:35.954 --> 00:52:36.454 resounding,  
NOTE Confidence: 0.9866704

00:52:37.075 --> 00:52:37.575 endorsement.  
NOTE Confidence: 0.9489173

00:52:38.114 --> 00:52:39.075 Frank, you looked at that.  
NOTE Confidence: 0.9489173

00:52:39.075 --> 00:52:40.375 You're like, these are great.

NOTE Confidence: 0.9489173

00:52:40.515 --> 00:52:41.635 So and, of course, there's,

NOTE Confidence: 0.9489173

00:52:41.875 --> 00:52:43.075 a ton of pathways in

NOTE Confidence: 0.9489173

00:52:43.075 --> 00:52:44.694 other things, diabetes, hypertension,

NOTE Confidence: 0.91452444

00:52:46.160 --> 00:52:47.680 you know, but not other

NOTE Confidence: 0.91452444

00:52:47.680 --> 00:52:49.200 things aside from heme as

NOTE Confidence: 0.91452444

00:52:49.200 --> 00:52:49.700 well.

NOTE Confidence: 0.91520935

00:52:52.960 --> 00:52:54.239 And whoever it is that

NOTE Confidence: 0.91520935

00:52:54.239 --> 00:52:54.739 asks

NOTE Confidence: 0.995009

00:52:55.520 --> 00:52:56.960 can always send me a

NOTE Confidence: 0.995009

00:52:56.960 --> 00:52:58.080 quick note, and I will

NOTE Confidence: 0.995009

00:52:58.080 --> 00:52:59.300 make sure you have somebody

NOTE Confidence: 0.995009

00:52:59.360 --> 00:53:00.880 help you find the additional

NOTE Confidence: 0.995009

00:53:00.880 --> 00:53:01.380 pathways.

NOTE Confidence: 0.715229

00:53:03.305 --> 00:53:04.585 Great. And, Frank, I'm gonna

NOTE Confidence: 0.715229

00:53:04.585 --> 00:53:05.484 be going back.

NOTE Confidence: 0.96782917

00:53:06.105 --> 00:53:06.905 I was oh, and if  
NOTE Confidence: 0.96782917

00:53:06.905 --> 00:53:08.585 you can't find it, maybe  
NOTE Confidence: 0.96782917

00:53:08.585 --> 00:53:10.984 that's a reason to, you  
NOTE Confidence: 0.96782917

00:53:10.984 --> 00:53:11.864 know, put it on the  
NOTE Confidence: 0.96782917

00:53:11.864 --> 00:53:13.464 list. Maybe it's being added  
NOTE Confidence: 0.96782917

00:53:13.464 --> 00:53:14.664 as we speak, but maybe  
NOTE Confidence: 0.96782917

00:53:14.664 --> 00:53:15.785 it's on the list. If  
NOTE Confidence: 0.96782917

00:53:15.785 --> 00:53:16.585 not, we could put it  
NOTE Confidence: 0.96782917

00:53:16.585 --> 00:53:17.565 on the list.  
NOTE Confidence: 0.9973422

00:53:18.800 --> 00:53:19.300 Exactly.  
NOTE Confidence: 0.8934162

00:53:20.320 --> 00:53:22.480 Okay. Well, it looks like  
NOTE Confidence: 0.8934162

00:53:22.480 --> 00:53:22.980 we  
NOTE Confidence: 0.9816767

00:53:24.080 --> 00:53:25.120 are ending nearing the end  
NOTE Confidence: 0.9816767

00:53:25.120 --> 00:53:26.900 of our hour where Kelsey's  
NOTE Confidence: 0.9816767

00:53:26.960 --> 00:53:28.880 daughter has announced it's time  
NOTE Confidence: 0.9816767

00:53:28.880 --> 00:53:30.320 to come have dinner or



NOTE Confidence: 0.9816767  
00:53:30.320 --> 00:53:31.300 something. Right?  
NOTE Confidence: 0.9729091  
00:53:32.994 --> 00:53:34.435 I was gonna ask go  
NOTE Confidence: 0.9729091  
00:53:34.435 --> 00:53:35.715 back to, Frank, your your  
NOTE Confidence: 0.9729091  
00:53:35.715 --> 00:53:37.795 background slide introducing this whole  
NOTE Confidence: 0.9729091  
00:53:37.795 --> 00:53:39.315 thing, which was sort of  
NOTE Confidence: 0.9729091  
00:53:39.315 --> 00:53:41.575 elevated blood counts and that,  
NOTE Confidence: 0.9993966  
00:53:41.955 --> 00:53:43.075 you know, there's  
NOTE Confidence: 0.94977474  
00:53:43.635 --> 00:53:44.855 it's so common.  
NOTE Confidence: 0.9511358  
00:53:45.309 --> 00:53:46.349 Every day you're looking at  
NOTE Confidence: 0.9511358  
00:53:46.349 --> 00:53:47.329 so many CBCs,  
NOTE Confidence: 0.98294955  
00:53:48.989 --> 00:53:50.430 trying to figure out what  
NOTE Confidence: 0.98294955  
00:53:50.430 --> 00:53:51.410 to do beforehand  
NOTE Confidence: 0.95925736  
00:53:51.789 --> 00:53:54.349 versus who really needs urgent  
NOTE Confidence: 0.95925736  
00:53:54.349 --> 00:53:54.849 care,  
NOTE Confidence: 0.8965012  
00:53:55.469 --> 00:53:57.710 or urgent referral or, you  
NOTE Confidence: 0.8965012

00:53:57.710 --> 00:53:59.650 know, accessing the e referral.  
NOTE Confidence: 0.963155

00:54:00.005 --> 00:54:01.685 Do you do you and  
NOTE Confidence: 0.963155

00:54:01.685 --> 00:54:02.965 Karen feel like you have  
NOTE Confidence: 0.963155

00:54:02.965 --> 00:54:04.265 a good handle on that?  
NOTE Confidence: 0.9948271

00:54:05.364 --> 00:54:06.585 Are there other instances  
NOTE Confidence: 0.9971846

00:54:06.885 --> 00:54:07.385 where  
NOTE Confidence: 0.9915245

00:54:09.205 --> 00:54:09.705 where  
NOTE Confidence: 0.98809576

00:54:10.805 --> 00:54:12.405 you're you're thinking that that  
NOTE Confidence: 0.98809576

00:54:12.405 --> 00:54:13.525 you need a little extra  
NOTE Confidence: 0.98809576

00:54:13.525 --> 00:54:14.645 help or or that you're  
NOTE Confidence: 0.98809576

00:54:14.645 --> 00:54:15.650 not quite sure where to  
NOTE Confidence: 0.98809576

00:54:15.650 --> 00:54:16.550 go from there?  
NOTE Confidence: 0.48823148

00:54:19.890 --> 00:54:20.390 Right?  
NOTE Confidence: 0.9924346

00:54:21.010 --> 00:54:21.670 I think,  
NOTE Confidence: 0.97443265

00:54:22.130 --> 00:54:23.090 I mean, I think, you  
NOTE Confidence: 0.97443265

00:54:23.090 --> 00:54:24.130 know, like what Karen said,

NOTE Confidence: 0.97443265  
00:54:24.130 --> 00:54:25.730 sometimes managing, like, sort of  
NOTE Confidence: 0.97443265  
00:54:25.730 --> 00:54:27.330 the patient expectation is sort  
NOTE Confidence: 0.97443265  
00:54:27.330 --> 00:54:28.770 of the our other job,  
NOTE Confidence: 0.97443265  
00:54:28.770 --> 00:54:30.195 right, besides just handling the  
NOTE Confidence: 0.97443265  
00:54:30.195 --> 00:54:32.195 medical stuff. And so sometimes  
NOTE Confidence: 0.97443265  
00:54:32.195 --> 00:54:33.795 there is no no amount  
NOTE Confidence: 0.97443265  
00:54:33.795 --> 00:54:34.455 of reassurance  
NOTE Confidence: 0.9931617  
00:54:34.755 --> 00:54:35.735 I can give someone.  
NOTE Confidence: 0.95866525  
00:54:36.594 --> 00:54:37.715 And so there there is  
NOTE Confidence: 0.95866525  
00:54:37.715 --> 00:54:38.935 unfortunately some  
NOTE Confidence: 0.90476525  
00:54:39.315 --> 00:54:40.114 it is what it is  
NOTE Confidence: 0.90476525  
00:54:40.114 --> 00:54:40.935 patient driven,  
NOTE Confidence: 0.99927914  
00:54:41.795 --> 00:54:43.255 referrals. I mean, I think  
NOTE Confidence: 0.97002256  
00:54:43.910 --> 00:54:45.270 the I would say the  
NOTE Confidence: 0.97002256  
00:54:45.270 --> 00:54:46.630 other ones that come up.  
NOTE Confidence: 0.97002256

00:54:46.630 --> 00:54:48.469 So the, the gammopathy or  
NOTE Confidence: 0.97002256

00:54:48.469 --> 00:54:49.910 the MGUS pathway, I think  
NOTE Confidence: 0.97002256

00:54:49.910 --> 00:54:51.130 I use a fair amount,  
NOTE Confidence: 0.9845862

00:54:51.830 --> 00:54:53.270 or or can't see myself  
NOTE Confidence: 0.9845862

00:54:53.270 --> 00:54:54.469 using a fair amount, which  
NOTE Confidence: 0.9845862

00:54:54.469 --> 00:54:55.610 is which is great.  
NOTE Confidence: 0.89735514

00:54:56.469 --> 00:54:57.030 And then,  
NOTE Confidence: 0.9488437

00:54:58.485 --> 00:54:59.445 the I think I think  
NOTE Confidence: 0.9488437

00:54:59.445 --> 00:55:01.225 someone alluded to the you  
NOTE Confidence: 0.9488437

00:55:01.445 --> 00:55:02.485 you see a pre op,  
NOTE Confidence: 0.9488437

00:55:02.485 --> 00:55:04.725 someone at had asked for  
NOTE Confidence: 0.9488437

00:55:04.725 --> 00:55:05.225 the,  
NOTE Confidence: 0.92407423

00:55:05.525 --> 00:55:07.045 the PT and PTT and  
NOTE Confidence: 0.92407423

00:55:07.045 --> 00:55:08.425 it's mildly elevated.  
NOTE Confidence: 0.9781652

00:55:08.805 --> 00:55:09.765 And then you're like, well,  
NOTE Confidence: 0.9781652

00:55:09.765 --> 00:55:10.885 now what I now what

NOTE Confidence: 0.9781652  
00:55:10.885 --> 00:55:11.845 do we do? Right? And  
NOTE Confidence: 0.9781652  
00:55:11.845 --> 00:55:12.345 so  
NOTE Confidence: 0.998163  
00:55:12.690 --> 00:55:13.190 so,  
NOTE Confidence: 0.9233217  
00:55:13.570 --> 00:55:14.609 you know, that's a that's  
NOTE Confidence: 0.9233217  
00:55:14.609 --> 00:55:16.530 another, I think, really, like,  
NOTE Confidence: 0.9233217  
00:55:16.530 --> 00:55:17.030 if,  
NOTE Confidence: 0.9264686  
00:55:17.489 --> 00:55:18.849 you know, you bookmark things,  
NOTE Confidence: 0.9264686  
00:55:18.849 --> 00:55:19.730 like, you know, is this  
NOTE Confidence: 0.9264686  
00:55:19.730 --> 00:55:21.410 a bookmarkable one? So those  
NOTE Confidence: 0.9264686  
00:55:21.410 --> 00:55:22.530 I think are are are  
NOTE Confidence: 0.9264686  
00:55:22.530 --> 00:55:24.609 good. I've not used, the  
NOTE Confidence: 0.9264686  
00:55:24.609 --> 00:55:25.890 eConsult as much, but I  
NOTE Confidence: 0.9264686  
00:55:25.890 --> 00:55:27.989 feel like there's just a  
NOTE Confidence: 0.9264686  
00:55:28.033 --> 00:55:30.145 a a a hidden or  
NOTE Confidence: 0.9264686  
00:55:30.145 --> 00:55:32.085 not so hidden, like, potential  
NOTE Confidence: 0.9264686

00:55:32.145 --> 00:55:32.885 to really,  
NOTE Confidence: 0.928289

00:55:33.905 --> 00:55:35.765 improve the through the throughput  
NOTE Confidence: 0.928289

00:55:35.985 --> 00:55:37.985 between, primary care and and  
NOTE Confidence: 0.928289

00:55:37.985 --> 00:55:38.485 heme,  
NOTE Confidence: 0.96129036

00:55:39.230 --> 00:55:40.750 with that. And so I  
NOTE Confidence: 0.96129036

00:55:40.750 --> 00:55:41.869 think I feel like that's  
NOTE Confidence: 0.96129036

00:55:41.869 --> 00:55:42.989 something that we should take  
NOTE Confidence: 0.96129036

00:55:42.989 --> 00:55:43.489 back,  
NOTE Confidence: 0.96626747

00:55:43.950 --> 00:55:44.989 and figure out how do  
NOTE Confidence: 0.96626747

00:55:44.989 --> 00:55:46.130 we make this,  
NOTE Confidence: 0.99572504

00:55:47.549 --> 00:55:48.349 more user  
NOTE Confidence: 0.9337691

00:55:48.989 --> 00:55:49.809 used more.  
NOTE Confidence: 0.9688559

00:55:50.589 --> 00:55:52.190 Mhmm. Yeah. It's pretty user  
NOTE Confidence: 0.9688559

00:55:52.190 --> 00:55:52.690 friendly.  
NOTE Confidence: 0.98178375

00:55:53.265 --> 00:55:54.864 And it it's nice, because  
NOTE Confidence: 0.98178375

00:55:54.864 --> 00:55:55.825 so many of us kind

NOTE Confidence: 0.98178375  
00:55:55.825 --> 00:55:57.204 of do curbsides. Right?  
NOTE Confidence: 0.8535652  
00:55:57.905 --> 00:55:58.864 We call we phone a  
NOTE Confidence: 0.8535652  
00:55:58.864 --> 00:55:59.364 friend.  
NOTE Confidence: 0.9593945  
00:56:00.145 --> 00:56:01.265 But that that's not in  
NOTE Confidence: 0.9593945  
00:56:01.265 --> 00:56:01.924 the chart,  
NOTE Confidence: 0.9197286  
00:56:02.545 --> 00:56:03.344 and it, you know, it  
NOTE Confidence: 0.9197286  
00:56:03.344 --> 00:56:04.464 it doesn't have any credit.  
NOTE Confidence: 0.9197286  
00:56:04.464 --> 00:56:05.910 The the there's actually billing  
NOTE Confidence: 0.9197286  
00:56:05.910 --> 00:56:07.349 credit for the specialist through  
NOTE Confidence: 0.9197286  
00:56:07.349 --> 00:56:08.650 the econsult. So,  
NOTE Confidence: 0.9482699  
00:56:09.270 --> 00:56:10.230 they they kind of get  
NOTE Confidence: 0.9482699  
00:56:10.230 --> 00:56:11.989 productivity credit and and and  
NOTE Confidence: 0.9482699  
00:56:11.989 --> 00:56:13.030 we get a a very  
NOTE Confidence: 0.9482699  
00:56:13.030 --> 00:56:13.849 clear answer.  
NOTE Confidence: 0.97764677  
00:56:14.630 --> 00:56:15.829 And, again, if we want  
NOTE Confidence: 0.97764677

00:56:15.829 --> 00:56:16.869 to, we can have a  
NOTE Confidence: 0.97764677

00:56:16.869 --> 00:56:18.390 whole another encounter to discuss  
NOTE Confidence: 0.97764677

00:56:18.390 --> 00:56:20.010 the answer if it's complicated,  
NOTE Confidence: 0.97764677

00:56:20.069 --> 00:56:21.045 or or we can just  
NOTE Confidence: 0.97764677

00:56:21.204 --> 00:56:22.244 simply send the patient a  
NOTE Confidence: 0.97764677

00:56:22.244 --> 00:56:23.204 note or or call the  
NOTE Confidence: 0.97764677

00:56:23.204 --> 00:56:24.325 patient if it's kind of  
NOTE Confidence: 0.97764677

00:56:24.325 --> 00:56:25.305 what we were expecting  
NOTE Confidence: 0.98047906

00:56:25.605 --> 00:56:26.424 to say anyway.  
NOTE Confidence: 0.9842136

00:56:27.684 --> 00:56:28.184 So  
NOTE Confidence: 0.9993308

00:56:28.898 --> 00:56:30.658 alright. Well, I have to  
NOTE Confidence: 0.9993308

00:56:30.658 --> 00:56:31.878 thank our speakers  
NOTE Confidence: 0.99957734

00:56:32.178 --> 00:56:33.378 very much for all of  
NOTE Confidence: 0.99957734

00:56:33.378 --> 00:56:33.958 the preparation  
NOTE Confidence: 0.96082836

00:56:34.258 --> 00:56:36.098 and wisdom and pearls that  
NOTE Confidence: 0.96082836

00:56:36.098 --> 00:56:36.838 came through,



NOTE Confidence: 0.9558716

00:56:37.938 --> 00:56:39.698 and, and and, Frank, for

NOTE Confidence: 0.9558716

00:56:39.698 --> 00:56:40.343 keeping us on