WEBVTT

NOTE duration: "00:56:40.343" NOTE Confidence: 0.93632483

 $00:00:00.000 \longrightarrow 00:00:01.120$ I'll go ahead and get

NOTE Confidence: 0.93632483

 $00:00:01.120 \longrightarrow 00:00:02.879$ us started. So good evening.

NOTE Confidence: 0.93632483

 $00:00:02.879 \longrightarrow 00:00:04.880$ This is Smilo shares with

NOTE Confidence: 0.93632483

 $00:00:04.880 \longrightarrow 00:00:06.019$ primary care,

NOTE Confidence: 0.99932766

 $00:00:06.799 \longrightarrow 00:00:08.420$ which is a monthly

NOTE Confidence: 0.9998053

 $00:00:08.960 \longrightarrow 00:00:09.460$ series

NOTE Confidence: 0.95823085

 $00{:}00{:}10.639 \dashrightarrow 00{:}00{:}13.045$ with primary care here at

NOTE Confidence: 0.95823085

 $00{:}00{:}13.045 \dashrightarrow 00{:}00{:}14.644$ 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

 $00:00:16.404 \longrightarrow 00:00:17.864$ and our oncology

NOTE Confidence: 0.82112724

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

NOTE Confidence: 0.74619365

 $00{:}00{:}20.324 \dashrightarrow 00{:}00{:}21.064$ at SMILO.

NOTE Confidence: 0.996029

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

NOTE Confidence: 0.9823504

 $00:00:24.164 \longrightarrow 00:00:26.000$ where they may present in

00:00:26.000 --> 00:00:28.320 primary care. Primary care may

NOTE Confidence: 0.9823504

 $00:00:28.320 \longrightarrow 00:00:30.000$ have some testing to do,

NOTE Confidence: 0.9823504

 $00:00:30.000 \longrightarrow 00:00:30.500$ evaluation,

NOTE Confidence: 0.9974182

 $00:00:31.279 \longrightarrow 00:00:33.059$ have to decide on referral

NOTE Confidence: 0.9974182

 $00:00:33.120 \longrightarrow 00:00:33.620$ criteria,

NOTE Confidence: 0.9522354

 $00:00:34.800 \longrightarrow 00:00:36.879$ 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

 $00:00:40.254 \longrightarrow 00:00:41.074$ We will

NOTE Confidence: 0.9084905

 $00{:}00{:}41.774 \dashrightarrow 00{:}00{:}44.034$ today be focusing on hematologic

NOTE Confidence: 0.7501181

 $00:00:44.815 \longrightarrow 00:00:45.315$ issues,

NOTE Confidence: 0.97184026

 $00{:}00{:}46.175 --> 00{:}00{:}47.534$ with a special focus on

NOTE Confidence: 0.97184026

 $00:00:47.534 \longrightarrow 00:00:48.915$ when things are too high,

NOTE Confidence: 0.9937282

 $00:00:49.614 \longrightarrow 00:00:51.214$ and we'll get started there

NOTE Confidence: 0.9937282

 $00:00:51.214 \longrightarrow 00:00:52.434$ in just a second.

NOTE Confidence: 0.9243219

 $00:00:53.489 \longrightarrow 00:00:55.010$ But first, I wanna make

NOTE Confidence: 0.9243219

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

 $00:00:57.250 \longrightarrow 00:00:58.449$ myself and,

NOTE Confidence: 0.8982895

 $00{:}00{:}59.010 \dashrightarrow 00{:}01{:}00.769$ pass it over to, Anne

NOTE Confidence: 0.8982895

 $00:01:00.769 \longrightarrow 00:01:01.269$ Chang

NOTE Confidence: 0.73073024

00:01:01.649 --> 00:01:02.370 who is,

NOTE Confidence: 0.9644532

 $00:01:03.170 \longrightarrow 00:01:05.170$ in the Smilow Cancer Center

NOTE Confidence: 0.9644532

 $00:01:05.170 \longrightarrow 00:01:06.310$ and will introduce

NOTE Confidence: 0.998747

 $00:01:06.690 \longrightarrow 00:01:08.229$ 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

 $00:01:10.555 \longrightarrow 00:01:12.075$ the medical director of primary

NOTE Confidence: 0.9757371

 $00{:}01{:}12.075 \dashrightarrow 00{:}01{:}13.675$ 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

 $00:01:17.755 \longrightarrow 00:01:19.055$ is my colleague,

NOTE Confidence: 0.99810255

 $00{:}01{:}19.755 \dashrightarrow 00{:}01{:}21.855$ also a primary care physician

 $00:01:22.475 \longrightarrow 00:01:23.375$ with a background

NOTE Confidence: 0.96608216

 $00:01:23.950 \longrightarrow 00:01:25.630$ of a chemistry degree at

NOTE Confidence: 0.96608216

00:01:25.630 --> 00:01:26.690 Georgetown University,

NOTE Confidence: 0.9993963

 $00:01:27.790 \longrightarrow 00:01:29.630$ working as an HIV case

NOTE Confidence: 0.9993963

 $00:01:29.630 \longrightarrow 00:01:30.130$ manager

NOTE Confidence: 0.99108756

 $00:01:30.670 \longrightarrow 00:01:31.709$ back in what we would

NOTE Confidence: 0.99108756

 $00:01:31.709 \longrightarrow 00:01:33.310$ call the day when there

NOTE Confidence: 0.99108756 00:01:33.310 --> 00:01:33.709 was,

NOTE Confidence: 0.99904555

 $00:01:34.110 \longrightarrow 00:01:34.610$ uncontrolled

NOTE Confidence: 0.76463974

 $00:01:34.910 \longrightarrow 00:01:35.410$ HIV.

NOTE Confidence: 0.9874777

 $00:01:36.215 \longrightarrow 00:01:37.655$ And then, went to medical

NOTE Confidence: 0.9874777

 $00:01:37.655 \longrightarrow 00:01:39.015$ school at NYU and did

NOTE Confidence: 0.9874777

 $00{:}01{:}39.015 \dashrightarrow 00{:}01{:}40.455$ his residency at University of

NOTE Confidence: 0.9874777

 $00{:}01{:}40.455 \dashrightarrow 00{:}01{:}40.955$ 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

 $00:01:45.575 \longrightarrow 00:01:47.415$ there for four years before

NOTE Confidence: 0.9618855

 $00{:}01{:}47.415 \dashrightarrow 00{:}01{:}49.435$ moving to Connecticut and joining,

NOTE Confidence: 0.91937727

 $00:01:50.040 \longrightarrow 00:01:51.560$ PrimeMed, which is a medical

NOTE Confidence: 0.91937727

 $00:01:51.560 \longrightarrow 00:01:52.759$ group which is now part

NOTE Confidence: 0.91937727 00:01:52.759 --> 00:01:53.159 of, NOTE Confidence: 0.94259953

 $00:01:53.560 \longrightarrow 00:01:55.420$ 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

 $00{:}01{:}57.320 \dashrightarrow 00{:}01{:}58.700$ the Yale School of Management

NOTE Confidence: 0.976458

 $00:01:59.079 \longrightarrow 00:02:00.280$ and is now both the

NOTE Confidence: 0.976458

 $00:02:00.280 \longrightarrow 00:02:02.325$ regional medical director for the

NOTE Confidence: 0.976458

00:02:02.564 --> 00:02:03.704 Bridgeport region,

NOTE Confidence: 0.8892187

 $00:02:04.325 \longrightarrow 00:02:05.685$ as well as the president

NOTE Confidence: 0.8892187

 $00{:}02{:}05.685 \dashrightarrow 00{:}02{:}07.225$ of the Prime Med Physicians

NOTE Confidence: 0.8892187

 $00:02:07.365 \longrightarrow 00:02:07.865$ PSA.

NOTE Confidence: 0.97248846

 $00:02:08.565 \longrightarrow 00:02:09.444$ He's on the board of

 $00:02:09.444 \longrightarrow 00:02:11.285$ trustees and the CIN board

NOTE Confidence: 0.97248846

 $00:02:11.285 \longrightarrow 00:02:11.944$ of directors.

NOTE Confidence: 0.96833026

 $00:02:12.644 \longrightarrow 00:02:14.245$ And, he lives in Easton

NOTE Confidence: 0.96833026

 $00:02:14.245 \longrightarrow 00:02:15.750$ with his wife who's an

NOTE Confidence: 0.96833026

 $00:02:15.990 \longrightarrow 00:02:17.669$ OB GYN, so he always

NOTE Confidence: 0.96833026

 $00:02:17.669 \longrightarrow 00:02:19.530$ has extra perspective to add

NOTE Confidence: 0.9670574

 $00:02:19.830 \longrightarrow 00:02:21.590$ and, tells me that he's

NOTE Confidence: 0.9670574

 $00:02:21.590 \longrightarrow 00:02:22.490$ feeling miserable

NOTE Confidence: 0.99815243

 $00{:}02{:}22.870 \longrightarrow 00{:}02{:}24.550$ miserably at learning tenn is in

NOTE Confidence: 0.99815243

 $00:02:24.550 \longrightarrow 00:02:26.250$ 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

 $00:02:30.470 \longrightarrow 00:02:31.610$ 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

 $00:02:33.985 \longrightarrow 00:02:35.364$ picture is a little old.

NOTE Confidence: 0.78600156

 $00:02:36.944 \longrightarrow 00:02:37.905$ I think that's all right.

00:02:37.905 --> 00:02:39.044 Doesn't do you justice.

NOTE Confidence: 0.9439913

 $00:02:39.984 \longrightarrow 00:02:41.584$ Thank you, Karen. This is

NOTE Confidence: 0.9439913

 $00:02:41.584 \longrightarrow 00:02:42.325$ such a

NOTE Confidence: 0.9356517

 $00:02:42.944 \longrightarrow 00:02:44.385$ pleasure to be here to night.

NOTE Confidence: 0.9356517

00:02:44.385 --> 00:02:46.064 I'm a medical oncologist and

NOTE Confidence: 0.9356517

 $00:02:46.064 \longrightarrow 00:02:48.620$ also associate cancer center director

NOTE Confidence: 0.94020057

 $00:02:49.160 \longrightarrow 00:02:51.240$ for clinical initiatives. And tonight

NOTE Confidence: 0.94020057

 $00:02:51.240 \longrightarrow 00:02:52.380$ we have two SMILO

NOTE Confidence: 0.8657263

 $00:02:53.000 \longrightarrow 00:02:54.220$ 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

 $00:02:59.000 \longrightarrow 00:02:59.500$ hematology.

NOTE Confidence: 0.97700906

 $00{:}03{:}00.255 \dashrightarrow 00{:}03{:}01.855$ She received her medical degree

NOTE Confidence: 0.97700906

 $00:03:01.855 \longrightarrow 00:03:03.055$ from the Royal College of

NOTE Confidence: 0.97700906

00:03:03.055 --> 00:03:04.735 Surgeons in Dublin, Ireland and

 $00:03:04.735 \longrightarrow 00:03:05.875$ completed her residency

NOTE Confidence: 0.94456303

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

NOTE Confidence: 0.94456303

 $00{:}03{:}07.615 \dashrightarrow 00{:}03{:}10.014$ 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

 $00:03:12.220 \longrightarrow 00:03:14.239$ She subsequently completed her subspecialty

NOTE Confidence: 0.95615244

 $00:03:14.540 \longrightarrow 00:03:15.680$ training in hematology

NOTE Confidence: 0.97643775

 $00:03:15.980 \longrightarrow 00:03:17.739$ 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

 $00:03:20.139 \longrightarrow 00:03:21.340$ and has been here at

NOTE Confidence: 0.9637319

 $00:03:21.340 \longrightarrow 00:03:22.720$ Smilo since that time.

NOTE Confidence: 0.9941236

 $00:03:23.099 \longrightarrow 00:03:24.060$ It's such a joy to

NOTE Confidence: 0.9941236

 $00:03:24.060 \longrightarrow 00:03:24.705$ have you.

NOTE Confidence: 0.95999265

 $00:03:25.185 \longrightarrow 00:03:26.085$ And also,

NOTE Confidence: 0.9318754

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

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

 $00:03:32.385 \longrightarrow 00:03:32.885$ hematologic

NOTE Confidence: 0.99922705

 $00:03:33.264 \longrightarrow 00:03:33.764$ disorders

NOTE Confidence: 0.9498963

 $00:03:34.065 \longrightarrow 00:03:36.225$ in women, cancer prevention, including

NOTE Confidence: 0.9498963

 $00:03:36.225 \longrightarrow 00:03:38.085$ the role of nutrition, obesity

NOTE Confidence: 0.9498963

 $00:03:38.225 \longrightarrow 00:03:39.765$ and the environment in cancer.

NOTE Confidence: 0.9608591

 $00:03:40.140 \longrightarrow 00:03:41.579$ 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

 $00:03:42.860 \longrightarrow 00:03:44.060$ 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

 $00:03:45.980 \longrightarrow 00:03:46.480$ forum.

NOTE Confidence: 0.9333849

 $00{:}03{:}46.939 \dashrightarrow 00{:}03{:}48.379$ 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

 $00:03:49.900 \longrightarrow 00:03:50.560$ of hematology

 $00:03:51.099 \longrightarrow 00:03:51.900$ as a member of the

NOTE Confidence: 0.9656308

 $00{:}03{:}51.900 \dashrightarrow 00{:}03{:}53.680$ committee and practice and representative

NOTE Confidence: 0.9656308

 $00:03:53.900 \longrightarrow 00:03:54.720$ for the AMA

NOTE Confidence: 0.94258314

 $00:03:55.185 \longrightarrow 00:03:56.165$ House of Delegates.

NOTE Confidence: 0.97219664

 $00:03:57.185 \longrightarrow 00:03:58.944$ Doctor. Martin's interested in how

NOTE Confidence: 0.97219664

 $00:03:58.944 \longrightarrow 00:04:00.805$ sex and gender influence health

NOTE Confidence: 0.97219664

 $00:04:00.944 \longrightarrow 00:04:02.545$ and collaborates with the women's

NOTE Confidence: 0.97219664

 $00:04:02.545 \longrightarrow 00:04:04.065$ health research at Yale. So

NOTE Confidence: 0.97219664

 $00{:}04{:}04.065 --> 00{:}04{:}04.965$ thank you, Kelsey.

NOTE Confidence: 0.95006084

 $00:04:05.584 \longrightarrow 00:04:06.625$ And then I'd like to

NOTE Confidence: 0.95006084

 $00{:}04{:}06.625 \dashrightarrow 00{:}04{:}09.285$ also introduce Doctor. Anish Sharda

NOTE Confidence: 0.95006084

 $00:04:09.530 \longrightarrow 00:04:10.430$ who's an assistant

NOTE Confidence: 0.8476922

 $00:04:10.730 \longrightarrow 00:04:12.349$ professor of medicine in hematology.

NOTE Confidence: 0.9195467

 $00{:}04{:}12.890 \dashrightarrow 00{:}04{:}14.250$ And he cares for patients

NOTE Confidence: 0.9195467

 $00:04:14.250 \longrightarrow 00:04:15.310$ as part of the SMILO

NOTE Confidence: 0.9195467

 $00:04:15.530 \longrightarrow 00:04:17.150$ Classic Hematology Program,

 $00:04:17.690 \longrightarrow 00:04:19.550$ previously known as benign hematology.

NOTE Confidence: 0.93821543

 $00:04:19.610 \longrightarrow 00:04:20.910$ Now we call it classic.

NOTE Confidence: 0.94309103

 $00:04:21.610 \longrightarrow 00:04:23.370$ His clinical and research interests

NOTE Confidence: 0.94309103

 $00:04:23.370 \longrightarrow 00:04:24.889$ 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

 $00:04:30.544 \longrightarrow 00:04:32.544$ in vascular biology is, is

NOTE Confidence: 0.96787465

 $00:04:32.544 \longrightarrow 00:04:33.685$ 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

 $00:04:35.745 \longrightarrow 00:04:37.365$ 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

 $00{:}04{:}42.080 \dashrightarrow 00{:}04{:}43.520$ residency at the University of

NOTE Confidence: 0.9216178

 $00{:}04{:}43.520 \dashrightarrow 00{:}04{:}44.980$ Minnesota Medical Center,

NOTE Confidence: 0.8823976

 $00:04:45.600 \longrightarrow 00:04:47.200$ followed by clinical and research

NOTE Confidence: 0.8823976

 $00:04:47.200 \longrightarrow 00:04:49.779$ fellowship and the Hemang fellowship

 $00:04:49.839 \longrightarrow 00:04:51.760$ at BI Deaconess Medical Center

NOTE Confidence: 0.8823976

 $00{:}04{:}51.760 \dashrightarrow 00{:}04{:}53.035$ and Harvard Medical School in

NOTE Confidence: 0.8823976

 $00:04:53.035 \longrightarrow 00:04:54.095$ Boston. So

NOTE Confidence: 0.9883506

 $00:04:54.395 \longrightarrow 00:04:56.335$ 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

 $00:05:01.995 \longrightarrow 00:05:03.035$ 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

 $00:05:04.154 \longrightarrow 00:05:05.675$ over to doctor Chimenola to

NOTE Confidence: 0.9508931

 $00{:}05{:}05.675 \dashrightarrow 00{:}05{:}06.635$ get us started with the

NOTE Confidence: 0.9508931

 $00:05:06.635 \longrightarrow 00:05:07.135$ cases.

NOTE Confidence: 0.9659155

 $00:05:07.630 \longrightarrow 00:05:08.990$ If you have questions as

NOTE Confidence: 0.9659155

 $00:05:08.990 \longrightarrow 00:05:10.430$ we go, please feel free

NOTE Confidence: 0.9659155

 $00:05:10.430 \longrightarrow 00:05:11.630$ to enter them in the

NOTE Confidence: 0.9659155

 $00:05:11.630 \longrightarrow 00:05:13.150$ q and a section and

 $00:05:13.150 \longrightarrow 00:05:14.589$ we will, break at the

NOTE Confidence: 0.9659155

 $00{:}05{:}14.589 \dashrightarrow 00{:}05{:}16.589$ appropriate point to answer them.

NOTE Confidence: 0.9659155

 $00:05:16.910 \longrightarrow 00:05:18.029$ It's it's part of what

NOTE Confidence: 0.9659155

 $00:05:18.029 \longrightarrow 00:05:19.390$ makes this series great is

NOTE Confidence: 0.9659155

 $00:05:19.390 \longrightarrow 00:05:21.230$ the ability to really answer

NOTE Confidence: 0.9659155

 $00:05:21.230 \longrightarrow 00:05:23.089$ questions real time throughout.

NOTE Confidence: 0.94069326

 $00:05:23.845 \longrightarrow 00:05:24.884$ And I see some of

NOTE Confidence: 0.94069326

 $00:05:24.884 \longrightarrow 00:05:25.625$ 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

 $00{:}05{:}31.844 \dashrightarrow 00{:}05{:}33.365$ 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

 $00:05:36.900 \longrightarrow 00:05:37.720$ you for attending.

NOTE Confidence: 0.9954555

 $00:05:38.180 \longrightarrow 00:05:39.160$ Thank you for

NOTE Confidence: 0.8372368

 $00:05:39.539 \longrightarrow 00:05:40.600$ having me. So,

NOTE Confidence: 0.9123501

 $00:05:41.380 \longrightarrow 00:05:43.539$ these are two cases from

NOTE Confidence: 0.9123501

 $00:05:43.539 \longrightarrow 00:05:44.440$ my panel.

NOTE Confidence: 0.9991432

 $00:05:44.979 \longrightarrow 00:05:46.199$ The data is

NOTE Confidence: 0.8098436

 $00:05:47.380 \longrightarrow 00:05:48.979$ a hundred percent like just

NOTE Confidence: 0.8098436

 $00:05:48.979 \longrightarrow 00:05:50.339$ 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

 $00:05:52.545 \longrightarrow 00:05:54.065$ you'll see where maybe I

NOTE Confidence: 0.9771627

 $00:05:54.065 \longrightarrow 00:05:54.945$ could have done a little

NOTE Confidence: 0.9771627

 $00:05:54.945 \longrightarrow 00:05:56.085$ more before referral,

NOTE Confidence: 0.9781444

 $00:05:56.785 \longrightarrow 00:05:57.745$ 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

 $00:06:01.345 \longrightarrow 00:06:02.464$ to to you all, the

00:06:02.464 --> 00:06:04.480 audience, and and, hopefully,

NOTE Confidence: 0.9960365

 $00:06:05.020 \longrightarrow 00:06:06.160$ you agree. So,

NOTE Confidence: 0.95165586

 $00:06:06.700 \longrightarrow 00:06:07.820$ we're gonna talk about two

NOTE Confidence: 0.95165586

 $00:06:07.820 \longrightarrow 00:06:09.420$ cases where the blood counts

NOTE Confidence: 0.95165586

 $00:06:09.420 \longrightarrow 00:06:10.460$ are high. Right? We think

NOTE Confidence: 0.95165586

 $00:06:10.460 \longrightarrow 00:06:12.140$ 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

 $00:06:13.100 \longrightarrow 00:06:14.460$ penis, but there's a lot

NOTE Confidence: 0.95165586

 $00:06:14.460 \longrightarrow 00:06:15.200$ of elevated

NOTE Confidence: 0.9751708

 $00:06:15.714 \longrightarrow 00:06:17.875$ and abnormal blood counts, when

NOTE Confidence: 0.9751708

 $00{:}06{:}17.875 \dashrightarrow 00{:}06{:}19.634$ 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

 $00:06:21.955 \longrightarrow 00:06:23.154$ that can be done prior

NOTE Confidence: 0.99891883

 $00:06:23.154 \longrightarrow 00:06:23.815$ to referral,

NOTE Confidence: 0.9795475

 $00:06:24.354 \longrightarrow 00:06:25.955$ which may actually eliminate the

 $00:06:25.955 \longrightarrow 00:06:27.014$ 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

 $00:06:28.755 \longrightarrow 00:06:30.035$ sort of identify people who

NOTE Confidence: 0.9766687

 $00:06:30.035 \longrightarrow 00:06:31.495$ need more urgent referrals,

NOTE Confidence: 0.91468734

 $00:06:31.850 \longrightarrow 00:06:33.370$ as well. And so we'll

NOTE Confidence: 0.91468734

 $00:06:33.370 \longrightarrow 00:06:34.810$ go through, these cases. If

NOTE Confidence: 0.91468734

 $00:06:34.810 \longrightarrow 00:06:36.270$ I get the next slide,

NOTE Confidence: 0.91468734

 $00:06:36.410 \longrightarrow 00:06:38.089$ please. So the first case

NOTE Confidence: 0.91468734

 $00:06:38.089 \longrightarrow 00:06:39.630$ was, is a gentleman

NOTE Confidence: 0.96351385

 $00:06:40.490 \longrightarrow 00:06:42.330$ who, about eight years ago,

NOTE Confidence: 0.96351385

 $00:06:42.330 \longrightarrow 00:06:42.990$ we saw,

NOTE Confidence: 0.99573326

 $00:06:43.529 \longrightarrow 00:06:44.589$ for fatigue

NOTE Confidence: 0.94465506 00:06:46.025 --> 00:06:46.525 and

NOTE Confidence: 0.90360796

 $00:06:47.064 \longrightarrow 00:06:49.164$ 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

 $00:06:50.904 \longrightarrow 00:06:52.264$ pressure was his only active

 $00{:}06{:}52.264 \dashrightarrow 00{:}06{:}53.625$ problem. He was at the

NOTE Confidence: 0.9502303

 $00:06:53.625 \longrightarrow 00:06:55.404$ 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

 $00:07:00.389 \longrightarrow 00:07:01.710$ works as a social worker

NOTE Confidence: 0.9395978500:07:01.710 --> 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

 $00:07:05.589 \longrightarrow 00:07:06.729$ BMI was was

NOTE Confidence: 0.9237931

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

NOTE Confidence: 0.9237931

 $00:07:09.430 \longrightarrow 00:07:10.490$ 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

 $00:07:14.150 \longrightarrow 00:07:15.210$ include some

NOTE Confidence: 0.84775454

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

 $00:07:18.005 \longrightarrow 00:07:19.065$ heme or hemonc,

NOTE Confidence: 0.9822407

 $00:07:19.845 \longrightarrow 00:07:21.525$ diseases. So he came in

NOTE Confidence: 0.9822407

 $00:07:21.525 \longrightarrow 00:07:22.345$ for fatigue.

NOTE Confidence: 0.94698465

 $00:07:22.885 \longrightarrow 00:07:24.165$ 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

 $00:07:27.285 \longrightarrow 00:07:27.785$ was,

NOTE Confidence: 0.7510143

 $00:07:28.485 \longrightarrow 00:07:28.985$ elevated,

NOTE Confidence: 0.99094176

 $00:07:30.050 \longrightarrow 00:07:31.410$ slightly. The rest of his

NOTE Confidence: 0.99094176

 $00:07:31.410 \longrightarrow 00:07:33.430$ 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

 $00:07:40.770 \longrightarrow 00:07:42.789$ was relatively unchanged. The hemoglobin

NOTE Confidence: 0.977074

 $00:07:43.354 \longrightarrow 00:07:44.815$ had stayed in the seventeen

NOTE Confidence: 0.977074

 $00:07:45.035 \longrightarrow 00:07:46.555$ to seventeen point five range.

NOTE Confidence: 0.977074 00:07:46.555 --> 00:07:47.055 So

 $00{:}07{:}47.995 \dashrightarrow 00{:}07{:}50.074$ mildly elevated. And other than

NOTE Confidence: 0.95495707

 $00{:}07{:}50.074 \dashrightarrow 00{:}07{:}51.835$ the fatigue, really no other

NOTE Confidence: 0.95495707

 $00:07:51.835 \longrightarrow 00:07:52.335$ symptoms.

NOTE Confidence: 0.928549

 $00:07:53.115 \longrightarrow 00:07:54.395$ We, we started the workup,

NOTE Confidence: 0.928549

 $00:07:54.395 \longrightarrow 00:07:55.595$ which showed the normal iron

NOTE Confidence: 0.928549

 $00:07:55.595 \longrightarrow 00:07:56.095$ studies,

NOTE Confidence: 0.86368823

 $00:07:57.514 \longrightarrow 00:07:58.655$ that you saw before.

NOTE Confidence: 0.92203414

 $00:07:59.220 \longrightarrow 00:08:00.660$ And, and then sort of

NOTE Confidence: 0.92203414

 $00:08:00.660 \longrightarrow 00:08:01.780$ kind of what and we

NOTE Confidence: 0.92203414

 $00:08:01.780 \longrightarrow 00:08:03.060$ were at and those were

NOTE Confidence: 0.92203414

 $00:08:03.060 \longrightarrow 00:08:03.560$ unrevealing.

NOTE Confidence: 0.9699258

 $00:08:04.260 \longrightarrow 00:08:05.140$ 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

 $00:08:06.100 \longrightarrow 00:08:07.620$ know, what, what next? And

NOTE Confidence: 0.9699258 00:08:07.620 --> 00:08:08.120 so, NOTE Confidence: 0.94349617 $00:08:08.660 \longrightarrow 00:08:10.020$ before we go back to,

NOTE Confidence: 0.94349617

 $00{:}08{:}10.020 \dashrightarrow 00{:}08{:}11.460$ to him, just sort of

NOTE Confidence: 0.94349617

 $00:08:11.460 \longrightarrow 00:08:12.760$ a little bit of a,

NOTE Confidence: 0.8543508

 $00:08:13.384 \longrightarrow 00:08:14.125$ a reintroduction

NOTE Confidence: 0.95798963

 $00:08:14.664 \longrightarrow 00:08:15.945$ to people on the care

NOTE Confidence: 0.95798963

00:08:15.945 --> 00:08:17.005 signature pathways.

NOTE Confidence: 0.9970139

 $00:08:17.625 \longrightarrow 00:08:18.585$ And you can see that

NOTE Confidence: 0.9970139

 $00:08:18.585 \longrightarrow 00:08:19.405$ in the last

NOTE Confidence: 0.9664081

 $00:08:19.945 \longrightarrow 00:08:21.805$ few months, they've really,

NOTE Confidence: 0.7088167

 $00:08:22.905 \longrightarrow 00:08:23.405$ increased

NOTE Confidence: 0.94867116

 $00:08:23.945 \longrightarrow 00:08:25.405$ especially in some of the

NOTE Confidence: 0.9967053

 $00:08:25.960 \longrightarrow 00:08:26.780$ basic hematologic

NOTE Confidence: 0.9586462

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

NOTE Confidence: 0.9586462

 $00:08:28.200 \longrightarrow 00:08:30.060$ 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

 $00:08:33.320 \longrightarrow 00:08:35.260$ the the care signature pathways

 $00{:}08{:}35.880 \longrightarrow 00{:}08{:}37.320$ are pathways that are designed

NOTE Confidence: 0.8805368 00:08:37.320 --> 00:08:37.820 by, NOTE Confidence: 0.88520163

 $00:08:38.342 \longrightarrow 00:08:39.925$ of a group of our

NOTE Confidence: 0.88520163

 $00:08:39.925 \longrightarrow 00:08:40.425$ local,

NOTE Confidence: 0.98651856

00:08:41.125 --> 00:08:42.345 clinicians and experts,

NOTE Confidence: 0.97097313

 $00:08:42.804 \longrightarrow 00:08:44.005$ 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

 $00:08:46.245 \longrightarrow 00:08:48.405$ a certain, problem. We probably

NOTE Confidence: 0.97097313

 $00:08:48.405 \longrightarrow 00:08:50.085$ all know it started or

NOTE Confidence: 0.97097313

 $00:08:50.085 \longrightarrow 00:08:52.485$ or, really gained some some

NOTE Confidence: 0.97097313

 $00:08:52.485 \longrightarrow 00:08:54.184$ fame with the COVID.

NOTE Confidence: 0.9192319

00:08:54.720 --> 00:08:56.100 But now is,

NOTE Confidence: 0.7858081

 $00:08:57.839 \longrightarrow 00:08:58.660$ the number,

NOTE Confidence: 0.9494369

 $00:08:59.519 \longrightarrow 00:09:00.800$ and then the depth of

NOTE Confidence: 0.9494369

 $00:09:00.800 \longrightarrow 00:09:02.079$ some of the information you

 $00:09:02.079 \longrightarrow 00:09:03.519$ get from there is, is

NOTE Confidence: 0.9494369

 $00:09:03.519 \longrightarrow 00:09:05.199$ incredible. And, and it's a

NOTE Confidence: 0.9494369 00:09:05.199 --> 00:09:05.699 live, NOTE Confidence: 0.95538336

 $00:09:06.959 \longrightarrow 00:09:08.079$ a live document, so to

NOTE Confidence: 0.95538336

 $00:09:08.079 \longrightarrow 00:09:10.095$ speak, where it it's continuing

NOTE Confidence: 0.95538336

 $00:09:10.315 \longrightarrow 00:09:11.135$ to change.

NOTE Confidence: 0.9909595

 $00:09:11.995 \longrightarrow 00:09:12.815$ And so

NOTE Confidence: 0.9779561

 $00:09:13.515 \longrightarrow 00:09:15.275$ just, so these are some

NOTE Confidence: 0.9779561

 $00:09:15.275 \longrightarrow 00:09:16.175$ of the new ones,

NOTE Confidence: 0.96494776

 $00:09:16.635 \longrightarrow 00:09:17.934$ or some of them, including

NOTE Confidence: 0.96494776

 $00{:}09{:}18.075 \dashrightarrow 00{:}09{:}20.415$ some that are really relatively

NOTE Confidence: 0.96494776

 $00:09:20.554 \longrightarrow 00:09:21.835$ brand new. Another reason we

NOTE Confidence: 0.96494776

 $00:09:21.835 \longrightarrow 00:09:23.035$ pick some of these cases

NOTE Confidence: 0.96494776

 $00:09:23.035 \longrightarrow 00:09:23.995$ was to highlight some of

NOTE Confidence: 0.96494776

 $00:09:23.995 \longrightarrow 00:09:26.010$ the new care signature pathways.

NOTE Confidence: 0.99153775

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

 $00:09:27.670 \longrightarrow 00:09:29.530$ the next slide, please. So,

NOTE Confidence: 0.98300236

 $00:09:30.150 \longrightarrow 00:09:31.530$ 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

 $00:09:35.190 \longrightarrow 00:09:36.090$ for an elevated,

NOTE Confidence: 0.92816

 $00:09:36.550 \longrightarrow 00:09:37.050$ hemoglobin.

NOTE Confidence: 0.9600396

00:09:38.465 --> 00:09:39.285 Should have mentioned

NOTE Confidence: 0.9206803

 $00:09:39.745 \longrightarrow 00:09:41.345$ in in the history part

NOTE Confidence: 0.9206803

 $00:09:41.345 \longrightarrow 00:09:43.125$ that his pulse ox had

NOTE Confidence: 0.9206803

 $00:09:43.184 \longrightarrow 00:09:44.085$ been consistently

NOTE Confidence: 0.99781096

 $00:09:44.545 \longrightarrow 00:09:45.045$ normal.

NOTE Confidence: 0.9338819

 $00:09:45.585 \longrightarrow 00:09:47.285$ We saw, I'm on the

NOTE Confidence: 0.9338819

 $00{:}09{:}47.505 \dashrightarrow 00{:}09{:}49.025$ right side actually now some

NOTE Confidence: 0.9338819

 $00:09:49.025 \longrightarrow 00:09:50.465$ of the basic stuff. You

NOTE Confidence: 0.9338819

 $00:09:50.465 \longrightarrow 00:09:51.845$ know, he wasn't on testosterone,

 $00:09:53.360 \longrightarrow 00:09:55.120$ 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

 $00:09:56.240 \longrightarrow 00:09:57.200$ see some of the things

NOTE Confidence: 0.9543383

 $00:09:57.200 \longrightarrow 00:09:58.000$ that we had done now

NOTE Confidence: 0.9543383

 $00:09:58.000 \longrightarrow 00:09:59.200$ 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

 $00:10:00.720 \longrightarrow 00:10:01.840$ so there wasn't a cancerous

NOTE Confidence: 0.9543383

 $00:10:01.840 \longrightarrow 00:10:02.880$ 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

 $00:10:04.320 \longrightarrow 00:10:05.360$ did some of the workup.

NOTE Confidence: 0.9543383

 $00:10:05.360 \longrightarrow 00:10:06.160$ As you can see, there's

NOTE Confidence: 0.9543383

 $00:10:06.160 \longrightarrow 00:10:07.120$ probably a little bit more

NOTE Confidence: 0.9543383

 $00:10:07.120 \longrightarrow 00:10:08.175$ 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

 $00:10:09.375 \longrightarrow 00:10:10.355$ urgent referral,

NOTE Confidence: 0.8410642

 $00:10:12.095 \longrightarrow 00:10:13.535$ but the care synergy pathway

00:10:13.535 --> 00:10:14.755 really does sort of,

NOTE Confidence: 0.9806145

 $00{:}10{:}15.855 \dashrightarrow 00{:}10{:}16.995$ I find to be incredibly

NOTE Confidence: 0.9806145

00:10:17.054 --> 00:10:17.554 helpful,

NOTE Confidence: 0.98356074

 $00:10:18.015 \longrightarrow 00:10:19.455$ for some, for a lot

NOTE Confidence: 0.98356074

 $00:10:19.455 \longrightarrow 00:10:20.274$ of the hematologic

NOTE Confidence: 0.6092245

 $00:10:20.894 \longrightarrow 00:10:21.394$ diseases

NOTE Confidence: 0.9929857

 $00:10:21.855 \longrightarrow 00:10:22.595$ 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

 $00:10:27.040 \longrightarrow 00:10:27.860$ to the next

NOTE Confidence: 0.84552956

 $00:10:28.399 \longrightarrow 00:10:28.899$ slide,

NOTE Confidence: 0.9386131

 $00:10:29.920 \longrightarrow 00:10:32.100$ and, I'm gonna pass this,

NOTE Confidence: 0.7687911

 $00:10:32.959 \longrightarrow 00:10:33.459$ forward,

NOTE Confidence: 0.9824729

 $00:10:34.959 \longrightarrow 00:10:36.480$ but, I'm gonna stick around

NOTE Confidence: 0.9824729

 $00:10:36.480 \longrightarrow 00:10:38.019$ if there's any questions from,

NOTE Confidence: 0.9873227

 $00{:}10{:}38.645 \dashrightarrow 00{:}10{:}39.304$ for me.

 $00:10:41.765 \longrightarrow 00:10:42.265$ 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

 $00:10:46.804 \longrightarrow 00:10:48.184$ initially, some definitions

NOTE Confidence: 0.9927879

00:10:48.725 --> 00:10:49.385 of erythrocytosis,

NOTE Confidence: 0.96245086

 $00{:}10{:}50.405 \dashrightarrow 00{:}10{:}51.445$ 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

 $00:10:54.890 \longrightarrow 00:10:56.110$ different normal ranges,

NOTE Confidence: 0.98538804

 $00:10:56.890 \longrightarrow 00:10:58.730$ which could flag something as

NOTE Confidence: 0.98538804

 $00{:}10{:}58.730 \dashrightarrow 00{:}11{:}00.329$ potentially being high when may be

NOTE Confidence: 0.98538804

 $00:11:00.329 \longrightarrow 00:11:01.529$ we don't consider it as

NOTE Confidence: 0.98538804

 $00{:}11{:}01.529 --> 00{:}11{:}02.029 \; \mathrm{such}.$

NOTE Confidence: 0.9481716

00:11:02.970 --> 00:11:03.450 But,

NOTE Confidence: 0.98788285

 $00:11:04.010 \longrightarrow 00:11:05.550$ there are sex differences,

NOTE Confidence: 0.982975

 $00{:}11{:}06.250 \dashrightarrow 00{:}11{:}07.709$ in how we define arthrocytosis

 $00{:}11{:}08.170 \dashrightarrow 00{:}11{:}09.595$ and for sixteen point five

NOTE Confidence: 0.96160966

 $00{:}11{:}09.595 \dashrightarrow 00{:}11{:}10.795$ grams per deciliter for males

NOTE Confidence: 0.96160966

 $00:11:10.795 \longrightarrow 00:11:12.554$ and sixteen grams per deciliter

NOTE Confidence: 0.96160966

 $00:11:12.554 \longrightarrow 00:11:14.255$ for females with the corresponding

NOTE Confidence: 0.96160966

 $00:11:14.394 \longrightarrow 00:11:16.975$ 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

 $00:11:19.035 \longrightarrow 00:11:20.394$ 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

 $00:11:22.714 \longrightarrow 00:11:24.660$ which is really an autonomous

NOTE Confidence: 0.9841196

 $00:11:24.720 \longrightarrow 00:11:26.640$ production. And and for the

NOTE Confidence: 0.9841196

 $00:11:26.640 \longrightarrow 00:11:28.000$ sake of this discussion, that

NOTE Confidence: 0.9841196

 $00:11:28.000 \longrightarrow 00:11:29.620$ 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

 $00:11:33.040 \longrightarrow 00:11:34.320$ Everything else which is more

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

NOTE Confidence: 0.96738344

 $00:11:36.080 \longrightarrow 00:11:36.580$ erythrocytosis.

NOTE Confidence: 0.968684

 $00:11:36.960 \longrightarrow 00:11:37.755$ And these are,

NOTE Confidence: 0.95943564

 $00:11:38.395 \longrightarrow 00:11:39.755$ situations in which it's it's

NOTE Confidence: 0.95943564

 $00:11:39.755 \longrightarrow 00:11:41.035$ not autonomous or rather an

NOTE Confidence: 0.95943564

 $00:11:41.035 \longrightarrow 00:11:43.035$ external factor, which is leading

NOTE Confidence: 0.95943564

 $00:11:43.035 \longrightarrow 00:11:44.395$ to the booster red cell

NOTE Confidence: 0.95943564

 $00:11:44.395 \longrightarrow 00:11:45.515$ 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

 $00:11:47.675 \longrightarrow 00:11:48.175$ erythropoietin

NOTE Confidence: 0.9852262

 $00:11:48.715 \longrightarrow 00:11:49.915$ 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

 $00:11:52.970 \longrightarrow 00:11:54.350$ 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

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

NOTE Confidence: 0.9990809

 $00:12:00.809 \longrightarrow 00:12:02.570$ 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

 $00:12:05.065 \longrightarrow 00:12:05.565$ causes.

NOTE Confidence: 0.9307235

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

NOTE Confidence: 0.9915613

 $00:12:09.225 \longrightarrow 00:12:10.925$ 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

 $00:12:15.785 \longrightarrow 00:12:16.605$ in his case,

NOTE Confidence: 0.9937452

 $00:12:17.625 \longrightarrow 00:12:18.285$ where they

NOTE Confidence: 0.9905009

 $00:12:18.720 \longrightarrow 00:12:19.779$ discontinued the,

NOTE Confidence: 0.92420363

 $00:12:20.880 \longrightarrow 00:12:21.380$ hydrochlorothiazide.

NOTE Confidence: 0.8557842

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

NOTE Confidence: 0.8790788

 $00:12:28.160 \longrightarrow 00:12:29.199$ you know, most of the

NOTE Confidence: 0.8790788

 $00:12:29.199 \longrightarrow 00:12:30.320$ time, when we're thinking about

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

NOTE Confidence: 0.8790788

 $00:12:31.920 \longrightarrow 00:12:33.565$ where the there's

NOTE Confidence: 0.92205864

 $00:12:34.024 \longrightarrow 00:12:35.144$ a change in the plasma

NOTE Confidence: 0.92205864

 $00:12:35.144 \longrightarrow 00:12:36.605$ volume creating this,

NOTE Confidence: 0.9599186

 $00:12:37.225 \longrightarrow 00:12:37.725$ increase,

NOTE Confidence: 0.90502363

00:12:38.265 --> 00:12:39.325 or apparent increase,

NOTE Confidence: 0.97982424

 $00{:}12{:}40.105 \dashrightarrow 00{:}12{:}41.725$ in the hemoglobin or hematocrit.

NOTE Confidence: 0.9620136

 $00:12:42.184 \longrightarrow 00:12:43.464$ We might often be talking

NOTE Confidence: 0.9620136

 $00{:}12{:}43.464 \dashrightarrow 00{:}12{:}45.304$ 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

 $00:12:48.899 \longrightarrow 00:12:50.259$ either vomiting or diarrhea, but

NOTE Confidence: 0.9848222

 $00:12:50.259 \longrightarrow 00:12:51.139$ I just did wanna make

NOTE Confidence: 0.9848222

 $00:12:51.139 \longrightarrow 00:12:52.100$ a brief mention that there

NOTE Confidence: 0.9848222 00:12:52.100 --> 00:12:52.759 is a,

00:12:53.620 --> 00:12:54.120 condition,

NOTE Confidence: 0.9784883

 $00:12:54.660 \longrightarrow 00:12:56.500$ called case box polycythemia, which

NOTE Confidence: 0.9784883

 $00:12:56.500 \longrightarrow 00:12:57.220$ can really be thought of

NOTE Confidence: 0.9784883

 $00:12:57.220 \longrightarrow 00:12:58.500$ as almost a chronic form

NOTE Confidence: 0.9784883

 $00:12:58.500 \longrightarrow 00:13:00.199$ of of relative polycythemia.

NOTE Confidence: 0.9290268

 $00:13:00.500 \longrightarrow 00:13:01.379$ We we might tend to

NOTE Confidence: 0.9290268

 $00:13:01.379 \longrightarrow 00:13:02.355$ see that in,

NOTE Confidence: 0.9995733

00:13:02.834 --> 00:13:04.054 males with hypertension

NOTE Confidence: 0.9804183

 $00:13:04.434 \longrightarrow 00:13:06.375$ who are obese. So sometimes,

NOTE Confidence: 0.94842976

 $00{:}13{:}07.475 \dashrightarrow 00{:}13{:}08.675$ I personally find it's almost

NOTE Confidence: 0.94842976

 $00{:}13{:}08.675 \dashrightarrow 00{:}13{:}10.514$ 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

 $00:13:12.915 \longrightarrow 00:13:13.815$ the next slide.

NOTE Confidence: 0.99731797

00:13:15.510 --> 00:13:16.950 So, you know, one brief

00:13:16.950 --> 00:13:18.010 slide here on polycythemia

NOTE Confidence: 0.96928763

 $00{:}13{:}18.310 \dashrightarrow 00{:}13{:}19.350$ ver a because I think that's

NOTE Confidence: 0.96928763

 $00:13:19.350 \longrightarrow 00:13:19.850$ often,

NOTE Confidence: 0.97349435

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

NOTE Confidence: 0.97349435

 $00:13:22.310 \longrightarrow 00:13:23.750$ of course, we don't wanna

NOTE Confidence: 0.97349435

 $00:13:23.750 \longrightarrow 00:13:24.250$ miss.

NOTE Confidence: 0.99458706

 $00:13:24.950 \longrightarrow 00:13:26.330$ And this is a,

NOTE Confidence: 0.9908933

00:13:27.030 --> 00:13:28.170 cancer, a myeloproliferative

NOTE Confidence: 0.98997915

 $00:13:28.630 \longrightarrow 00:13:30.485$ 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

 $00{:}13{:}32.325 \dashrightarrow 00{:}13{:}33.785$ Patients often have thrombotic,

NOTE Confidence: 0.973397

 $00:13:34.245 \longrightarrow 00:13:36.005$ but sometimes bleeding complications and

NOTE Confidence: 0.973397

00:13:36.005 --> 00:13:36.985 can have vasomotor

NOTE Confidence: 0.99926305

 $00{:}13{:}37.684 --> 00{:}13{:}38.184 \ {\rm symptoms}.$

NOTE Confidence: 0.8745522

 $00:13:40.245 \longrightarrow 00:13:42.085$ For simplicity's sake for this

NOTE Confidence: 0.8745522

 $00:13:42.085 \longrightarrow 00:13:42.585$ discussion,

00:13:43.410 --> 00:13:45.269 essentially, all patients with polycythemia

NOTE Confidence: 0.92975676

 $00:13:45.809 \longrightarrow 00:13:46.850$ there will have a JAK

NOTE Confidence: 0.92975676

 $00:13:46.850 \longrightarrow 00:13:48.389$ two mutation. So

NOTE Confidence: 0.97821236

 $00:13:49.089 \longrightarrow 00:13:50.209$ 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

 $00:13:51.329 \longrightarrow 00:13:52.529$ seven f mutation, and then

NOTE Confidence: 0.97821236

 $00:13:52.529 \longrightarrow 00:13:53.589$ a smaller percentage

NOTE Confidence: 0.9437024

 $00:13:54.050 \longrightarrow 00:13:55.089$ are kinda what we call

NOTE Confidence: 0.9437024

 $00:13:55.089 \longrightarrow 00:13:56.630$ other other JAK mutations.

NOTE Confidence: 0.95516163

 $00:13:57.345 \longrightarrow 00:13:58.545$ And so if somebody is

NOTE Confidence: 0.95516163

 $00:13:58.704 \longrightarrow 00:14:00.165$ 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

 $00:14:05.345 \longrightarrow 00:14:05.845$ vera.

 $00:14:08.704 \longrightarrow 00:14:09.824$ So this is a,

NOTE Confidence: 0.99972284

 $00{:}14{:}10.385 --> 00{:}14{:}11.204 \text{ one proposed}$

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

 $00:14:15.980 \longrightarrow 00:14:17.340$ 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

 $00:14:19.180 \longrightarrow 00:14:20.240$ taken from a,

NOTE Confidence: 0.94164735

 $00:14:20.700 \longrightarrow 00:14:22.060$ European journal, so you can

NOTE Confidence: 0.94164735

 $00:14:22.060 \longrightarrow 00:14:23.260$ 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

 $00:14:26.075 \longrightarrow 00:14:27.695$ 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

 $00{:}14{:}30.955 --> 00{:}14{:}31.455 \ \mathrm{erythrocytosis},$

NOTE Confidence: 0.97480124

 $00:14:31.835 \longrightarrow 00:14:32.875$ which is really things like

NOTE Confidence: 0.97480124

 $00:14:32.875 \longrightarrow 00:14:33.375$ dehydration,

00:14:34.875 --> 00:14:35.675 you know, then we get

NOTE Confidence: 0.9717315

 $00:14:35.675 \longrightarrow 00:14:36.795$ to this next main fork

NOTE Confidence: 0.9717315

 $00:14:36.795 \longrightarrow 00:14:38.250$ in the road. And of

NOTE Confidence: 0.9717315

 $00:14:38.250 \longrightarrow 00:14:39.690$ the next kind of very

NOTE Confidence: 0.9717315

 $00:14:39.690 \longrightarrow 00:14:40.890$ useful test that can be

NOTE Confidence: 0.9717315

 $00:14:40.890 \longrightarrow 00:14:43.870$ 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

 $00:14:45.690 \longrightarrow 00:14:47.370$ to be high, low, or

NOTE Confidence: 0.99294

 $00:14:47.370 \longrightarrow 00:14:48.430$ normal, that helps,

NOTE Confidence: 0.9963527

 $00:14:48.970 \longrightarrow 00:14:50.430$ bring us into the next,

NOTE Confidence: 0.98264384

 $00{:}14{:}52.395 --> 00{:}14{:}53.195 \ \mathrm{most \ likely},$

NOTE Confidence: 0.9483717

 $00{:}14{:}53.755 \dashrightarrow 00{:}14{:}55.115$ 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

 $00:15:00.475 \longrightarrow 00:15:02.255$ acquired causes. So not polycythemia

NOTE Confidence: 0.95924973

 $00{:}15{:}02.635 \dashrightarrow 00{:}15{:}03.675$ vera, not the can not

NOTE Confidence: 0.95924973

 $00:15:03.675 \longrightarrow 00:15:05.035$ a cancerous condition, but something

NOTE Confidence: 0.95924973

 $00:15:05.035 \longrightarrow 00:15:06.795$ else driving EPO levels to

NOTE Confidence: 0.95924973

 $00:15:06.795 \longrightarrow 00:15:07.410$ be high.

NOTE Confidence: 0.8886964

 $00:15:07.810 \longrightarrow 00:15:09.490$ And often the main the

NOTE Confidence: 0.8886964

 $00:15:09.490 \longrightarrow 00:15:09.970$ main,

NOTE Confidence: 0.98166305

 $00:15:10.370 \longrightarrow 00:15:12.050$ reasons here are hypoxia and

NOTE Confidence: 0.98166305

 $00{:}15{:}12.050 \dashrightarrow 00{:}15{:}13.829$ medical conditions that cause such

NOTE Confidence: 0.98166305

 $00:15:13.889 \longrightarrow 00:15:14.629$ and medications.

NOTE Confidence: 0.9874741

 $00:15:15.410 \longrightarrow 00:15:17.110$ 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

 $00:15:20.264 \longrightarrow 00:15:21.084$ If the,

NOTE Confidence: 0.9589318

 $00{:}15{:}21.625 {\:\dashrightarrow\:} 00{:}15{:}23.385$ erythropoiet in level is low or

NOTE Confidence: 0.9589318

 $00:15:23.385 \longrightarrow 00:15:24.584$ very low, then that's where

NOTE Confidence: 0.9589318

 $00:15:24.584 \longrightarrow 00:15:26.105$ we often will next check

 $00:15:26.105 \longrightarrow 00:15:27.144$ the JAK two,

NOTE Confidence: 0.9943852

 $00{:}15{:}27.865 \to 00{:}15{:}29.225$ mutation testing. Again, if it's

NOTE Confidence: 0.9943852

 $00:15:29.225 \longrightarrow 00:15:30.745$ positive, that confirms that someone

NOTE Confidence: 0.9943852

 $00:15:30.745 \longrightarrow 00:15:31.404$ has polycythemia

NOTE Confidence: 0.9987032

 $00:15:31.865 \longrightarrow 00:15:32.365$ vera.

NOTE Confidence: 0.9682441

 $00:15:33.050 \longrightarrow 00:15:34.830$ If it's negative, we we,

NOTE Confidence: 0.9800927

 $00:15:36.170 \longrightarrow 00:15:37.610$ we'll we'll look for those

NOTE Confidence: 0.9800927

 $00:15:37.610 \longrightarrow 00:15:38.589$ other JAK mutations.

NOTE Confidence: 0.9919288

00:15:39.930 --> 00:15:40.430 And,

NOTE Confidence: 0.99857956

 $00:15:40.970 \longrightarrow 00:15:42.330$ 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

 $00:15:49.285 \longrightarrow 00:15:50.405$ Okay. So, again, our in

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

 $00:15:53.525 \longrightarrow 00:15:54.485$ to check would be an

NOTE Confidence: 0.9606091

 $00:15:54.485 \longrightarrow 00:15:54.985$ erythropoietin

NOTE Confidence: 0.9902204

 $00:15:55.365 \longrightarrow 00:15:55.865$ 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

 $00:15:59.045 \longrightarrow 00:16:00.805$ the direction of placentia vera.

NOTE Confidence: 0.97699517

 $00:16:00.805 \longrightarrow 00:16:02.085$ And if it's normal or

NOTE Confidence: 0.97699517

 $00:16:02.085 \longrightarrow 00:16:03.445$ elevated, then we're going down

NOTE Confidence: 0.97699517

 $00:16:03.445 \longrightarrow 00:16:04.345$ the more common

NOTE Confidence: 0.99921113

 $00:16:04.780 \longrightarrow 00:16:06.560$ likelihood of secondary etiologies.

NOTE Confidence: 0.9531681

 $00:16:08.620 \longrightarrow 00:16:09.500$ So this is just a

NOTE Confidence: 0.9531681

 $00:16:09.500 \longrightarrow 00:16:11.980$ 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,

 $00:16:15.340 \longrightarrow 00:16:16.780$ you might commonly see in

NOTE Confidence: 0.99654216

 $00{:}16{:}16.780 --> 00{:}16{:}17.520 \ \mathrm{your \ practice},$

NOTE Confidence: 0.99342704

 $00:16:18.620 \longrightarrow 00:16:19.200$ that can

NOTE Confidence: 0.934058

 $00:16:19.835 \longrightarrow 00:16:21.755$ that can, again, have a

NOTE Confidence: 0.934058

 $00:16:21.755 \longrightarrow 00:16:22.255$ erythrocytosis

NOTE Confidence: 0.920996

 $00:16:22.635 \longrightarrow 00:16:23.995$ and with either a normal

NOTE Confidence: 0.920996

00:16:23.995 --> 00:16:25.055 or increased erythropoietin

NOTE Confidence: 0.955305

 $00{:}16{:}25.435 --> 00{:}16{:}25.935 \ \mathrm{level}.$

NOTE Confidence: 0.75976354

00:16:28.155 --> 00:16:28.975 So cardiopulmonary

NOTE Confidence: 0.9806707

 $00:16:29.435 \longrightarrow 00:16:31.115$ disease and obstructive sleep apnea,

NOTE Confidence: 0.9806707

00:16:31.115 --> 00:16:32.235 I think, are 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

 $00:16:35.580 \longrightarrow 00:16:36.480$ in a high altitude.

NOTE Confidence: 0.8279263

00:16:37.980 --> 00:16:39.120 Cigarette smoking,

00:16:39.900 --> 00:16:40.960 often, I think,

NOTE Confidence: 0.92394257

 $00{:}16{:}42.380 \dashrightarrow 00{:}16{:}44.220$ we might see either separate

NOTE Confidence: 0.92394257

 $00:16:44.220 \longrightarrow 00:16:45.680$ but often together with cardiopulmonary

NOTE Confidence: 0.996021

 $00:16:46.140 \longrightarrow 00:16:46.640$ diseases.

NOTE Confidence: 0.95507926

 $00:16:47.015 \longrightarrow 00:16:47.895$ And then I just wanted

NOTE Confidence: 0.95507926

 $00{:}16{:}47.895 \dashrightarrow 00{:}16{:}49.654$ 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

 $00:16:52.375 \longrightarrow 00:16:53.495$ and that can be identified

NOTE Confidence: 0.95507926

 $00:16:53.495 \longrightarrow 00:16:54.775$ 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

 $00:16:56.455 \longrightarrow 00:16:57.495$ medications here,

NOTE Confidence: 0.8898392

 $00:17:00.360 \longrightarrow 00:17:01.660$ Pointing out that SGLT

NOTE Confidence: 0.8315924

 $00:17:02.280 \longrightarrow 00:17:02.780$ SGLT

NOTE Confidence: 0.90415055

 $00:17:03.240 \longrightarrow 00:17:03.740$ two,

NOTE Confidence: 0.9969063

 $00{:}17{:}04.119 --> 00{:}17{:}04.619 \ inhibitors,$

 $00:17:04.920 \longrightarrow 00:17:05.960$ the drugs that end in

NOTE Confidence: 0.9616509

 $00:17:05.960 \longrightarrow 00:17:06.460$ neflozins,

NOTE Confidence: 0.92236924

 $00:17:07.480 \longrightarrow 00:17:09.480$ we're seeing an increased number

NOTE Confidence: 0.92236924

 $00:17:09.480 \longrightarrow 00:17:11.020$ 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

 $00:17:12.984 \longrightarrow 00:17:14.984$ we do see erythrocytosis from

NOTE Confidence: 0.98768765

 $00:17:14.984 \longrightarrow 00:17:15.945$ these. So just keep that

NOTE Confidence: 0.98768765

 $00:17:15.945 \longrightarrow 00:17:16.905$ in mind, kind of doing

NOTE Confidence: 0.98768765

 $00:17:16.905 \longrightarrow 00:17:18.184$ a quick medication check when

NOTE Confidence: 0.98768765 00:17:18.184 --> 00:17:18.684 you NOTE Confidence: 0.90507615

 $00:17:18.984 \longrightarrow 00:17:20.825$ notice a higher hemoglobin in

NOTE Confidence: 0.90507615

 $00:17:20.825 \longrightarrow 00:17:22.205$ your with your patients.

NOTE Confidence: 0.996689

 $00{:}17{:}23.065 \dashrightarrow 00{:}17{:}24.345$ In addition to things like

NOTE Confidence: 0.996689

 $00:17:24.345 \longrightarrow 00:17:24.845$ testosterone,

NOTE Confidence: 0.99739885

 $00:17:25.145 \longrightarrow 00:17:26.045$ I'd say that's

 $00:17:26.570 \longrightarrow 00:17:27.070$ also

NOTE Confidence: 0.9200067

00:17:27.530 --> 00:17:29.130 often prevalent in our patient

NOTE Confidence: 0.9200067

 $00:17:29.130 \longrightarrow 00:17:29.630$ population.

NOTE Confidence: 0.915491

 $00:17:31.290 \longrightarrow 00:17:32.970$ I personally don't see that

NOTE Confidence: 0.915491

 $00:17:32.970 \longrightarrow 00:17:33.710$ many patients,

NOTE Confidence: 0.99669564

 $00:17:35.210 \longrightarrow 00:17:35.710$ 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

 $00:17:39.450 \longrightarrow 00:17:40.890$ think, intuitively makes sense to

NOTE Confidence: 0.9490137

 $00:17:40.890 \longrightarrow 00:17:41.950$ think about that.

NOTE Confidence: 0.9677413

 $00:17:43.565 \longrightarrow 00:17:44.765$ If we talked about the

NOTE Confidence: 0.9677413

 $00:17:44.765 \longrightarrow 00:17:45.265$ relative,

NOTE Confidence: 0.880446

 $00:17:45.965 \longrightarrow 00:17:46.465$ erythrocytosis,

NOTE Confidence: 0.9869564

 $00:17:47.005 \longrightarrow 00:17:47.805$ and then if we see

NOTE Confidence: 0.9869564

00:17:47.805 --> 00:17:48.625 a high EPO,

NOTE Confidence: 0.7785151

 $00:17:49.325 \longrightarrow 00:17:49.825$ level,

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

NOTE Confidence: 0.9312222

 $00{:}17{:}53.405 \to 00{:}17{:}55.165$ including, like, uterine fibroids, which

NOTE Confidence: 0.9312222

 $00:17:55.165 \longrightarrow 00:17:56.205$ 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

 $00:18:00.760 \longrightarrow 00:18:02.840$ And then also renal conditions,

NOTE Confidence: 0.8999782

 $00:18:02.840 \longrightarrow 00:18:04.840$ so renal artery stenosis, renal

NOTE Confidence: 0.8999782

 $00:18:04.840 \longrightarrow 00:18:06.040$ cysts, and,

NOTE Confidence: 0.9879542

 $00:18:06.520 \longrightarrow 00:18:07.800$ and patients who have also

NOTE Confidence: 0.9879542

 $00:18:07.800 \longrightarrow 00:18:09.800$ had a, kidney transplant as

NOTE Confidence: 0.9879542

 $00:18:09.800 \longrightarrow 00:18:10.300$ well.

NOTE Confidence: 0.9961371

 $00:18:12.945 \longrightarrow 00:18:13.905$ So in terms of other

NOTE Confidence: 0.9961371

 $00{:}18{:}13.905 \dashrightarrow 00{:}18{:}15.424$ labs to to check, in

NOTE Confidence: 0.9961371

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

NOTE Confidence: 0.99878323

 $00:18:16.945 \longrightarrow 00:18:17.984$ iron studies, a lot of

 $00:18:17.984 \longrightarrow 00:18:19.205$ our patients with polycythemia

NOTE Confidence: 0.93630934

 $00:18:19.744 \longrightarrow 00:18:21.365$ vera will have kinda low

NOTE Confidence: 0.93630934

 $00:18:21.424 \longrightarrow 00:18:22.484$ iron at baseline,

NOTE Confidence: 0.967433

 $00:18:23.984 \longrightarrow 00:18:25.105$ which was checked in your

NOTE Confidence: 0.967433

 $00:18:25.105 \longrightarrow 00:18:25.605$ case.

NOTE Confidence: 0.9032192

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

NOTE Confidence: 0.98944396

 $00:18:28.090 \longrightarrow 00:18:28.830$ is useful,

NOTE Confidence: 0.9901748

 $00:18:29.770 \longrightarrow 00:18:30.730$ really to look for some

NOTE Confidence: 0.9901748

 $00:18:30.730 \longrightarrow 00:18:31.850$ of those kind of more

NOTE Confidence: 0.9901748

 $00:18:31.850 \longrightarrow 00:18:32.670$ ominous markers,

NOTE Confidence: 0.98669547

 $00:18:33.609 \longrightarrow 00:18:34.270$ sort of,

NOTE Confidence: 0.9271629

 $00:18:35.450 \longrightarrow 00:18:37.050$ 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

 $00:18:38.330 \longrightarrow 00:18:39.390$ malignant condition

NOTE Confidence: 0.941426 00:18:39.850 --> 00:18:40.350 or NOTE Confidence: 0.9497781

 $00:18:41.284 \longrightarrow 00:18:42.184$ what we call leukoerythroblastosis,

 $00:18:43.445 \longrightarrow 00:18:44.565$ just sort of these younger

NOTE Confidence: 0.930518

 $00{:}18{:}44.565 \dashrightarrow 00{:}18{:}46.244$ precursor cells, so nucleated red

NOTE Confidence: 0.930518

 $00:18:46.244 \longrightarrow 00:18:47.544$ 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

 $00:18:50.005 \longrightarrow 00:18:51.044$ guess, kinda outlined on the

NOTE Confidence: 0.97895026

 $00:18:51.044 \longrightarrow 00:18:52.164$ prior slide, but just in

NOTE Confidence: 0.97895026

 $00:18:52.164 \longrightarrow 00:18:53.144$ a different format.

NOTE Confidence: 0.9701085

 $00:18:55.000 \longrightarrow 00:18:55.880$ I think some of these

NOTE Confidence: 0.9701085

 $00:18:55.880 \longrightarrow 00:18:57.799$ 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

 $00:19:01.159 \longrightarrow 00:19:02.140$ Just as you,

NOTE Confidence: 0.97426116

 $00:19:03.400 \longrightarrow 00:19:04.940$ 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

 $00:19:06.119 \longrightarrow 00:19:07.785$ either normal or high, and

NOTE Confidence: 0.95866185

 $00:19:07.785 \longrightarrow 00:19:08.744$ kinda try to go through

 $00:19:08.744 \longrightarrow 00:19:10.525$ 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

 $00:19:17.785 \longrightarrow 00:19:19.305$ particularly this last bullet point

NOTE Confidence: 0.98727196

 $00:19:19.305 \longrightarrow 00:19:20.425$ here as we're seeing more

NOTE Confidence: 0.98727196

 $00{:}19{:}20.425 \dashrightarrow 00{:}19{:}21.965$ of these prescribed in practice.

NOTE Confidence: 0.9976737

 $00:19:25.369 \longrightarrow 00:19:26.590$ 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

 $00:19:29.050 \longrightarrow 00:19:30.910$ it largely is going to,

NOTE Confidence: 0.93875664

 $00:19:32.170 \longrightarrow 00:19:33.530$ the medication list, obviously, we

NOTE Confidence: 0.93875664

 $00:19:33.530 \longrightarrow 00:19:34.250$ 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

 $00:19:35.369 \longrightarrow 00:19:37.050$ a smoking history, of course.

NOTE Confidence: 0.93875664

 $00:19:37.050 \longrightarrow 00:19:37.695$ 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,

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

NOTE Confidence: 0.93875664

 $00:19:42.215 \longrightarrow 00:19:42.815$ are quite,

NOTE Confidence: 0.9996029

 $00:19:43.215 \longrightarrow 00:19:43.715$ 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

 $00:19:49.855 \longrightarrow 00:19:50.355$ plethora,

NOTE Confidence: 0.91523415

 $00:19:51.215 \longrightarrow 00:19:51.855$ signs of,

NOTE Confidence: 0.9556031

 $00:19:52.429 \longrightarrow 00:19:54.030$ scratching, itching from pruritus patients

NOTE Confidence: 0.9556031

 $00:19:54.030 \longrightarrow 00:19:54.850$ might experience.

NOTE Confidence: 0.9907906

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

NOTE Confidence: 0.9907906

 $00:19:57.710 \longrightarrow 00:19:58.669$ I think we're really gonna

NOTE Confidence: 0.9907906

 $00:19:58.669 \longrightarrow 00:19:59.169$ wanna

NOTE Confidence: 0.9684305

 $00{:}19{:}59.470 \dashrightarrow 00{:}20{:}00.590$ 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

 $00:20:02.990 \longrightarrow 00:20:04.429$ So these are helpful things

 $00:20:04.429 \longrightarrow 00:20:05.330$ to look for.

NOTE Confidence: 0.94405526

 $00:20:08.025 \longrightarrow 00:20:09.145$ 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

 $00:20:10.265 \longrightarrow 00:20:11.544$ would say my my my

NOTE Confidence: 0.94405526

 $00:20:11.544 \longrightarrow 00:20:12.905$ recommendations would be anybody who

NOTE Confidence: 0.94405526

 $00{:}20{:}12.905 \dashrightarrow 00{:}20{:}14.765$ 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

 $00{:}20{:}20{:}585 {\:{\mbox{--}}\!>\:} 00{:}20{:}21.690$ 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

 $00:20:24.250 \longrightarrow 00:20:25.450$ quite rare, there are,

NOTE Confidence: 0.99176884

 $00:20:25.929 \longrightarrow 00:20:26.970$ we do have a handful

NOTE Confidence: 0.99176884

 $00:20:26.970 \longrightarrow 00:20:28.570$ of patients with hereditary forms

NOTE Confidence: 0.99176884

 $00:20:28.570 \longrightarrow 00:20:29.309$ of erythrocytosis,

NOTE Confidence: 0.9418495

 $00:20:31.850 \longrightarrow 00:20:33.210$ certainly somebody who has a

NOTE Confidence: 0.9418495

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

 $00:20:34.915 \longrightarrow 00:20:36.195$ 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

 $00:20:38.835 \longrightarrow 00:20:40.535$ 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

 $00:20:44.515 \longrightarrow 00:20:45.015$ manage.

NOTE Confidence: 0.9941117 00:20:45.555 --> 00:20:46.055 So NOTE Confidence: 0.9561772

 $00:20:46.435 \longrightarrow 00:20:48.035$ headaches, for example, I'd say

NOTE Confidence: 0.9561772

 $00:20:48.035 \longrightarrow 00:20:49.255$ would be a very common

NOTE Confidence: 0.9561772

 $00:20:49.315 \longrightarrow 00:20:49.815$ symptom,

NOTE Confidence: 0.9577518

00:20:50.659 --> 00:20:52.039 kind of mental fogginess,

NOTE Confidence: 0.9963414

 $00:20:55.220 \longrightarrow 00:20:56.179$ would probably be a second

NOTE Confidence: 0.9963414

 $00{:}20{:}56.179 \dashrightarrow 00{:}20{:}57.380$ thing I would think about.

NOTE Confidence: 0.9433082

00:20:57.779 --> 00:20:58.679 And so, certainly,

 $00:20:59.220 \longrightarrow 00:21:00.659$ 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

 $00:21:01.859 \longrightarrow 00:21:03.140$ erythrocytosis, I think we should

NOTE Confidence: 0.9526133

 $00:21:03.140 \longrightarrow 00:21:04.260$ see those patients, in my

NOTE Confidence: 0.9526133

 $00:21:04.260 \longrightarrow 00:21:04.760$ opinion.

NOTE Confidence: 0.9571164

 $00:21:07.445 \longrightarrow 00:21:08.804$ I have one brief thing

NOTE Confidence: 0.9571164

 $00:21:08.804 \longrightarrow 00:21:10.025$ on how we manage polycythemia

NOTE Confidence: 0.9571164

 $00:21:10.325 \longrightarrow 00:21:11.784$ 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

 $00{:}21{:}20.210 \dashrightarrow 00{:}21{:}21.970$ should manage other causes of

NOTE Confidence: 0.9615427

 $00:21:21.970 \longrightarrow 00:21:22.470$ 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,

 $00:21:25.330 \longrightarrow 00:21:26.850$ have phlebotomy to reduce their

NOTE Confidence: 0.94145864

 $00:21:26.850 \longrightarrow 00:21:28.450$ hematocrit often to a level

NOTE Confidence: 0.94145864

 $00:21:28.450 \longrightarrow 00:21:29.750$ of less than forty five.

NOTE Confidence: 0.94145864

 $00:21:29.809 \longrightarrow 00:21:30.784$ Most of these patients are

NOTE Confidence: 0.94145864

 $00:21:30.784 \longrightarrow 00:21:32.544$ on aspirin, and sometimes they,

NOTE Confidence: 0.94145864

 $00:21:32.945 \longrightarrow 00:21:33.445$ receive,

NOTE Confidence: 0.9962071

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

NOTE Confidence: 0.88737184

 $00:21:36.225 \longrightarrow 00:21:38.005$ phytoreductive pills like hydroxyurea

NOTE Confidence: 0.9841652

 $00:21:39.744 \longrightarrow 00:21:40.325$ or others.

NOTE Confidence: 0.9859298

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

NOTE Confidence: 0.97399646

 $00:21:45.585 \longrightarrow 00:21:47.190$ 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

 $00{:}21{:}49.030 \dashrightarrow 00{:}21{:}49.990$ the, like, take home point

NOTE Confidence: 0.97399646

 $00:21:49.990 \longrightarrow 00:21:50.470$ of this.

NOTE Confidence: 0.9791629

 $00:21:51.429 \longrightarrow 00:21:52.869$ And the treatment is really

 $00:21:52.869 \longrightarrow 00:21:54.630$ directed at the underlying cause

NOTE Confidence: 0.9791629

 $00:21:54.630 \longrightarrow 00:21:55.669$ if we think it's even

NOTE Confidence: 0.9791629

 $00:21:55.669 \longrightarrow 00:21:56.169$ necessary,

NOTE Confidence: 0.9426502

 $00:21:59.325 \longrightarrow 00:22:00.365$ 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

 $00:22:03.005 \longrightarrow 00:22:03.885$ right, we might see this

NOTE Confidence: 0.9716889

 $00:22:03.885 \longrightarrow 00:22:05.005$ in more advanced forms of

NOTE Confidence: 0.9716889

 $00:22:05.005 \longrightarrow 00:22:06.465$ COPD or OSA, and

NOTE Confidence: 0.97089386

 $00{:}22{:}06.845 \dashrightarrow 00{:}22{:}09.105$ 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

 $00:22:10.605 \longrightarrow 00:22:11.825$ data in this space.

NOTE Confidence: 0.9784323

 $00:22:12.710 \longrightarrow 00:22:13.830$ 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

 $00:22:16.950 \longrightarrow 00:22:18.630$ or even effective at reducing

NOTE Confidence: 0.99103236

 $00:22:18.630 \longrightarrow 00:22:20.310$ thrombotic risk and could actually

NOTE Confidence: 0.99103236

 $00{:}22{:}20.310 \dashrightarrow 00{:}22{:}21.850$ increase thrombotic risk.

 $00:22:23.670 \longrightarrow 00:22:24.410$ And, certainly,

NOTE Confidence: 0.92278886

00:22:25.325 --> 00:22:26.525 to try to assess someone's

NOTE Confidence: 0.92278886

 $00:22:26.525 \longrightarrow 00:22:27.725$ thrombotic risk, you know, we

NOTE Confidence: 0.92278886

 $00:22:27.725 \longrightarrow 00:22:29.005$ need to think about other

NOTE Confidence: 0.92278886

 $00:22:29.005 \longrightarrow 00:22:30.525$ other risk other risk factors

NOTE Confidence: 0.92278886

 $00:22:30.525 \longrightarrow 00:22:31.665$ patients might have.

NOTE Confidence: 0.97835946

 $00:22:33.005 \longrightarrow 00:22:34.205$ We do know that when

NOTE Confidence: 0.97835946

 $00:22:34.205 \longrightarrow 00:22:35.725$ patients with OSA are on

NOTE Confidence: 0.97835946

 $00:22:35.725 \longrightarrow 00:22:37.005$ CPAP, it can reduce their

NOTE Confidence: 0.97835946

 $00:22:37.005 \longrightarrow 00:22:37.505$ with rocytosis.

NOTE Confidence: 0.941954

 $00:22:39.250 \longrightarrow 00:22:40.789$ But, otherwise, in terms

NOTE Confidence: 0.91396356

 $00:22:41.090 \longrightarrow 00:22:43.010$ of directed management to lower,

NOTE Confidence: 0.91396356

 $00:22:43.330 \longrightarrow 00:22:44.690$ the erythrocyt count, its data

NOTE Confidence: 0.91396356

 $00:22:44.690 \longrightarrow 00:22:45.590$ is less clear.

NOTE Confidence: 0.94235706

00:22:47.809 --> 00:22:49.169 One brief slide on testosterone

 $00:22:49.169 \longrightarrow 00:22:50.049$ 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

 $00:22:51.250 \longrightarrow 00:22:51.750$ referrals.

NOTE Confidence: 0.9740381

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

NOTE Confidence: 0.9740381

 $00:22:54.994 \longrightarrow 00:22:55.494$ arthrocytosis,

NOTE Confidence: 0.96447045

 $00:22:57.155 \longrightarrow 00:22:58.355$ for a few reasons, but

NOTE Confidence: 0.96447045

 $00:22:58.355 \longrightarrow 00:22:59.315$ probably initially due to a

NOTE Confidence: 0.96447045

 $00:22:59.315 \longrightarrow 00:23:00.934$ rise in arthropoietin levels.

NOTE Confidence: 0.9662818

 $00:23:04.115 \longrightarrow 00:23:06.035$ Often, patients have been referred

NOTE Confidence: 0.9662818

 $00:23:06.035 \longrightarrow 00:23:07.530$ to sort of decide if

NOTE Confidence: 0.9662818

 $00:23:07.530 \longrightarrow 00:23:08.650$ 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

 $00:23:13.850 \longrightarrow 00:23:14.890$ data to say we should

NOTE Confidence: 0.9808407

 $00:23:14.890 \longrightarrow 00:23:16.010$ do that, and it may

NOTE Confidence: 0.9808407

 $00{:}23{:}16.010 \dashrightarrow 00{:}23{:}17.390$ actually make things worse.

 $00:23:20.684 \longrightarrow 00:23:22.125$ So going back to the

NOTE Confidence: 0.93023175

 $00:23:22.285 \longrightarrow 00:23:22.945$ our case,

NOTE Confidence: 0.99929446

00:23:23.965 --> 00:23:25.005 I think that,

NOTE Confidence: 0.9683259

 $00:23:25.885 \longrightarrow 00:23:27.405$ you know, we the JAK

NOTE Confidence: 0.9683259

 $00{:}23{:}27.405 \dashrightarrow 00{:}23{:}29.164$ two mutation was negative from

NOTE Confidence: 0.9683259

 $00:23:29.164 \longrightarrow 00:23:30.285$ what I recall, so we're

NOTE Confidence: 0.9683259

 $00:23:30.285 \longrightarrow 00:23:31.484$ now kinda going down this

NOTE Confidence: 0.9683259

 $00:23:31.484 \longrightarrow 00:23:32.445$ path of what we call

NOTE Confidence: 0.9683259

 $00:23:32.445 \longrightarrow 00:23:33.505$ secondary causes.

NOTE Confidence: 0.96985286

 $00:23:34.880 \longrightarrow 00:23:36.000$ 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

 $00{:}23{:}37.040 \dashrightarrow 00{:}23{:}38.900$ rule out medication related causes.

NOTE Confidence: 0.92582494

 $00{:}23{:}39.280 \dashrightarrow 00{:}23{:}40.720$ 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

 $00:23:42.000 \longrightarrow 00:23:42.740$ the erythropoietin

 $00:23:43.040 \longrightarrow 00:23:43.540$ level,

NOTE Confidence: 0.9925945

00:23:44.000 --> 00:23:45.200 will help kinda guide us

NOTE Confidence: 0.9925945

 $00:23:45.200 \longrightarrow 00:23:46.100$ on next steps.

NOTE Confidence: 0.94159406

 $00:23:48.505 \longrightarrow 00:23:49.945$ Commonly, we might have a

NOTE Confidence: 0.94159406

 $00:23:49.945 \longrightarrow 00:23:51.545$ patient who has signs or

NOTE Confidence: 0.94159406

 $00{:}23{:}51.545 \dashrightarrow 00{:}23{:}53.225$ symptoms suggestive of sleep apnea

NOTE Confidence: 0.94159406

 $00:23:53.225 \longrightarrow 00:23:54.425$ 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

 $00:23:55.785 \longrightarrow 00:23:56.365$ be useful.

NOTE Confidence: 0.9755587

 $00:23:57.625 \longrightarrow 00:23:58.585$ And I do not think

NOTE Confidence: 0.9755587

 $00{:}23{:}58.585 \dashrightarrow 00{:}24{:}00.045$ there's any role for the rapeutic

NOTE Confidence: 0.9755587

 $00:24:00.185 \longrightarrow 00:24:01.625$ phlebotomy in this type of

NOTE Confidence: 0.9755587

 $00:24:01.625 \longrightarrow 00:24:02.125$ case.

NOTE Confidence: 0.9536772

 $00:24:05.859 \longrightarrow 00:24:07.059$ Great. Thanks. Before we do

NOTE Confidence: 0.9536772

 $00:24:07.059 \longrightarrow 00:24:08.100$ case two, since this was

NOTE Confidence: 0.9536772

 $00:24:08.100 \longrightarrow 00:24:08.980$ eight years ago, I can

 $00:24:08.980 \longrightarrow 00:24:10.260$ give you, like, the the

NOTE Confidence: 0.9536772

 $00:24:10.260 \longrightarrow 00:24:12.100$ final. So he did have

NOTE Confidence: 0.9536772

 $00:24:12.100 \longrightarrow 00:24:13.940$ a an epogen level before

NOTE Confidence: 0.9536772

 $00:24:13.940 \longrightarrow 00:24:15.799$ seeing hematology. It was negative.

NOTE Confidence: 0.9358852

 $00:24:17.059 \longrightarrow 00:24:17.700$ And then,

NOTE Confidence: 0.95180243

00:24:18.544 --> 00:24:20.404 he saw, Doctor. Persico,

NOTE Confidence: 0.99151874

 $00:24:21.265 \longrightarrow 00:24:22.565$ who did do the,

NOTE Confidence: 0.948748

00:24:23.105 --> 00:24:23.765 the carboxyhemoglobin

NOTE Confidence: 0.96820104

 $00:24:24.625 \longrightarrow 00:24:25.924$ study that was normal.

NOTE Confidence: 0.89120966

 $00:24:26.705 \longrightarrow 00:24:28.005$ And he did the CalR

NOTE Confidence: 0.89120966

 $00:24:28.225 \longrightarrow 00:24:29.284$ exon analysis

NOTE Confidence: 0.960588

 $00:24:29.664 \longrightarrow 00:24:31.205$ as well, which was negative.

NOTE Confidence: 0.98772824

 $00{:}24{:}32.090 \dashrightarrow 00{:}24{:}33.770$ The workup eventually found that

NOTE Confidence: 0.98772824

 $00:24:33.770 \longrightarrow 00:24:35.150$ he had some, you know,

NOTE Confidence: 0.9711155

 $00:24:35.450 \longrightarrow 00:24:37.050$ mild to moderate sleep apnea,

 $00:24:37.050 \longrightarrow 00:24:38.109$ and he's been on,

NOTE Confidence: 0.8642767

00:24:38.970 --> 00:24:39.470 CPAP,

NOTE Confidence: 0.8700054

 $00:24:39.850 \longrightarrow 00:24:40.670$ since. And his,

NOTE Confidence: 0.98239464

 $00:24:41.530 \longrightarrow 00:24:43.230$ hemoglobin has been generally,

NOTE Confidence: 0.9101066

 $00:24:43.930 \longrightarrow 00:24:45.130$ staying in, like, the sixteen

NOTE Confidence: 0.9101066

 $00:24:45.130 \longrightarrow 00:24:47.175$ 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

 $00:24:48.775 \longrightarrow 00:24:49.735$ you know, we switched his

NOTE Confidence: 0.9101066

 $00{:}24{:}49.735 {\:{\circ}{\circ}{\circ}}>00{:}24{:}51.575$ blood pressure around blood pressure

NOTE Confidence: 0.9101066

 $00:24:51.575 \longrightarrow 00:24:52.955$ medicines around off the hydrochlorothiazide.

NOTE Confidence: 0.99349856 00:24:53.575 --> 00:24:54.075 So,

NOTE Confidence: 0.9642011

 $00:24:54.455 \longrightarrow 00:24:55.335$ 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

 $00:24:56.295 \longrightarrow 00:24:57.835$ but, who who does?

NOTE Confidence: 0.9110043

 $00:24:58.855 \longrightarrow 00:25:00.455$ So, thank you. The the

NOTE Confidence: 0.9110043

 $00:25:00.455 \longrightarrow 00:25:01.175$ second case is,

 $00:25:01.920 \longrightarrow 00:25:03.920$ this one, is actually sort

NOTE Confidence: 0.9634057

 $00:25:03.920 \longrightarrow 00:25:04.900$ of in the workup,

NOTE Confidence: 0.84993935

 $00:25:06.240 \longrightarrow 00:25:07.220$ now. It's a,

NOTE Confidence: 0.90196574

 $00:25:07.760 \longrightarrow 00:25:08.880$ seventy four year old woman.

NOTE Confidence: 0.90196574

 $00:25:08.880 \longrightarrow 00:25:09.540$ So recently

NOTE Confidence: 0.91295254

 $00:25:10.960 \longrightarrow 00:25:12.660$ just for a routine follow-up.

NOTE Confidence: 0.91295254

 $00:25:12.720 \longrightarrow 00:25:14.720$ She has, some chronic medical

NOTE Confidence: 0.91295254

 $00{:}25{:}14.720 \dashrightarrow 00{:}25{:}16.100$ problems including obesity,

NOTE Confidence: 0.9411072

00:25:16.785 --> 00:25:18.565 AFib, hypertension, hyperlipidemia,

NOTE Confidence: 0.99696285

 $00:25:19.905 \longrightarrow 00:25:21.845$ remote history of adrenal insufficiency.

NOTE Confidence: 0.9342513

 $00:25:22.705 \longrightarrow 00:25:23.925$ You can see her medications.

NOTE Confidence: 0.9342513

 $00:25:24.145 \longrightarrow 00:25:25.105$ Most of them are old.

NOTE Confidence: 0.9342513

 $00{:}25{:}25.105 \dashrightarrow 00{:}25{:}25.845$ 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.

 $00:25:29.585 \longrightarrow 00:25:30.065$ She,

NOTE Confidence: 0.917304

 $00:25:30.625 \longrightarrow 00:25:32.520$ 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

 $00:25:33.560 \longrightarrow 00:25:34.700$ see, ten to fifteen,

NOTE Confidence: 0.87620664

 $00:25:35.560 \longrightarrow 00:25:36.380$ 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

 $00:25:39.880 \longrightarrow 00:25:40.460$ a possible,

NOTE Confidence: 0.9554987

 $00:25:41.240 \longrightarrow 00:25:41.740$ hematologic,

NOTE Confidence: 0.9480469

 $00:25:43.000 \longrightarrow 00:25:44.700$ positive finding with the,

NOTE Confidence: 0.8607256

 $00:25:45.320 \longrightarrow 00:25:47.020$ 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

 $00:25:54.244 \longrightarrow 00:25:55.845$ but didn't necessarily do

NOTE Confidence: 0.9210445

 $00:25:56.645 \longrightarrow 00:25:58.025$ she didn't know the diagnosis

 $00:25:58.725 \longrightarrow 00:26:00.005$ per se. So,

NOTE Confidence: 0.9958976

 $00:26:00.484 \longrightarrow 00:26:01.465$ so this is her.

NOTE Confidence: 0.9423406

 $00:26:03.109 \longrightarrow 00:26:04.550$ We did some, some blood

NOTE Confidence: 0.9423406

 $00:26:04.550 \longrightarrow 00:26:06.230$ work and, you can see

NOTE Confidence: 0.9423406

 $00:26:06.230 \longrightarrow 00:26:07.830$ her white count upper normal,

NOTE Confidence: 0.9423406

 $00:26:07.830 \longrightarrow 00:26:08.330$ hemoglobin

NOTE Confidence: 0.8940203

00:26:08.869 --> 00:26:09.369 normal,

NOTE Confidence: 0.99632245

 $00:26:10.070 \longrightarrow 00:26:11.530$ and platelets were elevated,

NOTE Confidence: 0.9997824

 $00:26:12.150 \longrightarrow 00:26:12.650$ repeated

NOTE Confidence: 0.84418213

 $00:26:13.270 \longrightarrow 00:26:14.070$ and were,

NOTE Confidence: 0.9988748

 $00:26:14.630 \longrightarrow 00:26:16.410$ pretty similar in the four

NOTE Confidence: 0.99367374

 $00:26:16.845 \longrightarrow 00:26:18.684$ fifty to five twenty five

NOTE Confidence: 0.99367374

 $00{:}26{:}18.684 --> 00{:}26{:}19.184 \ \mathrm{range}.$

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,

 $00:26:24.445 \longrightarrow 00:26:25.345$ did do an

NOTE Confidence: 0.80284965

00:26:25.645 --> 00:26:26.145 ultrasound,

NOTE Confidence: 0.97956055

 $00:26:26.765 \longrightarrow 00:26:27.725$ as part of the workup

NOTE Confidence: 0.97956055

 $00:26:27.725 \longrightarrow 00:26:29.005$ 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

 $00:26:32.850 \longrightarrow 00:26:34.530$ and, no evidence of any,

NOTE Confidence: 0.97559404

 $00:26:35.010 \longrightarrow 00:26:35.510$ splenomegaly

NOTE Confidence: 0.95412064 00:26:35.970 --> 00:26:36.470 or,

NOTE Confidence: 0.839105

 $00:26:37.010 \longrightarrow 00:26:37.670$ or any,

NOTE Confidence: 0.99831486

 $00:26:38.850 \longrightarrow 00:26:40.950$ any abnormalities in the spleen.

NOTE Confidence: 0.9444338 00:26:43.250 --> 00:26:43.750 So,

NOTE Confidence: 0.9555517

 $00:26:44.475 \longrightarrow 00:26:46.015$ this one's on ongoing.

NOTE Confidence: 0.9828774

 $00:26:46.315 \longrightarrow 00:26:47.215$ So she,

NOTE Confidence: 0.9059272

 $00:26:48.075 \longrightarrow 00:26:49.595$ were next to order the,

NOTE Confidence: 0.9059272

00:26:49.835 --> 00:26:51.515 blood smear, but thought, unlike

 $00:26:51.515 \longrightarrow 00:26:52.395$ the other case, we can

NOTE Confidence: 0.9059272

 $00:26:52.395 \longrightarrow 00:26:53.755$ do sort of a a

NOTE Confidence: 0.9059272

 $00{:}26{:}53.755 \dashrightarrow 00{:}26{:}54.734$ a fresh case.

NOTE Confidence: 0.93908674

 $00:26:55.435 \longrightarrow 00:26:56.895$ 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

 $00:27:01.480 \longrightarrow 00:27:01.980$ real

NOTE Confidence: 0.9903834

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

NOTE Confidence: 0.96589565

 $00:27:03.880 \longrightarrow 00:27:04.920$ which is good, but a

NOTE Confidence: 0.96589565

 $00:27:04.920 \longrightarrow 00:27:05.420$ peripheral,

NOTE Confidence: 0.949256

 $00:27:05.880 \longrightarrow 00:27:07.240$ blood smear that sort of,

NOTE Confidence: 0.949256

 $00:27:07.560 \longrightarrow 00:27:08.760$ you know, ordered not done.

NOTE Confidence: 0.949256

 $00:27:08.760 \longrightarrow 00:27:09.400$ So you can see on

NOTE Confidence: 0.949256

 $00:27:09.400 \longrightarrow 00:27:10.760$ the bottom, you know, some

NOTE Confidence: 0.949256

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

00:27:12.945 --> 00:27:13.445 findings,

NOTE Confidence: 0.9596957

 $00:27:14.145 \longrightarrow 00:27:15.424$ 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

 $00:27:16.545 \longrightarrow 00:27:18.005$ haven't ruled out yet.

NOTE Confidence: 0.9144208

 $00:27:20.865 \longrightarrow 00:27:22.005$ So I'll pass,

NOTE Confidence: 0.81979966

 $00{:}27{:}22.465 --> 00{:}27{:}22.965 \text{ this},\\$

NOTE Confidence: 0.81197315

 $00:27:23.265 \longrightarrow 00:27:24.980$ 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

 $00:27:27.760 \longrightarrow 00:27:28.260$ questions.

NOTE Confidence: 0.74971354

 $00:27:31.520 \longrightarrow 00:27:32.420$ Thank you.

NOTE Confidence: 0.97699606

 $00:27:33.840 \longrightarrow 00:27:35.140$ So I think unlike

NOTE Confidence: 0.99107057

 $00:27:36.475 \longrightarrow 00:27:37.855$ erythrocytosis or polycythemia,

NOTE Confidence: 0.908761

00:27:38.715 --> 00:27:40.494 the workup of thrombocytosis

NOTE Confidence: 0.77447015

 $00:27:41.034 \longrightarrow 00:27:43.034$ is and I misspelled it

NOTE Confidence: 0.77447015

 $00:27:43.034 \longrightarrow 00:27:43.534$ here,

NOTE Confidence: 0.8341453

 $00:27:45.595 \longrightarrow 00:27:46.635$ the expert. But,

 $00:27:48.875 \longrightarrow 00:27:49.595$ it's it's

NOTE Confidence: 0.89703494

 $00:27:50.850 \longrightarrow 00:27:52.630$ I think clinically in both

NOTE Confidence: 0.89703494

 $00:27:52.690 \longrightarrow 00:27:54.450$ 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

 $00:27:56.609 \longrightarrow 00:27:57.669$ just a lot more

NOTE Confidence: 0.8810647

 $00:27:58.049 \longrightarrow 00:27:59.190$ simple or simpler,

NOTE Confidence: 0.9904963

 $00:27:59.730 \longrightarrow 00:28:00.230$ and

NOTE Confidence: 0.63593274

 $00:28:00.530 \longrightarrow 00:28:01.510$ perhaps reflects

NOTE Confidence: 0.77340686

 $00:28:02.130 \longrightarrow 00:28:02.789$ the physiology

NOTE Confidence: 0.90240926

 $00:28:04.544 \longrightarrow 00:28:05.585$ because you know the platelet

NOTE Confidence: 0.90240926

 $00:28:05.585 \longrightarrow 00:28:07.184$ production and its regulation is

NOTE Confidence: 0.90240926

 $00:28:07.184 \longrightarrow 00:28:07.845$ so much

NOTE Confidence: 0.97986513

 $00{:}28{:}08.465 --> 00{:}28{:}08.965 \ \mathrm{simpler}$

NOTE Confidence: 0.91632164

 $00:28:09.744 \longrightarrow 00:28:10.865$ than red cells, you know

NOTE Confidence: 0.91632164

 $00:28:10.865 \longrightarrow 00:28:12.544$ there's no kidney involved, there's

 $00:28:12.544 \longrightarrow 00:28:13.744$ no liver involved, and you

NOTE Confidence: 0.91632164

 $00:28:13.744 \longrightarrow 00:28:14.565$ know there isn't

NOTE Confidence: 0.88465947

 $00{:}28{:}14.865 \dashrightarrow 00{:}28{:}16.484$ a you know feedback mechanism

NOTE Confidence: 0.96182483

 $00:28:17.024 \longrightarrow 00:28:17.524$ that's

NOTE Confidence: 0.93573534

 $00:28:18.304 \longrightarrow 00:28:20.970$ 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

 $00:28:23.930 \longrightarrow 00:28:24.670$ so thrombocytosis

NOTE Confidence: 0.89931214

 $00:28:24.970 \longrightarrow 00:28:26.030$ is, especially

NOTE Confidence: 0.92382157

00:28:28.570 --> 00:28:29.630 isolated thrombocytosis,

NOTE Confidence: 0.9526966

 $00:28:30.090 \longrightarrow 00:28:31.050$ and and this is what

NOTE Confidence: 0.9526966

 $00:28:31.050 \longrightarrow 00:28:32.590$ our our our

NOTE Confidence: 0.9192524

 $00:28:32.905 \longrightarrow 00:28:34.205$ patient here has is,

NOTE Confidence: 0.79799455

 $00:28:35.065 \longrightarrow 00:28:36.045$ is mostly

NOTE Confidence: 0.9483092

 $00:28:36.505 \longrightarrow 00:28:37.005$ incidental.

NOTE Confidence: 0.64306974

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

00:28:41.065 --> 00:28:42.025 with that, what I mean

NOTE Confidence: 0.97414

 $00:28:42.025 \longrightarrow 00:28:43.225$ is, you know, most of

NOTE Confidence: 0.97414

 $00:28:43.225 \longrightarrow 00:28:43.885$ the time,

NOTE Confidence: 0.9233688

00:28:44.265 --> 00:28:45.645 patients are not very symptomatic,

NOTE Confidence: 0.9233688

 $00:28:45.705 \longrightarrow 00:28:47.245$ and these are picked up,

NOTE Confidence: 0.90702313

 $00:28:47.810 \longrightarrow 00:28:49.570$ either, you know, routine labs.

NOTE Confidence: 0.90702313

 $00:28:49.570 \longrightarrow 00:28:50.530$ They they could be peri

NOTE Confidence: 0.90702313

 $00:28:50.530 \longrightarrow 00:28:51.650$ up. They could be just

NOTE Confidence: 0.90702313

00:28:51.650 --> 00:28:52.710 their handles, physicals,

NOTE Confidence: 0.9661348

 $00:28:54.130 \longrightarrow 00:28:54.870$ or otherwise.

NOTE Confidence: 0.9504588

 $00:28:55.810 \longrightarrow 00:28:56.630$ And and

NOTE Confidence: 0.99547845

 $00:28:56.930 \longrightarrow 00:28:58.790$ and to sum it up,

NOTE Confidence: 0.9431283

 $00:28:59.410 \longrightarrow 00:29:00.450$ most of the times when

NOTE Confidence: 0.9431283

 $00:29:00.450 \longrightarrow 00:29:00.950$ we're

NOTE Confidence: 0.9923752

 $00:29:01.835 \longrightarrow 00:29:03.035$ when when we're dealing with,

 $00:29:03.275 \longrightarrow 00:29:04.095$ 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

 $00:29:07.595 \longrightarrow 00:29:08.095$ thrombocytosis

NOTE Confidence: 0.9636649

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

NOTE Confidence: 0.9636649

 $00:29:10.395 \longrightarrow 00:29:11.055$ we wanna

NOTE Confidence: 0.81179047

 $00:29:11.995 \longrightarrow 00:29:12.495$ 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

 $00:29:18.490 \longrightarrow 00:29:19.470$ Next slide, please.

NOTE Confidence: 0.96666354

 $00:29:21.770 \longrightarrow 00:29:23.070$ So when I'm,

NOTE Confidence: 0.99819237

 $00:29:24.090 \longrightarrow 00:29:24.590$ seeing

NOTE Confidence: 0.99233186

 $00:29:25.815 \longrightarrow 00:29:26.475$ 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

 $00:29:31.335 \longrightarrow 00:29:32.695$ and and that and

 $00:29:32.695 \longrightarrow 00:29:33.735$ 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

 $00:29:35.654 \longrightarrow 00:29:37.174$ 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

 $00:29:39.610 \longrightarrow 00:29:40.990$ patients with polycythemia

NOTE Confidence: 0.9202901

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

NOTE Confidence: 0.9246631

 $00:29:44.730 \longrightarrow 00:29:45.870$ 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

 $00:29:47.929 \longrightarrow 00:29:49.130$ you know, when we get

NOTE Confidence: 0.9484636

 $00{:}29{:}49.130 \dashrightarrow 00{:}29{:}51.149$ down to more direct questions.

NOTE Confidence: 0.9586236

 $00:29:52.325 \longrightarrow 00:29:52.825$ But

NOTE Confidence: 0.85855377

 $00{:}29{:}53.365 \dashrightarrow 00{:}29{:}54.905$ but but you know thrombocytosis

NOTE Confidence: 0.9771355

 $00{:}29{:}55.365 \dashrightarrow 00{:}29{:}56.985$ can also produce some vasomotor

NOTE Confidence: 0.94092155

 $00:29:57.285 \longrightarrow 00:29:59.045$ symptoms and I've certainly had

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

NOTE Confidence: 0.94092155

 $00:30:01.605 \longrightarrow 00:30:02.265$ with other

NOTE Confidence: 0.9139916

 $00:30:02.565 \longrightarrow 00:30:04.345$ vasomotor symptoms that get better

NOTE Confidence: 0.9139916

 $00:30:04.405 \longrightarrow 00:30:06.485$ with with treatment especially with

NOTE Confidence: 0.9139916

 $00:30:06.485 \longrightarrow 00:30:06.985$ essential

NOTE Confidence: 0.9850853

 $00:30:07.490 \longrightarrow 00:30:07.990$ thrombocytosis.

NOTE Confidence: 0.9734914

 $00:30:09.570 \longrightarrow 00:30:10.770$ 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

 $00:30:14.930 \longrightarrow 00:30:16.130$ you know, whether the the

NOTE Confidence: 0.92386127

00:30:16.130 --> 00:30:17.350 person is asplenic,

NOTE Confidence: 0.93230313

 $00:30:17.730 \longrightarrow 00:30:19.330$ and and happens less

NOTE Confidence: 0.93230313

 $00:30:19.330 \longrightarrow 00:30:21.250$ so, but but certainly, you

NOTE Confidence: 0.93230313

 $00:30:21.250 \longrightarrow 00:30:22.610$ know, we we see people

NOTE Confidence: 0.93230313

00:30:22.610 --> 00:30:23.865 from, you know,

NOTE Confidence: 0.8536245

 $00:30:24.345 \longrightarrow 00:30:24.845$ from,

00:30:25.785 --> 00:30:26.925 time to time getting,

NOTE Confidence: 0.9576209

 $00{:}30{:}28.905 \longrightarrow 00{:}30{:}30.185$ either traumatic or, you know,

NOTE Confidence: 0.9576209

 $00:30:30.185 \longrightarrow 00:30:30.685$ other,

NOTE Confidence: 0.9221064

 $00:30:31.305 \longrightarrow 00:30:32.825$ re for for other reasons,

NOTE Confidence: 0.9221064

 $00{:}30{:}32.825 \dashrightarrow 00{:}30{:}34.425$ 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

 $00:30:35.760 \longrightarrow 00:30:36.980$ and that will always,

NOTE Confidence: 0.9351534

 $00:30:38.240 \longrightarrow 00:30:39.680$ you know, cause kind of

NOTE Confidence: 0.9351534

 $00:30:39.680 \longrightarrow 00:30:40.980$ mild to moderate thrombocytosis.

NOTE Confidence: 0.9720168

 $00:30:42.080 \longrightarrow 00:30:43.440$ 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

 $00:30:47.280 \longrightarrow 00:30:48.340$ 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

 $00:30:52.455 \longrightarrow 00:30:52.955$ and,

 $00:30:53.575 \longrightarrow 00:30:54.075$ someone

NOTE Confidence: 0.952685

 $00:30:54.615 \longrightarrow 00:30:56.295$ 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

 $00:30:57.335 \longrightarrow 00:30:58.315$ two hundred and,

NOTE Confidence: 0.971148

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

NOTE Confidence: 0.971148

 $00{:}31{:}00.455 \dashrightarrow 00{:}31{:}01.575$ the numbers have been creeping

NOTE Confidence: 0.971148

 $00:31:01.575 \longrightarrow 00:31:03.335$ up, and they've just recently

NOTE Confidence: 0.971148

 $00:31:03.335 \longrightarrow 00:31:04.455$ have come up to maybe

NOTE Confidence: 0.971148

 $00{:}31{:}04.455 \dashrightarrow 00{:}31{:}05.735$ 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

 $00:31:07.010 \longrightarrow 00:31:08.289$ of gives a sort of

NOTE Confidence: 0.971148

 $00:31:08.289 \longrightarrow 00:31:09.649$ sense that maybe this is

NOTE Confidence: 0.971148

 $00:31:09.649 \longrightarrow 00:31:10.630$ an essential thrombocytosis

NOTE Confidence: 0.8735603

 $00{:}31{:}11.490 \dashrightarrow 00{:}31{:}13.169$ and usually takes years to

NOTE Confidence: 0.8735603

00:31:13.169 --> 00:31:14.470 kind of, double,

NOTE Confidence: 0.96781135

 $00:31:15.649 \longrightarrow 00:31:16.610$ or, you know, the doubling

00:31:16.610 --> 00:31:18.450 time is typically very, very

NOTE Confidence: 0.96781135

 $00:31:18.450 \longrightarrow 00:31:19.975$ slow. The trend is important.

NOTE Confidence: 0.9536549

 $00:31:20.515 \longrightarrow 00:31:21.475$ 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

 $00:31:23.315 \longrightarrow 00:31:24.355$ goes up to six hundred,

NOTE Confidence: 0.9536549

 $00:31:24.355 \longrightarrow 00:31:25.395$ seven hundred and then goes

NOTE Confidence: 0.9536549

 $00:31:25.395 \longrightarrow 00:31:26.435$ 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 00:31:27.875 --> 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

 $00:31:31.715 \longrightarrow 00:31:33.335$ after finishing the workup,

NOTE Confidence: 0.9893218

00:31:33.715 --> 00:31:34.375 you know,

NOTE Confidence: 0.9313566

 $00:31:35.240 \longrightarrow 00:31:36.280$ realize that, you know, these

NOTE Confidence: 0.9313566

 $00:31:36.280 \longrightarrow 00:31:38.060$ are mostly kind of reactive,

 $00:31:38.680 \longrightarrow 00:31:39.180$ thrombocytosis.

NOTE Confidence: 0.56037474

00:31:41.160 --> 00:31:41.660 And

NOTE Confidence: 0.9508942

 $00:31:41.960 \longrightarrow 00:31:43.480$ 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

 $00{:}31{:}46.760 \dashrightarrow 00{:}31{:}48.200$ patients can have very extensive

NOTE Confidence: 0.9508942

 $00:31:48.200 \longrightarrow 00:31:49.960$ surgery, especially orthopedic surgery is

NOTE Confidence: 0.9508942

 $00:31:49.960 \longrightarrow 00:31:51.315$ very well described,

NOTE Confidence: 0.92068577

 $00:31:52.655 \longrightarrow 00:31:53.855$ hip surgery for example hip

NOTE Confidence: 0.92068577

 $00:31:53.855 \longrightarrow 00:31:55.455$ fracture surgery you know patients

NOTE Confidence: 0.92068577

 $00:31:55.455 \longrightarrow 00:31:56.115$ can have

NOTE Confidence: 0.93970215

 $00:31:56.415 \longrightarrow 00:31:58.015$ first thrombocytopenia and then you

NOTE Confidence: 0.93970215

 $00{:}31{:}58.015 \dashrightarrow 00{:}31{:}59.695$ know reactive thrombocytosis that can

NOTE Confidence: 0.93970215

 $00:31:59.695 \longrightarrow 00:32:00.675$ last for months,

NOTE Confidence: 0.92398524

 $00:32:01.775 \longrightarrow 00:32:02.735$ and and the same is

NOTE Confidence: 0.92398524

 $00:32:02.735 \longrightarrow 00:32:04.015$ with chronic infections it could

 $00:32:04.015 \longrightarrow 00:32:05.135$ be also myelitis or you

NOTE Confidence: 0.92398524

 $00:32:05.135 \longrightarrow 00:32:06.435$ 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

 $00:32:08.870 \longrightarrow 00:32:10.470$ 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

 $00:32:11.670 \longrightarrow 00:32:12.170$ thrombocytopenia

NOTE Confidence: 0.90314835

 $00:32:12.710 \longrightarrow 00:32:13.750$ kind of syndrome, but a

NOTE Confidence: 0.90314835

 $00:32:13.750 \longrightarrow 00:32:14.250$ thrombocytosis

NOTE Confidence: 0.9027762

 $00:32:14.630 \longrightarrow 00:32:15.930$ that could last for weeks,

NOTE Confidence: 0.9027762

 $00:32:16.230 \longrightarrow 00:32:17.430$ weeks to months and and

NOTE Confidence: 0.9027762

 $00:32:17.430 \longrightarrow 00:32:19.770$ then other, chronic inflammatory states,

NOTE Confidence: 0.95465994

 $00:32:20.150 \longrightarrow 00:32:22.465$ especially rheumatologic diseases. But but

NOTE Confidence: 0.95465994 00:32:22.465 --> 00:32:22.965 even

NOTE Confidence: 0.94208384

 $00:32:23.664 \longrightarrow 00:32:24.164$ milder,

NOTE Confidence: 0.9790897

 $00:32:25.504 \longrightarrow 00:32:26.804$ general sort of

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

NOTE Confidence: 0.8984043

 $00:32:28.544 \longrightarrow 00:32:29.044$ inflammatory

NOTE Confidence: 0.9465534

 $00:32:29.424 \longrightarrow 00:32:31.205$ kind of conditions, even diabetes

NOTE Confidence: 0.9465534 00:32:31.264 --> 00:32:31.764 or, NOTE Confidence: 0.90120614

 $00:32:32.225 \longrightarrow 00:32:33.745$ or a poorly controlled diabetes

NOTE Confidence: 0.90120614

 $00:32:33.745 \longrightarrow 00:32:34.804$ or or others.

NOTE Confidence: 0.95464283

 $00:32:35.850 \longrightarrow 00:32:37.450$ And then, some medications as

NOTE Confidence: 0.95464283

 $00:32:37.450 \longrightarrow 00:32:38.650$ well. I mean, I've certainly

NOTE Confidence: 0.95464283 00:32:38.650 --> 00:32:39.150 seen, NOTE Confidence: 0.97000533

 $00:32:40.490 \longrightarrow 00:32:41.710$ patients getting steroids.

NOTE Confidence: 0.9961434

 $00:32:42.890 \longrightarrow 00:32:43.770$ The last one I saw

NOTE Confidence: 0.9961434

 $00:32:43.770 \longrightarrow 00:32:44.670$ was, you know,

NOTE Confidence: 0.78436214

 $00:32:45.050 \longrightarrow 00:32:45.950$ 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

 $00:32:51.225 \longrightarrow 00:32:52.105$ 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

 $00:32:53.305 \longrightarrow 00:32:54.185$ 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

 $00:32:55.385 \longrightarrow 00:32:56.765$ know, steroids can do that.

NOTE Confidence: 0.93525404

 $00:32:56.905 \longrightarrow 00:32:58.365$ Stimulants also I've seen,

NOTE Confidence: 0.9502632

 $00:32:59.450 \longrightarrow 00:33:00.750$ 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

 $00:33:03.290 \longrightarrow 00:33:04.570$ you know, I think I've

NOTE Confidence: 0.9678008

 $00:33:04.570 \longrightarrow 00:33:05.690$ seen a bunch of patients

NOTE Confidence: 0.9678008

 $00:33:05.690 \longrightarrow 00:33:06.970$ who really go on it.

NOTE Confidence: 0.9678008

 $00:33:06.970 \longrightarrow 00:33:08.270$ The patients go high,

NOTE Confidence: 0.94497997

 $00:33:08.970 \longrightarrow 00:33:10.410$ and then, you know, and

NOTE Confidence: 0.94497997

 $00:33:10.410 \longrightarrow 00:33:11.290$ then they're off of it

NOTE Confidence: 0.94497997

 $00:33:11.290 \longrightarrow 00:33:12.250$ and and it comes down.

00:33:12.250 --> 00:33:12.705 So,

NOTE Confidence: 0.97014797

 $00:33:13.345 \longrightarrow 00:33:14.085$ and then,

NOTE Confidence: 0.9518502

 $00:33:14.544 \longrightarrow 00:33:15.505$ and then there are other,

NOTE Confidence: 0.9518502

 $00:33:15.505 \longrightarrow 00:33:16.865$ you know, chemotherapeutic agents. And

NOTE Confidence: 0.9518502

 $00:33:16.865 \longrightarrow 00:33:18.065$ 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

 $00:33:18.865 \longrightarrow 00:33:20.005$ have really extreme thrombocytosis,

NOTE Confidence: 0.97290534

 $00:33:20.945 \longrightarrow 00:33:22.404$ but those those would be

NOTE Confidence: 0.97290534

 $00{:}33{:}22.544 --> 00{:}33{:}23.044 \ \mathrm{rare}.$

NOTE Confidence: 0.8535692

 $00:33:24.544 \longrightarrow 00:33:25.745$ And then, then coming to

NOTE Confidence: 0.8535692

 $00{:}33{:}25.745 \dashrightarrow 00{:}33{:}27.424$ the laboratory workup and so,

NOTE Confidence: 0.8535692

00:33:27.424 --> 00:33:28.005 you know,

NOTE Confidence: 0.9408829

 $00:33:29.490 \longrightarrow 00:33:30.850$ you know, they've had at

NOTE Confidence: 0.9408829

 $00:33:30.850 \longrightarrow 00:33:32.130$ least a few CBC, but,

NOTE Confidence: 0.9408829

 $00:33:32.130 \longrightarrow 00:33:33.810$ you know, that's what, we

NOTE Confidence: 0.9408829

 $00:33:33.810 \longrightarrow 00:33:34.770$ end up getting in smear.

00:33:34.770 --> 00:33:36.770 And smear becomes very important

NOTE Confidence: 0.9408829

 $00:33:36.770 \longrightarrow 00:33:37.270$ because,

NOTE Confidence: 0.9954866

 $00:33:39.730 \longrightarrow 00:33:40.470$ many times,

NOTE Confidence: 0.9037695

 $00:33:41.145 \longrightarrow 00:33:42.445$ you know, thrombocytosis

NOTE Confidence: 0.9306202

 $00:33:42.905 \longrightarrow 00:33:43.885$ also causes,

NOTE Confidence: 0.9536624

00:33:45.225 --> 00:33:46.365 how do I put this,

NOTE Confidence: 0.99099004

 $00:33:46.665 \longrightarrow 00:33:48.205$ some degree of pseudothrombocytopenia.

NOTE Confidence: 0.94385654

 $00:33:50.825 \longrightarrow 00:33:51.865$ And what I mean by

NOTE Confidence: 0.94385654

 $00:33:51.865 \longrightarrow 00:33:52.665$ 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

 $00:33:53.785 \longrightarrow 00:33:54.600$ of five hundred or six

NOTE Confidence: 0.94385654

 $00:33:54.679 \longrightarrow 00:33:55.960$ hundred reported platelet count of

NOTE Confidence: 0.94385654

 $00:33:55.960 \longrightarrow 00:33:56.679$ 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

 $00:33:57.640 \longrightarrow 00:33:58.440$ and there are many, many,

 $00:33:58.440 \longrightarrow 00:34:00.200$ many clumps. And so especially

NOTE Confidence: 0.94385654

 $00:34:00.200 \longrightarrow 00:34:01.799$ with the central thrombocytosis. And

NOTE Confidence: 0.94385654 00:34:01.799 --> 00:34:02.299 so NOTE Confidence: 0.9694464

 $00:34:02.600 \longrightarrow 00:34:03.480$ so the, you know, the

NOTE Confidence: 0.9694464

 $00:34:03.480 \longrightarrow 00:34:05.080$ platelet count the actual platelet

NOTE Confidence: 0.9694464

 $00:34:05.080 \longrightarrow 00:34:07.240$ count is is way much

NOTE Confidence: 0.9694464

00:34:07.240 --> 00:34:08.140 higher. And,

NOTE Confidence: 0.99652433

 $00{:}34{:}08.600 \dashrightarrow 00{:}34{:}09.420$ and I

NOTE Confidence: 0.96291804

 $00:34:10.025 \longrightarrow 00:34:10.844$ sort of, like,

NOTE Confidence: 0.9879109

 $00:34:11.145 \longrightarrow 00:34:12.265$ you know, see that a

NOTE Confidence: 0.9879109

 $00:34:12.265 \longrightarrow 00:34:13.565$ 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

 $00:34:19.385 \longrightarrow 00:34:19.885$ useful,

NOTE Confidence: 0.92333764

 $00:34:20.344 \longrightarrow 00:34:21.625$ especially you're also looking for

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

 $00:34:24.480 \longrightarrow 00:34:25.600$ not reported or they're within

NOTE Confidence: 0.92333764

 $00:34:25.600 \longrightarrow 00:34:27.360$ the normal range and and,

NOTE Confidence: 0.92333764

 $00{:}34{:}27.600 \dashrightarrow 00{:}34{:}29.200$ and you appreciate, you know,

NOTE Confidence: 0.92333764

 $00:34:29.200 \longrightarrow 00:34:30.020$ they maybe,

NOTE Confidence: 0.64667237

 $00:34:30.560 \longrightarrow 00:34:31.760$ or question this poise or

NOTE Confidence: 0.64667237 00:34:31.760 --> 00:34:32.260 or, NOTE Confidence: 0.95636356

 $00:34:33.200 \longrightarrow 00:34:34.400$ so smear becomes very important.

NOTE Confidence: 0.95636356

 $00:34:34.400 \longrightarrow 00:34:36.020$ And then and then ferritin,

NOTE Confidence: 0.9327403

 $00:34:36.400 \longrightarrow 00:34:37.440$ and with with that, what

NOTE Confidence: 0.9327403

 $00:34:37.440 \longrightarrow 00:34:38.400$ I mean is iron iron

NOTE Confidence: 0.9327403

 $00{:}34{:}38.400 \dashrightarrow 00{:}34{:}39.705$ 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

 $00:34:41.625 \longrightarrow 00:34:43.005$ my iron panel. But,

 $00:34:43.625 \longrightarrow 00:34:45.885$ but, you know, in in

NOTE Confidence: 0.99254274

 $00:34:46.025 \longrightarrow 00:34:46.525$ outpatients,

NOTE Confidence: 0.9918328

 $00:34:46.825 \longrightarrow 00:34:48.185$ the most common cause of,

NOTE Confidence: 0.9918328

 $00:34:48.505 \longrightarrow 00:34:49.165$ of thrombocytosis

NOTE Confidence: 0.5759155

 $00:34:50.025 \longrightarrow 00:34:50.685$ is is,

NOTE Confidence: 0.9597764

 $00:34:51.305 \longrightarrow 00:34:52.665$ 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

 $00:34:54.260 \longrightarrow 00:34:55.540$ and the mechanism behind it

NOTE Confidence: 0.9597764

 $00:34:55.540 \longrightarrow 00:34:56.099$ is also,

NOTE Confidence: 0.9939809

 $00:34:56.500 \longrightarrow 00:34:57.480$ very well known.

NOTE Confidence: 0.9725072

 $00:34:58.500 \longrightarrow 00:34:59.619$ In fact, you can kind

NOTE Confidence: 0.9725072

 $00:34:59.619 \longrightarrow 00:35:01.060$ of divide the humanity into

NOTE Confidence: 0.9725072

 $00:35:01.060 \longrightarrow 00:35:01.940$ two, those who would, you

NOTE Confidence: 0.9725072

 $00{:}35{:}01.940 \dashrightarrow 00{:}35{:}03.320$ know, really have thrombocytosis

NOTE Confidence: 0.94364893

 $00:35:03.700 \longrightarrow 00:35:04.660$ and those who wouldn't with

NOTE Confidence: 0.94364893

 $00:35:04.660 \longrightarrow 00:35:06.494$ iron deficiency. And so, so

 $00{:}35{:}06.494 \dashrightarrow 00{:}35{:}07.214$ 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

 $00:35:08.974 \longrightarrow 00:35:09.474$ 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

 $00:35:13.454 \longrightarrow 00:35:14.974$ And then once, you know,

NOTE Confidence: 0.9900446

 $00:35:14.974 \longrightarrow 00:35:15.954$ you've really,

NOTE Confidence: 0.92708826

 $00:35:17.454 \longrightarrow 00:35:19.295$ 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

 $00:35:20.160 \longrightarrow 00:35:22.559$ normal inflammation, infection, surgery even,

NOTE Confidence: 0.92708826

 $00:35:22.559 \longrightarrow 00:35:23.780$ 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

 $00{:}35{:}26.319 \dashrightarrow 00{:}35{:}28.180$ cancer screening and and everything.

NOTE Confidence: 0.9661469

 $00:35:28.239 \longrightarrow 00:35:28.739$ And,

NOTE Confidence: 0.9958296

 $00:35:29.040 \longrightarrow 00:35:30.719$ then, you know, the the

 $00:35:30.719 \longrightarrow 00:35:31.219$ likelihood

NOTE Confidence: 0.90029

 $00:35:31.599 \longrightarrow 00:35:32.660$ of a persistent

NOTE Confidence: 0.99017674

 $00:35:33.040 \longrightarrow 00:35:33.540$ thrombocytosis

NOTE Confidence: 0.9982742

 $00:35:36.614 \longrightarrow 00:35:37.114$ being

NOTE Confidence: 0.839481

 $00:35:37.495 \longrightarrow 00:35:38.795$ essential thrombocytosis

NOTE Confidence: 0.9482966

 $00:35:39.094 \longrightarrow 00:35:39.755$ or thrombocythemia,

NOTE Confidence: 0.9067595

 $00:35:41.895 \longrightarrow 00:35:42.635$ is, you

NOTE Confidence: 0.91822857

 $00:35:43.094 \longrightarrow 00:35:44.315$ know, is more.

NOTE Confidence: 0.8158523

 $00{:}35{:}45.015 \dashrightarrow 00{:}35{:}45.515$ So,

NOTE Confidence: 0.98667717

 $00:35:45.975 \longrightarrow 00:35:47.015$ and and then, you know,

NOTE Confidence: 0.98667717

 $00:35:47.015 \longrightarrow 00:35:47.915$ that's really,

NOTE Confidence: 0.9930123

 $00:35:49.255 \longrightarrow 00:35:49.755$ really,

NOTE Confidence: 0.97800374

 $00:35:50.375 \longrightarrow 00:35:50.875$ diagnosed

NOTE Confidence: 0.9341669

 $00:35:51.430 \longrightarrow 00:35:51.930$ by,

NOTE Confidence: 0.957993

 $00:35:52.390 \longrightarrow 00:35:53.830$ by mutation testing. So fifty

NOTE Confidence: 0.957993

 $00:35:53.830 \longrightarrow 00:35:55.110$ percent of them those will

00:35:55.110 --> 00:35:56.070 have JAK two v six

NOTE Confidence: 0.957993

 $00:35:56.070 \longrightarrow 00:35:57.290$ one seven f mutation,

NOTE Confidence: 0.9540304

 $00:35:57.590 \longrightarrow 00:35:58.550$ and then about, you know,

NOTE Confidence: 0.9540304

 $00:35:58.550 \dashrightarrow 00:36:00.010$ 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

 $00:36:01.430 \longrightarrow 00:36:02.630$ to ten percent will have

NOTE Confidence: 0.94598716

 $00:36:02.630 \longrightarrow 00:36:04.489$ the MIPL or MPL mutation.

NOTE Confidence: 0.94598716

 $00:36:04.630 \longrightarrow 00:36:05.475$ 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

 $00:36:06.515 \longrightarrow 00:36:07.335$ and the remaining,

NOTE Confidence: 0.9207023

 $00:36:07.955 \longrightarrow 00:36:09.075$ would, you know, require a

NOTE Confidence: 0.9207023

00:36:09.075 --> 00:36:10.035 bone or biopsy,

NOTE Confidence: 0.9713268

 $00:36:10.355 \longrightarrow 00:36:11.095$ for diagnosis.

NOTE Confidence: 0.94337803

00:36:11.635 --> 00:36:12.995 And and, you know, and

NOTE Confidence: 0.94337803

 $00:36:12.995 \longrightarrow 00:36:14.195$ these days, we are we

 $00:36:14.195 \longrightarrow 00:36:16.195$ 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

 $00:36:17.795 \longrightarrow 00:36:19.095$ are, we are finding,

NOTE Confidence: 0.9835953

 $00:36:19.739 \longrightarrow 00:36:21.020$ other rare mutations that are

NOTE Confidence: 0.9835953

 $00:36:21.020 \longrightarrow 00:36:22.480$ associated with essential thrombocytosis.

NOTE Confidence: 0.99301445

 $00:36:22.860 \longrightarrow 00:36:23.520$ And so

NOTE Confidence: 0.98798704

 $00:36:23.820 \longrightarrow 00:36:24.560$ 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

 $00:36:29.180 \longrightarrow 00:36:30.160$ 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

 $00{:}36{:}34.325 \dots > 00{:}36{:}35.545$ said, you know, most common

NOTE Confidence: 0.9405675

 $00:36:35.765 \longrightarrow 00:36:37.605$ 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

 $00:36:40.485 \longrightarrow 00:36:42.085$ is is, you know it

NOTE Confidence: 0.90306866

 $00:36:42.085 \longrightarrow 00:36:43.545$ probably will rule out,

 $00{:}36{:}43.844 \dashrightarrow 00{:}36{:}45.890$ 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

 $00:36:47.309 \longrightarrow 00:36:47.969$ the cases,

NOTE Confidence: 0.9214129

 $00:36:48.589 \longrightarrow 00:36:50.190$ and then followed by by

NOTE Confidence: 0.9214129

 $00{:}36{:}50.190 \dashrightarrow 00{:}36{:}52.109$ 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

 $00:36:53.069 \longrightarrow 00:36:54.430$ status or, you know, in

NOTE Confidence: 0.9214129

 $00:36:54.430 \longrightarrow 00:36:56.289$ in chronic inflammatory conditions.

NOTE Confidence: 0.99733233

 $00:36:56.910 \longrightarrow 00:36:57.650$ Many times,

NOTE Confidence: 0.9079612

 $00:36:58.029 \longrightarrow 00:36:59.325$ 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

 $00:37:00.844 \longrightarrow 00:37:02.285$ in a younger person and

NOTE Confidence: 0.9079612

 $00:37:02.285 \longrightarrow 00:37:02.685$ and,

NOTE Confidence: 0.9966448

 $00:37:03.085 \longrightarrow 00:37:04.625$ and not, you know, not

NOTE Confidence: 0.9562602

 $00:37:04.925 \longrightarrow 00:37:06.525$ really get a diagnosis. And

 $00:37:06.525 \longrightarrow 00:37:07.425$ 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

 $00:37:10.125 \longrightarrow 00:37:11.425$ 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

 $00:37:12.950 \longrightarrow 00:37:14.630$ of, you know, seen people

NOTE Confidence: 0.9726739

 $00:37:14.630 \dashrightarrow 00:37:16.069$ developing diabetes or, you know,

NOTE Confidence: 0.9726739

 $00:37:16.069 \longrightarrow 00:37:16.890$ very general

NOTE Confidence: 0.8713304

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

NOTE Confidence: 0.93622935

 $00:37:19.430 \longrightarrow 00:37:20.089$ sort of,

NOTE Confidence: 0.9591881

 $00:37:20.869 \longrightarrow 00:37:23.109$ 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

 $00:37:24.069 \longrightarrow 00:37:25.450$ you know, a

NOTE Confidence: 0.88547933

 $00:37:25.910 \longrightarrow 00:37:27.130$ workup for

NOTE Confidence: 0.9760504

 $00:37:27.805 \longrightarrow 00:37:28.305$ for,

NOTE Confidence: 0.797839

 $00:37:29.005 \longrightarrow 00:37:29.505$ myeloproliferative

NOTE Confidence: 0.95628226

 $00:37:30.844 \longrightarrow 00:37:31.344$ neoplasm,

 $00{:}37{:}31.965 \dashrightarrow 00{:}37{:}33.725$ is is justified. And, you

NOTE Confidence: 0.95728236

 $00:37:33.725 \longrightarrow 00:37:34.785$ 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

 $00:37:36.844 \longrightarrow 00:37:37.344$ mutation,

NOTE Confidence: 0.9320204

 $00:37:37.965 \longrightarrow 00:37:39.085$ and then reflects to other

NOTE Confidence: 0.9320204

 $00:37:39.085 \longrightarrow 00:37:40.445$ mutations followed by a pulmonary

NOTE Confidence: 0.9320204

 $00:37:40.445 \longrightarrow 00:37:40.945$ biopsy.

NOTE Confidence: 0.9557816

 $00{:}37{:}44.660 --> 00{:}37{:}45.940$ Alright. No. Thank you. So

NOTE Confidence: 0.9557816

 $00:37:45.940 \longrightarrow 00:37:46.900$ this like I said, this

NOTE Confidence: 0.9557816

 $00:37:46.900 \longrightarrow 00:37:48.339$ 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

 $00:37:49.780 \longrightarrow 00:37:50.579$ the cause, but we have

NOTE Confidence: 0.9557816

 $00:37:50.579 \longrightarrow 00:37:51.320$ the smear,

NOTE Confidence: 0.98768437

 $00:37:52.180 \longrightarrow 00:37:53.380$ still coming on. And and

NOTE Confidence: 0.98768437

 $00:37:53.380 \longrightarrow 00:37:54.265$ then just,

 $00:37:54.825 \longrightarrow 00:37:55.325$ one

NOTE Confidence: 0.9935044

 $00{:}37{:}55.705 \dashrightarrow 00{:}37{:}57.465$ final plug on on the

NOTE Confidence: 0.9935044

 $00:37:57.465 \longrightarrow 00:37:58.765$ pathway. So,

NOTE Confidence: 0.9901169

00:37:59.225 --> 00:38:00.105 you know, when you're putting

NOTE Confidence: 0.9901169

 $00:38:00.185 \longrightarrow 00:38:01.145$ 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

 $00:38:03.065 \longrightarrow 00:38:04.344$ order, if I if you

NOTE Confidence: 0.9901169

 $00:38:04.344 \longrightarrow 00:38:06.205$ 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

 $00:38:08.025 \longrightarrow 00:38:09.225$ on the order what you

NOTE Confidence: 0.9843865

 $00{:}38{:}09.225 --> 00{:}38{:}09.725 \ \mathrm{want}.$

NOTE Confidence: 0.9888935

 $00:38:10.370 \longrightarrow 00:38:11.890$ But if you click on

NOTE Confidence: 0.9888935

 $00:38:11.890 \longrightarrow 00:38:13.510$ it from the pathway,

NOTE Confidence: 0.9750306

 $00:38:14.130 \longrightarrow 00:38:15.410$ it pops up. And so

NOTE Confidence: 0.9750306

 $00:38:15.410 \longrightarrow 00:38:16.210$ for those of you taking

NOTE Confidence: 0.9750306

00:38:16.210 --> 00:38:18.070 notes at home, it's peripheral

 $00:38:18.130 \longrightarrow 00:38:19.350$ smear for pathology.

NOTE Confidence: 0.9994404

 $00:38:19.969 \longrightarrow 00:38:21.030$ If you type in

NOTE Confidence: 0.89779985

00:38:21.410 --> 00:38:21.910 peripheral,

NOTE Confidence: 0.9427882

 $00:38:22.930 \longrightarrow 00:38:24.790$ blood or peripheral blood smear,

NOTE Confidence: 0.9427882

 $00:38:25.035 \longrightarrow 00:38:26.875$ you actually doesn't always show

NOTE Confidence: 0.9427882

 $00:38:26.875 \longrightarrow 00:38:27.855$ up in EPIC.

NOTE Confidence: 0.9616073

 $00:38:28.395 \longrightarrow 00:38:29.135$ So another,

NOTE Confidence: 0.9870066

 $00:38:29.914 \longrightarrow 00:38:31.194$ plug on on on the

NOTE Confidence: 0.9870066

00:38:31.194 --> 00:38:32.335 pathway for,

NOTE Confidence: 0.94717526

 $00:38:33.994 \longrightarrow 00:38:34.875$ in some ways, it may

NOTE Confidence: 0.94717526

 $00{:}38{:}34.875 \dashrightarrow 00{:}38{:}36.075$ be sometimes worth the time

NOTE Confidence: 0.94717526

 $00:38:36.075 \longrightarrow 00:38:37.355$ to go in just to

NOTE Confidence: 0.94717526

 $00:38:37.355 \longrightarrow 00:38:38.255$ make the ordering,

NOTE Confidence: 0.998514

 $00:38:38.954 \longrightarrow 00:38:39.420$ easier.

NOTE Confidence: 0.9709958

00:38:39.980 --> 00:38:40.719 And so,

 $00:38:41.819 \longrightarrow 00:38:43.260$ but, like I said, her

NOTE Confidence: 0.9934971

 $00:38:43.260 \longrightarrow 00:38:44.960$ case is ongoing. I'm suspecting,

NOTE Confidence: 0.98344266

 $00{:}38{:}45.819 \dashrightarrow 00{:}38{:}47.420$ since she's been relatively stable

NOTE Confidence: 0.98344266

 $00:38:47.420 \longrightarrow 00:38:48.540$ in the four fifty to

NOTE Confidence: 0.98344266

 $00:38:48.540 \longrightarrow 00:38:49.739$ five twenty five range that

NOTE Confidence: 0.98344266

 $00:38:49.739 \longrightarrow 00:38:51.599$ we will probably not find

NOTE Confidence: 0.98344266

 $00:38:51.739 \longrightarrow 00:38:52.239$ anything,

NOTE Confidence: 0.8982029

 $00:38:53.020 \longrightarrow 00:38:53.520$ 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

 $00:38:58.515 \longrightarrow 00:39:00.215$ give a another update.

NOTE Confidence: 0.97246355

 $00:39:02.195 \longrightarrow 00:39:03.555$ I don't I have been

NOTE Confidence: 0.97246355

 $00:39:03.555 \longrightarrow 00:39:04.835$ following the chat. I don't

NOTE Confidence: 0.97246355

 $00:39:04.835 \longrightarrow 00:39:06.295$ 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

 $00:39:08.114 \longrightarrow 00:39:09.415$ back back over.

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

 $00:39:14.140 \longrightarrow 00:39:15.579$ although we had a a

NOTE Confidence: 0.9584539

 $00:39:15.579 \longrightarrow 00:39:17.099$ couple of other things that

NOTE Confidence: 0.9584539

 $00:39:17.099 \longrightarrow 00:39:18.059$ we didn't know if we

NOTE Confidence: 0.9584539

 $00:39:18.059 \longrightarrow 00:39:19.099$ were gonna have time to

NOTE Confidence: 0.9584539

 $00:39:19.099 \longrightarrow 00:39:20.460$ discuss, and and so maybe

NOTE Confidence: 0.9584539

 $00:39:20.460 \longrightarrow 00:39:21.119$ we can,

NOTE Confidence: 0.9966239

 $00:39:21.579 \longrightarrow 00:39:23.099$ 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

 $00:39:24.859 \longrightarrow 00:39:26.685$ enter them in the q

NOTE Confidence: 0.9966239

 $00:39:26.685 \longrightarrow 00:39:27.265$ and a.

NOTE Confidence: 0.74906117

 $00{:}39{:}28.205 \dashrightarrow 00{:}39{:}29.245$ Well, I have one. If

NOTE Confidence: 0.74906117

 $00:39:29.245 \longrightarrow 00:39:31.085$ that's something too. Yeah. Thanks

NOTE Confidence: 0.74906117

00:39:31.085 --> 00:39:32.465 for going. Yeah. Okay. Good.

 $00:39:33.245 \longrightarrow 00:39:34.685$ 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

 $00:39:37.725 \longrightarrow 00:39:39.005$ 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

 $00:39:40.500 \longrightarrow 00:39:41.540$ missed it in your case

NOTE Confidence: 0.9567528

 $00:39:41.540 \longrightarrow 00:39:42.980$ and maybe to doctor Sharda

NOTE Confidence: 0.9567528

 $00:39:42.980 \longrightarrow 00:39:43.640$ as well,

NOTE Confidence: 0.9085981

00:39:46.739 --> 00:39:48.180 about if your patient's body

NOTE Confidence: 0.9085981

 $00:39:48.180 \longrightarrow 00:39:49.780$ 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

 $00:39:51.060 \longrightarrow 00:39:52.020$ that, and I missed it.

NOTE Confidence: 0.9085981

 $00:39:52.020 \longrightarrow 00:39:52.760$ But I think

NOTE Confidence: 0.939854

 $00:39:53.300 \longrightarrow 00:39:54.894$ yeah. Good question. I think

NOTE Confidence: 0.939854

 $00:39:54.894 \longrightarrow 00:39:55.855$ I see that a lot

 $00:39:55.855 \longrightarrow 00:39:57.214$ in practice as part of

NOTE Confidence: 0.939854

 $00:39:57.214 \longrightarrow 00:39:57.714$ this NOTE Confidence: 0.69244534

 $00:39:59.214 \longrightarrow 00:39:59.714$ inflammatory

NOTE Confidence: 0.85728574

 $00:40:00.575 \longrightarrow 00:40:01.394$ state. Right.

NOTE Confidence: 0.9423076

00:40:02.015 --> 00:40:03.454 Yeah. Yeah. And I I,

NOTE Confidence: 0.9423076

 $00:40:03.775 \longrightarrow 00:40:04.815$ no. I I complete her

NOTE Confidence: 0.9423076

 $00:40:04.815 \longrightarrow 00:40:06.355$ 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

 $00{:}40{:}08.549 \to 00{:}40{:}09.589$ 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

 $00:40:12.549 \longrightarrow 00:40:13.509$ 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: 0.998471200:40:17.989 --> 00:40:18.489 but

 $00:40:18.805 \longrightarrow 00:40:19.844$ I I sort of feel

NOTE Confidence: 0.9355345

 $00:40:19.844 \longrightarrow 00:40:20.725$ 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

 $00:40:21.844 \longrightarrow 00:40:22.965$ 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

 $00:40:24.645 \longrightarrow 00:40:26.085$ 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

 $00:40:27.364 \longrightarrow 00:40:28.825$ higher levels of obesity

NOTE Confidence: 0.9227397

 $00:40:29.445 \longrightarrow 00:40:31.205$ seem to have like a

NOTE Confidence: 0.9227397

 $00:40:31.205 \longrightarrow 00:40:32.825$ white counts of ten to

NOTE Confidence: 0.91531605

 $00{:}40{:}33.480 \mathrel{--}{>} 00{:}40{:}35.160$ twelve, you know, nothing that's

NOTE Confidence: 0.91531605

 $00:40:35.160 \longrightarrow 00:40:36.440$ sort of triggering a workup,

NOTE Confidence: 0.91531605

 $00:40:36.440 \longrightarrow 00:40:37.880$ but seems to have. And

NOTE Confidence: 0.91531605

 $00:40:37.880 \longrightarrow 00:40:39.000$ so I wonder, like you

NOTE Confidence: 0.91531605

 $00:40:39.000 \longrightarrow 00:40:40.119$ said, if there's another sort

NOTE Confidence: 0.91531605

 $00:40:40.119 \longrightarrow 00:40:41.400$ of, like, and you said,

 $00:40:41.400 \longrightarrow 00:40:42.440$ like maybe there's a little

NOTE Confidence: 0.91531605

 $00:40:42.440 \longrightarrow 00:40:43.660$ bit of non pathologic

NOTE Confidence: 0.96304023

 $00:40:44.280 \longrightarrow 00:40:45.180$ chronic inflammation

NOTE Confidence: 0.9366716

 $00:40:45.560 \longrightarrow 00:40:47.000$ that's driving some of these,

NOTE Confidence: 0.9967583

 $00:40:47.735 \longrightarrow 00:40:48.235$ thrombocytosis

NOTE Confidence: 0.98170257

 $00:40:48.614 \longrightarrow 00:40:49.495$ that may be causing a

NOTE Confidence: 0.98170257

 $00:40:49.495 \longrightarrow 00:40:50.395$ little bit of leukocytosis

NOTE Confidence: 0.9594556

 $00:40:50.695 \longrightarrow 00:40:51.655$ because I do see that

NOTE Confidence: 0.9594556

 $00:40:51.655 \longrightarrow 00:40:53.094$ a lot. So good question

NOTE Confidence: 0.9594556

 $00:40:53.094 \longrightarrow 00:40:54.715$ about the the BMI.

NOTE Confidence: 0.9594556

 $00:40:54.935 \longrightarrow 00:40:56.455$ Yeah. Hers was is thirty

NOTE Confidence: 0.9594556

 $00:40:56.455 \longrightarrow 00:40:56.955$ seven.

NOTE Confidence: 0.9390021

 $00:40:59.495 \longrightarrow 00:41:00.375$ Yeah. And yes, I think

NOTE Confidence: 0.9390021

 $00:41:00.375 \longrightarrow 00:41:01.094$ we see a lot of

NOTE Confidence: 0.9390021

 $00:41:01.094 \longrightarrow 00:41:02.395$ patients with leukocytosis

 $00:41:03.080 \longrightarrow 00:41:03.640$ who are,

NOTE Confidence: 0.95941186

 $00:41:04.120 \longrightarrow 00:41:05.500$ with an elevated BMI,

NOTE Confidence: 0.99174744

 $00:41:05.800 \longrightarrow 00:41:07.180$ 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

 $00:41:11.000 \longrightarrow 00:41:11.880$ 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

 $00:41:17.605 \longrightarrow 00:41:19.285$ 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

 $00{:}41{:}23.125 \dashrightarrow 00{:}41{:}24.565$ presentation and thrilled that you

NOTE Confidence: 0.9675707

 $00:41:24.565 \longrightarrow 00:41:26.344$ highlight the care signature pathways

NOTE Confidence: 0.9675707

 $00:41:26.485 \longrightarrow 00:41:27.685$ and the value for primary

NOTE Confidence: 0.9675707

 $00:41:27.685 \longrightarrow 00:41:28.805$ care. Mary Anne, thanks for

NOTE Confidence: 0.9675707

 $00:41:28.805 \longrightarrow 00:41:29.685$ the work that you and

NOTE Confidence: 0.9675707

 $00:41:29.685 \longrightarrow 00:41:30.665$ your team do

00:41:30.989 --> 00:41:32.510 on the signature care pathway,

NOTE Confidence: 0.95424944

 $00{:}41{:}32.510 \dashrightarrow 00{:}41{:}33.870$ and thank you for sharing

NOTE Confidence: 0.95424944

 $00:41:33.870 \longrightarrow 00:41:35.950$ the slides that we some

NOTE Confidence: 0.95424944

 $00:41:35.950 \longrightarrow 00:41:36.989$ of the slides that we

NOTE Confidence: 0.95424944

 $00:41:36.989 \longrightarrow 00:41:39.090$ used. So thank you. Yeah.

NOTE Confidence: 0.9727694

 $00:41:39.630 \longrightarrow 00:41:40.670$ No. And they're they're well

NOTE Confidence: 0.9727694

 $00:41:40.670 \longrightarrow 00:41:42.050$ done. I agree with Frank.

NOTE Confidence: 0.93788755

 $00:41:42.905 \longrightarrow 00:41:44.185$ Yeah. Yeah. And and the

NOTE Confidence: 0.93788755

 $00:41:44.185 \longrightarrow 00:41:45.385$ fact that they're living and

NOTE Confidence: 0.93788755

 $00{:}41{:}45.385 --> 00{:}41{:}45.704 \text{ get},$

NOTE Confidence: 0.7050968

 $00:41:46.265 \longrightarrow 00:41:46.765$ updated.

NOTE Confidence: 0.9706316

 $00:41:47.464 \longrightarrow 00:41:48.825$ So right. We we highlighted

NOTE Confidence: 0.9706316

 $00{:}41{:}48.825 \dashrightarrow 00{:}41{:}49.785$ these topics because there was

NOTE Confidence: 0.9706316

 $00:41:49.785 \longrightarrow 00:41:50.744$ a couple of new ones,

NOTE Confidence: 0.9706316

 $00:41:50.744 \longrightarrow 00:41:52.905$ but they they'll change as

 $00:41:52.905 \longrightarrow 00:41:54.025$ as need be, which is

NOTE Confidence: 0.9706316

 $00:41:54.025 \longrightarrow 00:41:54.844$ which is great.

NOTE Confidence: 0.9392949

 $00:41:58.180 \longrightarrow 00:41:58.820$ But I don't know if

NOTE Confidence: 0.9392949

 $00:41:58.820 \longrightarrow 00:42:00.100$ there's no other questions at

NOTE Confidence: 0.9392949

 $00:42:00.100 \longrightarrow 00:42:00.980$ a time. I did have

NOTE Confidence: 0.9392949

 $00:42:00.980 \longrightarrow 00:42:02.340$ one question. We see a

NOTE Confidence: 0.9392949

 $00:42:02.340 \longrightarrow 00:42:04.020$ lot of elevated fair, you

NOTE Confidence: 0.9392949

 $00:42:04.020 \longrightarrow 00:42:06.020$ know, through all these, all

NOTE Confidence: 0.9392949

 $00:42:06.020 \longrightarrow 00:42:07.460$ both of these cases, right?

NOTE Confidence: 0.9392949

 $00:42:07.460 \longrightarrow 00:42:08.580$ The workup was let's get

NOTE Confidence: 0.9392949

 $00:42:08.580 \longrightarrow 00:42:09.640$ 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

 $00:42:12.100 \longrightarrow 00:42:13.480$ in primary care,

NOTE Confidence: 0.9611543

 $00:42:14.035 \longrightarrow 00:42:15.315$ I do see a lot

NOTE Confidence: 0.9611543

 $00:42:15.315 \longrightarrow 00:42:16.935$ of iron studies that show

 $00:42:16.995 \longrightarrow 00:42:18.455$ an elevated ferritin

NOTE Confidence: 0.8937598

 $00:42:19.315 \longrightarrow 00:42:20.375$ and, and

NOTE Confidence: 0.7399415

 $00:42:20.675 \longrightarrow 00:42:21.175$ often

NOTE Confidence: 0.9228538

00:42:21.795 --> 00:42:23.635 my mind goes to, could,

NOTE Confidence: 0.9228538

 $00:42:23.635 \longrightarrow 00:42:24.295$ is this

NOTE Confidence: 0.92290384

 $00:42:24.915 \longrightarrow 00:42:25.415$ hemochromatosis

NOTE Confidence: 0.948854

 $00:42:26.435 \longrightarrow 00:42:27.155$ and do I need to

NOTE Confidence: 0.948854

00:42:27.155 --> 00:42:28.135 worry about hemochromatosis?

NOTE Confidence: 0.93123835

 $00:42:28.675 \longrightarrow 00:42:30.490$ 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

 $00:42:32.490 \longrightarrow 00:42:33.930$ you know what would be

NOTE Confidence: 0.93123835

 $00:42:33.930 \longrightarrow 00:42:35.550$ maybe the best marker

NOTE Confidence: 0.9591293

 $00:42:35.850 \longrightarrow 00:42:37.130$ 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 $00{:}42{:}39.610 --> 00{:}42{:}40.110 \ {\rm care}$

 $00:42:40.410 \longrightarrow 00:42:41.385$ colleagues of

NOTE Confidence: 0.98937976

 $00:42:41.705 \longrightarrow 00:42:43.225$ when is it worth the

NOTE Confidence: 0.98937976

 $00:42:43.225 \longrightarrow 00:42:44.844$ the the testing for hemochromatosis?

NOTE Confidence: 0.7833681 00:42:49.225 --> 00:42:49.725 I NOTE Confidence: 0.93697304

 $00:42:50.105 \longrightarrow 00:42:51.145$ I think by an iron

NOTE Confidence: 0.93697304

 $00:42:51.145 \longrightarrow 00:42:52.825$ saturation of more than forty

NOTE Confidence: 0.93697304

 $00:42:52.825 \longrightarrow 00:42:54.605$ five percent is usually a,

NOTE Confidence: 0.9587893

 $00:42:56.750 \longrightarrow 00:42:58.750$ a better test to kinda

NOTE Confidence: 0.9587893

 $00:42:58.750 \longrightarrow 00:42:59.969$ screen for hemochromatosis.

NOTE Confidence: 0.9674308

00:43:00.590 --> 00:43:01.330 So I think,

NOTE Confidence: 0.96253675

 $00{:}43{:}02.030 \dashrightarrow 00{:}43{:}03.469$ but certainly other ways that

NOTE Confidence: 0.96253675

 $00:43:03.469 \longrightarrow 00:43:04.430$ 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

 $00:43:05.710 \longrightarrow 00:43:06.270$ have had,

NOTE Confidence: 0.9393526

 $00:43:06.910 \longrightarrow 00:43:07.950$ you know, an MRI. And

NOTE Confidence: 0.9393526

 $00:43:07.950 \longrightarrow 00:43:08.989$ if there's sort of iron

 $00{:}43{:}08.989 \dashrightarrow 00{:}43{:}10.109$ 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

 $00:43:11.154 \longrightarrow 00:43:11.654$ certainly

NOTE Confidence: 0.9710727

 $00:43:12.035 \longrightarrow 00:43:13.075$ like, we think about that

NOTE Confidence: 0.9710727

 $00:43:13.075 \longrightarrow 00:43:14.454$ as well. But the ferritin,

NOTE Confidence: 0.9710727

00:43:14.515 --> 00:43:15.094 you know,

NOTE Confidence: 0.99622726

 $00:43:15.714 \longrightarrow 00:43:16.535$ in a similar

NOTE Confidence: 0.9601907

 $00:43:17.234 \longrightarrow 00:43:18.194$ thing and has a lot

NOTE Confidence: 0.9601907

 $00:43:18.194 \longrightarrow 00:43:19.315$ of sort of reactive you

NOTE Confidence: 0.9601907

 $00:43:19.315 \longrightarrow 00:43:20.355$ 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

 $00:43:22.994 \longrightarrow 00:43:24.055$ diseases and

NOTE Confidence: 0.88788

 $00:43:24.500 \longrightarrow 00:43:25.319$ and other spaces, alcohol.

NOTE Confidence: 0.86596924

00:43:27.140 --> 00:43:28.260 I don't know, doctor Sharda,

 $00:43:28.260 \longrightarrow 00:43:29.079$ your thoughts.

NOTE Confidence: 0.98589027

 $00:43:30.980 \longrightarrow 00:43:32.420$ No. I agree. And and

NOTE Confidence: 0.98589027

 $00:43:32.420 \longrightarrow 00:43:33.780$ and then it becomes tough

NOTE Confidence: 0.98589027

 $00:43:33.780 \longrightarrow 00:43:34.920$ because, you know,

NOTE Confidence: 0.95273495

 $00:43:36.420 \longrightarrow 00:43:36.920$ because,

NOTE Confidence: 0.93854254

 $00:43:37.700 \longrightarrow 00:43:39.105$ the the you know, many

NOTE Confidence: 0.93854254

 $00:43:39.105 \longrightarrow 00:43:40.725$ times we end up seeing,

NOTE Confidence: 0.9477544

 $00:43:41.344 \longrightarrow 00:43:41.825$ seeing,

NOTE Confidence: 0.917021

 $00:43:43.185 \longrightarrow 00:43:45.344$ people who've already had, mutation

NOTE Confidence: 0.917021

 $00:43:45.344 \longrightarrow 00:43:46.225$ testing and then, you know,

NOTE Confidence: 0.917021

 $00:43:46.225 \longrightarrow 00:43:47.745$ they have either the h

NOTE Confidence: 0.917021

 $00:43:47.745 \longrightarrow 00:43:48.864$ sixty three d or just,

NOTE Confidence: 0.917021

 $00:43:48.864 \longrightarrow 00:43:50.305$ 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

 $00:43:51.265 \longrightarrow 00:43:52.465$ stuck with someone with a

NOTE Confidence: 0.917021

00:43:52.465 --> 00:43:54.005 ferritin of seven eight hundred

00:43:54.380 --> 00:43:56.000 who perhaps is, you know,

NOTE Confidence: 0.8818578

 $00:43:56.300 \longrightarrow 00:43:57.420$ if you follow the, you

NOTE Confidence: 0.8818578

 $00:43:57.420 \longrightarrow 00:43:58.380$ know, if you're a tourist

NOTE Confidence: 0.8818578

 $00:43:58.380 \longrightarrow 00:43:59.520$ 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

 $00:44:01.260 \longrightarrow 00:44:02.480$ be phlebotomizing

NOTE Confidence: 0.9560171

00:44:03.420 --> 00:44:04.780 and but, you know, you

NOTE Confidence: 0.9560171

 $00:44:04.780 \longrightarrow 00:44:05.739$ 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

 $00:44:08.125 \longrightarrow 00:44:08.625$ becomes

NOTE Confidence: 0.94622505

 $00:44:09.085 \longrightarrow 00:44:10.684$ 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

 $00:44:15.244 \longrightarrow 00:44:16.364$ I guess, you know, not

 $00:44:16.364 \longrightarrow 00:44:17.325$ 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

 $00:44:20.300 \longrightarrow 00:44:20.800$ because

NOTE Confidence: 0.91748863

00:44:21.420 --> 00:44:23.180 after acute infections, I I

NOTE Confidence: 0.91748863

 $00:44:23.180 \longrightarrow 00:44:24.800$ 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

 $00:44:26.140 \longrightarrow 00:44:27.340$ for a very long time.

NOTE Confidence: 0.91748863

 $00:44:27.340 \longrightarrow 00:44:28.540$ 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

 $00:44:30.060 \longrightarrow 00:44:31.360$ peep you know, individuals,

NOTE Confidence: 0.99404997

 $00:44:31.739 \longrightarrow 00:44:32.239$ diabetes,

NOTE Confidence: 0.92872494

00:44:33.055 --> 00:44:34.415 having surgery, or, you know,

NOTE Confidence: 0.92872494

 $00:44:34.415 \longrightarrow 00:44:35.855$ foot infection. You know? It

NOTE Confidence: 0.92872494

 $00:44:35.855 \longrightarrow 00:44:37.635$ just becomes very difficult,

NOTE Confidence: 0.9152445

 $00:44:38.015 \longrightarrow 00:44:39.235$ at some point. Yeah.

 $00:44:41.614 \longrightarrow 00:44:43.055$ Yeah. That that so that

NOTE Confidence: 0.98804396

 $00{:}44{:}43.055 \dashrightarrow 00{:}44{:}44.594$ that was another good pearl.

NOTE Confidence: 0.7129718

 $00:44:44.910 \longrightarrow 00:44:46.130$ That in the SGLT

NOTE Confidence: 0.9632914

 $00:44:46.430 \longrightarrow 00:44:47.170$ two inhibitors,

NOTE Confidence: 0.8303625

 $00:44:48.109 \longrightarrow 00:44:49.549$ those are some good pearls,

NOTE Confidence: 0.8303625

 $00:44:49.710 \longrightarrow 00:44:50.849$ to lymph by.

NOTE Confidence: 0.9474859

 $00:44:51.950 \longrightarrow 00:44:53.329$ Yeah. I'm I'm curious.

NOTE Confidence: 0.96480006

 $00:44:54.030 \longrightarrow 00:44:55.630$ 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

 $00:44:59.904 \longrightarrow 00:45:00.704$ but, you know, we talked

NOTE Confidence: 0.9747569

 $00:45:00.704 \longrightarrow 00:45:02.484$ 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

 $00:45:04.785 \longrightarrow 00:45:06.805$ can see their own results

NOTE Confidence: 0.909908

 $00:45:07.505 \longrightarrow 00:45:08.645$ in my chart,

 $00:45:09.424 \longrightarrow 00:45:10.464$ we get a lot of

NOTE Confidence: 0.9946121

 $00:45:10.464 \longrightarrow 00:45:12.085$ very pointed questions.

NOTE Confidence: 0.9817005

00:45:12.469 --> 00:45:13.589 You know, the ferritin would

NOTE Confidence: 0.9817005

 $00:45:13.589 \longrightarrow 00:45:14.410$ 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

 $00:45:19.750 \longrightarrow 00:45:21.029$ a a specialist. I mean,

NOTE Confidence: 0.98049957

 $00:45:21.029 \longrightarrow 00:45:21.989$ it it's a kind of

NOTE Confidence: 0.98049957

 $00:45:21.989 \longrightarrow 00:45:24.309$ interesting situation where we you

NOTE Confidence: 0.98049957

 $00:45:24.309 \longrightarrow 00:45:25.589$ know, things that we never

NOTE Confidence: 0.98049957

 $00:45:25.589 \longrightarrow 00:45:26.650$ had to completely

NOTE Confidence: 0.9700828

 $00:45:27.085 \longrightarrow 00:45:28.445$ explain, we we now have

NOTE Confidence: 0.9700828

 $00{:}45{:}28.445 \to 00{:}45{:}29.105$ to explain.

NOTE Confidence: 0.9669073

 $00:45:29.805 \longrightarrow 00:45:31.005$ And, you know, there's always

NOTE Confidence: 0.9669073

 $00:45:31.005 \longrightarrow 00:45:32.125$ a a kind of fear

 $00:45:32.125 \longrightarrow 00:45:33.405$ of, like, are we dismissing

NOTE Confidence: 0.9669073

 $00{:}45{:}33.405 \dashrightarrow 00{:}45{:}35.005$ something when it gets called

NOTE Confidence: 0.9669073

 $00:45:35.005 \longrightarrow 00:45:35.825$ up that way.

NOTE Confidence: 0.97442436

 $00:45:36.364 \longrightarrow 00:45:37.245$ And and the other thing

NOTE Confidence: 0.97442436

 $00{:}45{:}37.245 \dashrightarrow 00{:}45{:}38.045$ that comes up a lot

NOTE Confidence: 0.97442436

 $00:45:38.045 \longrightarrow 00:45:39.085$ is, you know, these kind

NOTE Confidence: 0.97442436

 $00:45:39.085 \longrightarrow 00:45:39.745$ 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

 $00:45:44.819 \longrightarrow 00:45:46.020$ 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

 $00{:}45{:}51.140 \dashrightarrow 00{:}45{:}52.200$ 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

 $00:45:54.020 \longrightarrow 00:45:56.020$ people bleed until they go

 $00:45:56.020 \longrightarrow 00:45:56.520$ significantly

NOTE Confidence: 0.9640318

 $00:45:56.980 \longrightarrow 00:45:58.114$ lower, but what should be

NOTE Confidence: 0.9640318

 $00:45:58.114 \longrightarrow 00:46:00.194$ our threshold for doing a

NOTE Confidence: 0.9640318

 $00:46:00.194 \longrightarrow 00:46:00.694$ workup?

NOTE Confidence: 0.9814164

 $00:46:01.315 \longrightarrow 00:46:02.275$ 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

 $00:46:04.035 \longrightarrow 00:46:05.234$ really not a problem? They're

NOTE Confidence: 0.9814164

 $00:46:05.234 \longrightarrow 00:46:06.855$ 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

 $00:46:14.460 \longrightarrow 00:46:15.579$ 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

 $00:46:19.180 \longrightarrow 00:46:20.299$ 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

 $00:46:22.140 \longrightarrow 00:46:23.260$ but I tend to use

 $00:46:23.260 \longrightarrow 00:46:24.559$ it even in my description

NOTE Confidence: 0.9492860400:46:24.619 --> 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

 $00:46:27.715 \longrightarrow 00:46:29.015$ like I am,

NOTE Confidence: 0.91453403

 $00:46:29.635 \longrightarrow 00:46:31.015$ you know, definition of thrombocytopenia

NOTE Confidence: 0.91453403

 $00:46:31.235 \longrightarrow 00:46:32.435$ is less than hundred actually

NOTE Confidence: 0.91453403

 $00{:}46{:}32.435 \dashrightarrow 00{:}46{:}33.315$ because, you know, people have

NOTE Confidence: 0.91453403

 $00:46:33.315 \longrightarrow 00:46:34.915$ gotten together and actually the

NOTE Confidence: 0.91453403

00:46:34.915 --> 00:46:35.735 world thrombocytopenia

NOTE Confidence: 0.9286958

 $00:46:36.195 \longrightarrow 00:46:37.635$ whatever, so, you know, is

NOTE Confidence: 0.9286958

 $00:46:37.635 \longrightarrow 00:46:38.915$ less than one hundred. But

NOTE Confidence: 0.9286958

 $00:46:38.915 \longrightarrow 00:46:40.295$ 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

 $00:46:42.239 \longrightarrow 00:46:43.880$ any lab, they would Yeah.

 $00:46:44.080 \longrightarrow 00:46:45.680$ Still report normal as one

NOTE Confidence: 0.95478094

 $00:46:45.680 \longrightarrow 00:46:46.719$ 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

 $00:46:48.160 \longrightarrow 00:46:48.980$ lower ranges.

NOTE Confidence: 0.99647796

 $00:46:49.600 \longrightarrow 00:46:50.420$ And so

NOTE Confidence: 0.99390656

 $00:46:50.880 \longrightarrow 00:46:52.080$ 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

 $00:46:54.735 \longrightarrow 00:46:55.875$ than thrombocytosis

NOTE Confidence: 0.9185541

 $00:46:56.575 \longrightarrow 00:46:58.495$ or I would say, at

NOTE Confidence: 0.9185541

 $00:46:58.495 \longrightarrow 00:47:00.195$ least in my experience. And

NOTE Confidence: 0.9890146

 $00:47:00.495 \longrightarrow 00:47:01.615$ 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

 $00:47:02.815 \longrightarrow 00:47:04.195$ think they just need reassurance.

NOTE Confidence: 0.96481735

 $00:47:05.855 \longrightarrow 00:47:07.215$ I, you know, I I

NOTE Confidence: 0.96481735

 $00:47:07.375 \longrightarrow 00:47:08.415$ we see plenty of it.

00:47:08.415 --> 00:47:09.295 I I see plenty of

NOTE Confidence: 0.96481735

 $00:47:09.295 \longrightarrow 00:47:10.195$ it for referrals.

NOTE Confidence: 0.7864604

00:47:11.430 --> 00:47:11.930 But,

NOTE Confidence: 0.9583617

 $00:47:12.630 \longrightarrow 00:47:13.750$ but they, you know, it

NOTE Confidence: 0.9583617

 $00:47:13.750 \longrightarrow 00:47:15.430$ 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

 $00:47:17.190 \longrightarrow 00:47:18.010$ 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

 $00:47:21.270 \longrightarrow 00:47:22.710$ 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

 $00:47:24.070 \longrightarrow 00:47:25.055$ is a you know, you

NOTE Confidence: 0.9415475

 $00{:}47{:}25.055 \dashrightarrow 00{:}47{:}26.255$ 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 $00:47:29.295 \longrightarrow 00:47:31.135$ you know, it's usually been

NOTE Confidence: 0.94941396

 $00:47:31.135 \longrightarrow 00:47:32.575$ the most the risk of

NOTE Confidence: 0.94941396

 $00:47:32.575 \longrightarrow 00:47:33.935$ major bleeding is five percent

NOTE Confidence: 0.94941396

 $00:47:33.935 \longrightarrow 00:47:35.715$ with less than twenty. So

NOTE Confidence: 0.94035846

 $00:47:36.015 \longrightarrow 00:47:36.975$ 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

 $00:47:38.255 \longrightarrow 00:47:39.530$ lot of redundancy and, you

NOTE Confidence: 0.94035846

 $00:47:39.530 \longrightarrow 00:47:40.190$ 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

 $00{:}47{:}43.450 \dashrightarrow 00{:}47{:}44.989$ great really greater than hundred

NOTE Confidence: 0.94272774

 $00:47:45.369 \longrightarrow 00:47:47.210$ and you have repeated it,

NOTE Confidence: 0.94272774

 $00:47:47.210 \longrightarrow 00:47:48.329$ you know, and it's still

NOTE Confidence: 0.94272774

 $00:47:48.329 \longrightarrow 00:47:49.450$ 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

 $00:47:51.450 \longrightarrow 00:47:52.750$ I think, is very reassuring.

00:47:53.805 --> 00:47:55.085 And, you know, and and

NOTE Confidence: 0.9732696

 $00:47:55.085 \longrightarrow 00:47:56.045$ that you know, one one

NOTE Confidence: 0.9732696

 $00:47:56.045 \longrightarrow 00:47:57.165$ could just be clear that,

NOTE Confidence: 0.9732696

00:47:57.165 --> 00:47:57.665 actually,

NOTE Confidence: 0.94982964

 $00:47:58.285 \longrightarrow 00:47:59.885$ the real, you know, we

NOTE Confidence: 0.94982964

 $00:47:59.885 \longrightarrow 00:48:01.805$ call low platelets, you know,

NOTE Confidence: 0.94982964

 $00:48:01.964 \longrightarrow 00:48:03.085$ on the medicine you know,

NOTE Confidence: 0.94982964

 $00:48:03.085 \longrightarrow 00:48:04.605$ from the real definition is

NOTE Confidence: 0.94982964

 $00:48:04.605 \longrightarrow 00:48:05.665$ less than one hundred.

NOTE Confidence: 0.6333549

00:48:07.645 --> 00:48:08.145 So

NOTE Confidence: 0.9061628

 $00:48:10.180 \longrightarrow 00:48:12.239$ That is another great pearl.

NOTE Confidence: 0.9061628

 $00:48:12.300 \longrightarrow 00:48:13.920$ We have, like, just pearls

NOTE Confidence: 0.9061628

 $00{:}48{:}14.140 \dashrightarrow 00{:}48{:}16.000$ 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,

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

 $00:48:24.705 \longrightarrow 00:48:25.985$ a day. You know, it's

NOTE Confidence: 0.9871738

 $00:48:25.985 \longrightarrow 00:48:27.025$ a lot, and and they

NOTE Confidence: 0.9871738

 $00:48:27.025 \longrightarrow 00:48:28.385$ all have things just outside

NOTE Confidence: 0.9871738

 $00:48:28.385 \longrightarrow 00:48:29.045$ of normal.

NOTE Confidence: 0.93549204

 $00:48:30.305 \longrightarrow 00:48:31.585$ And so, this is very

NOTE Confidence: 0.93549204

 $00:48:31.585 \longrightarrow 00:48:32.085$ helpful,

NOTE Confidence: 0.9704903

 $00:48:32.625 \longrightarrow 00:48:33.665$ to not kind of over

NOTE Confidence: 0.9704903

 $00:48:33.665 \longrightarrow 00:48:35.025$ refer things that are, you

NOTE Confidence: 0.9704903

 $00:48:35.025 \longrightarrow 00:48:36.565$ know, pretty clearly fine.

NOTE Confidence: 0.8322561

 $00:48:37.250 \longrightarrow 00:48:38.450$ Yeah. I think that I

NOTE Confidence: 0.8322561

 $00:48:38.450 \longrightarrow 00:48:39.650$ I agree with everything doctor

NOTE Confidence: 0.8322561

 $00:48:39.650 \longrightarrow 00:48:40.369$ Shutter just said. And I

00:48:40.369 --> 00:48:41.190 think that,

NOTE Confidence: 0.98690176

 $00:48:42.369 \longrightarrow 00:48:43.170$ like, the

NOTE Confidence: 0.87965864

 $00:48:43.809 \longrightarrow 00:48:45.410$ sometimes, like, just in terms

NOTE Confidence: 0.87965864

 $00:48:45.410 \longrightarrow 00:48:46.210$ 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

 $00:48:47.650 \longrightarrow 00:48:48.550$ know, just

NOTE Confidence: 0.9351932

00:48:48.930 --> 00:48:50.450 some some patients, I think,

NOTE Confidence: 0.9472119

 $00:48:51.405 \longrightarrow 00:48:52.445$ accept that idea of, like,

NOTE Confidence: 0.9472119

 $00:48:52.445 \longrightarrow 00:48:53.405$ you could have a surgery

NOTE Confidence: 0.9472119

 $00:48:53.405 \longrightarrow 00:48:54.445$ 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

 $00{:}48{:}56.765 \dashrightarrow 00{:}48{:}58.125$ 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

00:49:01.005 --> 00:49:01.505 thrombocytopenia

NOTE Confidence: 0.937825

 $00:49:02.125 \longrightarrow 00:49:03.905$ and not there's no other

NOTE Confidence: 0.9622801

 $00:49:04.410 \longrightarrow 00:49:05.690$ kind of cell lines. I

NOTE Confidence: 0.9622801

 $00:49:05.690 \longrightarrow 00:49:06.569$ think the age of the

NOTE Confidence: 0.9622801

 $00:49:06.569 \longrightarrow 00:49:08.410$ 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

 $00:49:09.690 \longrightarrow 00:49:11.150$ sure we do, you know,

NOTE Confidence: 0.9622801

 $00:49:11.210 \longrightarrow 00:49:12.489$ even if it was mildly

NOTE Confidence: 0.9622801

 $00:49:12.489 \longrightarrow 00:49:13.130$ low, I guess I would

NOTE Confidence: 0.9622801

 $00:49:13.130 \longrightarrow 00:49:13.930$ just add that if it

NOTE Confidence: 0.9622801

 $00{:}49{:}13.930 \dashrightarrow 00{:}49{:}15.369$ 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

 $00:49:16.730 \longrightarrow 00:49:18.170$ I personally would monitor it.

NOTE Confidence: 0.9622801

 $00:49:18.170 \longrightarrow 00:49:18.829$ And then

NOTE Confidence: 0.9329569

 $00:49:19.245 \longrightarrow 00:49:19.885$ I don't know. I look

NOTE Confidence: 0.9329569

 $00:49:19.885 \longrightarrow 00:49:21.425$ at the mean platelet volume,

 $00:49:21.485 \longrightarrow 00:49:22.445$ which, you know, might be

NOTE Confidence: 0.9329569

 $00:49:22.445 \longrightarrow 00:49:23.085$ one of the things that

NOTE Confidence: 0.9329569

 $00:49:23.085 \longrightarrow 00:49:24.445$ 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

 $00:49:26.765 \longrightarrow 00:49:28.045$ think that's kind of these

NOTE Confidence: 0.9329569

 $00:49:28.045 \longrightarrow 00:49:29.885$ autoimmune ish people. Not that

NOTE Confidence: 0.9329569

 $00:49:29.885 \longrightarrow 00:49:31.165$ anything needs to be done,

NOTE Confidence: 0.9329569 00:49:31.165 --> 00:49:31.665 but NOTE Confidence: 0.9905072

 $00:49:33.590 \longrightarrow 00:49:35.110$ I think that that's something

NOTE Confidence: 0.9905072

 $00:49:35.110 \longrightarrow 00:49:35.830$ we see a lot in

NOTE Confidence: 0.9905072

 $00:49:35.830 \longrightarrow 00:49:36.950$ 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

 $00:49:41.430 \longrightarrow 00:49:43.030$ of how we reassure patients

NOTE Confidence: 0.97004867

 $00:49:43.030 \longrightarrow 00:49:44.150$ in general is hard. I

 $00:49:44.150 \longrightarrow 00:49:44.969$ think that

NOTE Confidence: 0.8598128

 $00:49:45.765 \longrightarrow 00:49:46.885$ it's a difficult

NOTE Confidence: 0.94368124

 $00:49:48.404 \longrightarrow 00:49:49.204$ there's a lot of things

NOTE Confidence: 0.94368124

 $00:49:49.204 \longrightarrow 00:49:50.805$ on a CBC that we

NOTE Confidence: 0.94368124

 $00:49:50.805 \longrightarrow 00:49:52.005$ don't really probably look at

NOTE Confidence: 0.94368124

 $00{:}49{:}52.005 \dashrightarrow 00{:}49{:}53.204$ in such great detail, but

NOTE Confidence: 0.94368124

 $00:49:53.204 \longrightarrow 00:49:54.984$ to patients that MCHC

NOTE Confidence: 0.9982994

 $00:49:55.364 \longrightarrow 00:49:56.585$ is crucial to their,

NOTE Confidence: 0.99947506

 $00{:}49{:}56.885 \to 00{:}49{:}57.385 \ \mathrm{you}$

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

 $00:50:00.244 \longrightarrow 00:50:01.500$ 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

 $00:50:08.620 \longrightarrow 00:50:09.580$ but just wanted to bring

00:50:09.580 --> 00:50:10.780 it up. But that, like,

NOTE Confidence: 0.9621549

 $00:50:10.780 \longrightarrow 00:50:12.060$ you know, for for someone

NOTE Confidence: 0.9621549

 $00:50:12.060 \longrightarrow 00:50:13.580$ we're dealing with who's really

NOTE Confidence: 0.9621549

 $00:50:13.580 \longrightarrow 00:50:14.940$ 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

 $00:50:16.665 \longrightarrow 00:50:19.005$ like, even one sentence from,

NOTE Confidence: 0.83827764

 $00:50:19.065 \longrightarrow 00:50:20.665$ you know, for from a

NOTE Confidence: 0.83827764

 $00:50:20.665 \longrightarrow 00:50:21.165$ specialist.

NOTE Confidence: 0.9536239

00:50:21.785 --> 00:50:22.445 I think,

NOTE Confidence: 0.98717344

 $00:50:23.625 \longrightarrow 00:50:24.985$ 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

 $00:50:26.505 \longrightarrow 00:50:27.005$ 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

 $00:50:30.950 \longrightarrow 00:50:32.469$ I think eConsult is a

 $00:50:32.469 \longrightarrow 00:50:33.369$ very nice

NOTE Confidence: 0.9473497

 $00:50:33.910 \longrightarrow 00:50:35.270$ pathway too, and,

NOTE Confidence: 0.98724204

 $00:50:35.750 \longrightarrow 00:50:36.550$ 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

 $00:50:38.710 \longrightarrow 00:50:39.450$ 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

 $00:50:47.265 \longrightarrow 00:50:48.465$ I certainly do it, you

NOTE Confidence: 0.9490204

 $00:50:48.465 \longrightarrow 00:50:49.505$ know, a few weeks, a

NOTE Confidence: 0.9490204

 $00:50:49.505 \longrightarrow 00:50:50.325$ year, and,

NOTE Confidence: 0.9794973

00:50:51.025 --> 00:50:51.985 and those are you know,

NOTE Confidence: 0.9794973

 $00:50:51.985 \longrightarrow 00:50:53.025$ they take two, three minutes.

NOTE Confidence: 0.9794973

 $00:50:53.025 \longrightarrow 00:50:53.844$ I mean and,

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

 $00:50:56.864 \longrightarrow 00:50:57.969$ this is fine. You know?

NOTE Confidence: 0.9872879

 $00:50:57.969 \longrightarrow 00:50:58.930$ And so I I I

NOTE Confidence: 0.9872879

 $00:50:58.930 \longrightarrow 00:51:00.370$ 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

 $00:51:06.130 \longrightarrow 00:51:06.850$ it could take a long

NOTE Confidence: 0.9705915

 $00:51:06.850 \longrightarrow 00:51:07.810$ time to get a referral

NOTE Confidence: 0.9705915

 $00:51:07.810 \longrightarrow 00:51:08.950$ for something like that.

NOTE Confidence: 0.9986404

 $00:51:09.810 \longrightarrow 00:51:11.750$ That is another very helpful

NOTE Confidence: 0.9997556

 $00:51:12.050 \longrightarrow 00:51:12.550$ suggestion.

NOTE Confidence: 0.93397725

 $00:51:13.775 \longrightarrow 00:51:15.315$ So we have, a a

 $00:51:15.455 \longrightarrow 00:51:17.795$ 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

 $00:51:22.015 \longrightarrow 00:51:23.955$ I only saw iron deficiency.

NOTE Confidence: 0.991301

 $00:51:24.255 \longrightarrow 00:51:25.614$ So all of the ones

NOTE Confidence: 0.991301

 $00:51:25.614 \longrightarrow 00:51:26.815$ that we showed are in

NOTE Confidence: 0.991301

 $00:51:26.815 \longrightarrow 00:51:27.315$ there.

NOTE Confidence: 0.8110366

00:51:28.700 --> 00:51:28.859 Actually,

NOTE Confidence: 0.5098155

 $00:51:29.500 \longrightarrow 00:51:31.039$ we can to that?

NOTE Confidence: 0.997337

00:51:31.739 --> 00:51:32.239 Yeah.

NOTE Confidence: 0.9111601

 $00:51:32.700 \longrightarrow 00:51:33.819$ Oh, yeah. The give us

NOTE Confidence: 0.9111601

 $00:51:33.819 \longrightarrow 00:51:35.180$ a table of contents of

NOTE Confidence: 0.9111601

 $00:51:35.180 \longrightarrow 00:51:36.619$ that. It was, like, seven

NOTE Confidence: 0.9111601

 $00:51:36.700 \longrightarrow 00:51:38.160$ slide seventeen or something.

NOTE Confidence: 0.92970324

 $00:51:39.900 \longrightarrow 00:51:40.400$ Renee,

NOTE Confidence: 0.95845705

 $00:51:40.859 \longrightarrow 00:51:41.920$ are you able to

 $00{:}51{:}44.825 \dashrightarrow 00{:}51{:}46.444$ She might have stepped away.

NOTE Confidence: 0.8996194

 $00:51:51.065 \longrightarrow 00:51:52.025$ 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

 $00:51:57.110 \longrightarrow 00:51:58.469$ Yeah. And if you can

NOTE Confidence: 0.9623297

 $00:51:58.469 \longrightarrow 00:51:59.450$ make that bigger.

NOTE Confidence: 0.9965258

 $00:52:03.350 \longrightarrow 00:52:04.330$ So we have

NOTE Confidence: 0.9992337

 $00:52:05.590 \longrightarrow 00:52:06.090$ thrombocytosis,

NOTE Confidence: 0.99970865

00:52:06.950 --> 00:52:07.450 lymphocytosis,

NOTE Confidence: 0.99049854

 $00:52:09.204 \longrightarrow 00:52:10.265$ ferritin evaluation,

NOTE Confidence: 0.99647003

 $00{:}52{:}10.805 \dashrightarrow 00{:}52{:}11.704$ and erythrocytosis

NOTE Confidence: 0.9580866

 $00:52:12.565 \longrightarrow 00:52:13.625$ 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

 $00:52:17.364 \longrightarrow 00:52:17.924$ and bleeding

 $00{:}52{:}18.405 \dashrightarrow 00{:}52{:}19.944$ concern for bleeding disorder.

NOTE Confidence: 0.9108159

 $00:52:22.290 \longrightarrow 00:52:23.590$ And and these were launched,

NOTE Confidence: 0.98470074

 $00:52:23.890 \longrightarrow 00:52:25.330$ they're they're a little simpler

NOTE Confidence: 0.98470074

 $00:52:25.330 \longrightarrow 00:52:26.130$ than some of the other

NOTE Confidence: 0.98470074

 $00:52:26.130 \longrightarrow 00:52:26.630$ pathways,

NOTE Confidence: 0.9824171

 $00:52:27.410 \longrightarrow 00:52:28.450$ and and so they were

NOTE Confidence: 0.9824171

 $00:52:28.450 \longrightarrow 00:52:29.489$ kind of launched. There there's

NOTE Confidence: 0.9824171

 $00:52:29.489 \longrightarrow 00:52:30.530$ actually some more ready to

NOTE Confidence: 0.9824171

 $00.52:30.530 \longrightarrow 00.52:31.510$ go in hematology,

NOTE Confidence: 0.85045063

00:52:32.210 --> 00:52:33.315 if, people,

NOTE Confidence: 0.9520633

 $00:52:33.954 \longrightarrow 00:52:35.155$ find these helpful, which I

NOTE Confidence: 0.9520633

 $00:52:35.155 \longrightarrow 00:52:35.954$ I think we've had a

NOTE Confidence: 0.9520633

 $00:52:35.954 \longrightarrow 00:52:36.454$ resounding,

NOTE Confidence: 0.9866704

 $00:52:37.075 \longrightarrow 00:52:37.575$ endorsement.

NOTE Confidence: 0.9489173

 $00:52:38.114 \longrightarrow 00:52:39.075$ Frank, you looked at that.

NOTE Confidence: 0.9489173

 $00:52:39.075 \longrightarrow 00:52:40.375$ You're like, these are great.

 $00:52:40.515 \longrightarrow 00:52:41.635$ So and, of course, there's,

NOTE Confidence: 0.9489173

 $00:52:41.875 \longrightarrow 00:52:43.075$ 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

 $00:52:46.160 \longrightarrow 00:52:47.680$ you know, but not other

NOTE Confidence: 0.91452444

 $00:52:47.680 \longrightarrow 00:52:49.200$ things aside from heme as

NOTE Confidence: 0.91452444 00:52:49.200 --> 00:52:49.700 well.

NOTE Confidence: 0.91520935

 $00:52:52.960 \longrightarrow 00:52:54.239$ And whoever it is that

NOTE Confidence: 0.91520935 00:52:54.239 --> 00:52:54.739 asks

NOTE Confidence: 0.995009

 $00:52:55.520 \longrightarrow 00:52:56.960$ can always send me a

NOTE Confidence: 0.995009

 $00:52:56.960 \longrightarrow 00:52:58.080$ 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

 $00:52:59.360 \longrightarrow 00:53:00.880$ 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

 $00:53:04.585 \longrightarrow 00:53:05.484$ be going back.

 $00:53:06.105 \longrightarrow 00:53:06.905$ I was oh, and if

NOTE Confidence: 0.96782917

 $00:53:06.905 \longrightarrow 00:53:08.585$ you can't find it, maybe

NOTE Confidence: 0.96782917

 $00:53:08.585 \longrightarrow 00:53:10.984$ that's a reason to, you

NOTE Confidence: 0.96782917

 $00:53:10.984 \longrightarrow 00:53:11.864$ 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

 $00:53:13.464 \longrightarrow 00:53:14.664$ as we speak, but may be

NOTE Confidence: 0.96782917

 $00:53:14.664 \longrightarrow 00:53:15.785$ it's on the list. If

NOTE Confidence: 0.96782917

 $00:53:15.785 \longrightarrow 00:53:16.585$ not, we could put it

NOTE Confidence: 0.96782917

 $00:53:16.585 \longrightarrow 00:53:17.565$ on the list.

NOTE Confidence: 0.9973422

 $00:53:18.800 \longrightarrow 00:53:19.300$ Exactly.

NOTE Confidence: 0.8934162

 $00:53:20.320 \longrightarrow 00:53:22.480$ Okay. Well, it looks like

NOTE Confidence: 0.8934162 00:53:22.480 --> 00:53:22.980 we NOTE Confidence: 0.9816767

 $00:53:24.080 \longrightarrow 00:53:25.120$ 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

 $00:53:26.960 \longrightarrow 00:53:28.880$ daughter has announced it's time

NOTE Confidence: 0.9816767

 $00:53:28.880 \longrightarrow 00:53:30.320$ to come have dinner or

 $00:53:30.320 \longrightarrow 00:53:31.300$ something. Right?

NOTE Confidence: 0.9729091

 $00{:}53{:}32.994 --> 00{:}53{:}34.435$ I was gonna ask go

NOTE Confidence: 0.9729091

 $00:53:34.435 \longrightarrow 00:53:35.715$ back to, Frank, your your

NOTE Confidence: 0.9729091

 $00:53:35.715 \longrightarrow 00:53:37.795$ 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

 $00:53:39.315 \longrightarrow 00:53:41.575$ elevated blood counts and that,

NOTE Confidence: 0.9993966

 $00:53:41.955 \longrightarrow 00:53:43.075$ you know, there's

NOTE Confidence: 0.94977474

 $00:53:43.635 \longrightarrow 00:53:44.855$ 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

 $00:53:46.349 \longrightarrow 00:53:47.329$ so many CBCs,

NOTE Confidence: 0.98294955

 $00:53:48.989 \longrightarrow 00:53:50.430$ trying to figure out what

NOTE Confidence: 0.98294955

 $00:53:50.430 \longrightarrow 00:53:51.410$ to do beforehand

NOTE Confidence: 0.95925736

 $00{:}53{:}51.789 \dashrightarrow 00{:}53{:}54.349$ versus who really needs urgent

NOTE Confidence: 0.95925736

 $00:53:54.349 \longrightarrow 00:53:54.849$ care,

NOTE Confidence: 0.8965012

00:53:55.469 --> 00:53:57.710 or urgent referral or, you

 $00:53:57.710 \longrightarrow 00:53:59.650$ know, accessing the e referral.

NOTE Confidence: 0.963155

 $00:54:00.005 \longrightarrow 00:54:01.685$ 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

 $00:54:02.965 \longrightarrow 00:54:04.265$ a good handle on that?

NOTE Confidence: 0.9948271

 $00:54:05.364 \longrightarrow 00:54:06.585$ Are there other instances

NOTE Confidence: 0.9971846

 $00:54:06.885 \longrightarrow 00:54:07.385$ where

NOTE Confidence: 0.9915245

 $00:54:09.205 \longrightarrow 00:54:09.705$ where

NOTE Confidence: 0.98809576

00:54:10.805 --> 00:54:12.405 you're you're thinking that that

NOTE Confidence: 0.98809576

 $00:54:12.405 \longrightarrow 00:54:13.525$ 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

 $00:54:14.645 \longrightarrow 00:54:15.650$ not quite sure where to

NOTE Confidence: 0.98809576

 $00.54:15.650 \longrightarrow 00.54:16.550$ go from there?

NOTE Confidence: 0.48823148

 $00:54:19.890 \longrightarrow 00:54:20.390$ 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

 $00:54:23.090 \longrightarrow 00:54:24.130$ know, like what Karen said,

00:54:24.130 --> 00:54:25.730 sometimes managing, like, sort of

NOTE Confidence: 0.97443265

 $00{:}54{:}25.730 {\:{\circ}{\circ}{\circ}}>00{:}54{:}27.330$ the patient expectation is sort

NOTE Confidence: 0.97443265

 $00:54:27.330 \longrightarrow 00:54:28.770$ 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

 $00{:}54{:}30.195 \dashrightarrow 00{:}54{:}32.195$ medical stuff. And so sometimes

NOTE Confidence: 0.97443265

 $00:54:32.195 \longrightarrow 00:54:33.795$ there is no no amount

NOTE Confidence: 0.97443265

 $00:54:33.795 \longrightarrow 00:54:34.455$ of reassurance

NOTE Confidence: 0.9931617

 $00:54:34.755 \longrightarrow 00:54:35.735$ I can give someone.

NOTE Confidence: 0.95866525

 $00:54:36.594 \longrightarrow 00:54:37.715$ And so there there is

NOTE Confidence: 0.95866525

00:54:37.715 --> 00:54:38.935 unfortunately some

NOTE Confidence: 0.90476525

 $00:54:39.315 \longrightarrow 00:54:40.114$ 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

 $00:54:43.910 \longrightarrow 00:54:45.270$ the I would say the

NOTE Confidence: 0.97002256

 $00:54:45.270 \longrightarrow 00:54:46.630$ other ones that come up.

 $00:54:46.630 \longrightarrow 00:54:48.469$ 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

 $00:54:49.910 \longrightarrow 00:54:51.130$ I use a fair amount,

NOTE Confidence: 0.9845862

 $00:54:51.830 \longrightarrow 00:54:53.270$ or or can't see myself

NOTE Confidence: 0.9845862

 $00:54:53.270 \longrightarrow 00:54:54.469$ using a fair amount, which

NOTE Confidence: 0.9845862

 $00:54:54.469 \longrightarrow 00:54:55.610$ is which is great.

NOTE Confidence: 0.89735514

 $00:54:56.469 \longrightarrow 00:54:57.030$ And then,

NOTE Confidence: 0.9488437

 $00:54:58.485 \longrightarrow 00:54:59.445$ the I think I think

NOTE Confidence: 0.9488437

 $00{:}54{:}59.445 \dashrightarrow 00{:}55{:}01.225$ someone alluded to the you

NOTE Confidence: 0.9488437

 $00:55:01.445 \longrightarrow 00:55:02.485$ you see a pre op,

NOTE Confidence: 0.9488437

00:55:02.485 --> 00:55:04.725 someone at had asked for

NOTE Confidence: 0.948843700:55:04.725 --> 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

 $00:55:07.045 \longrightarrow 00:55:08.425$ 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

 $00:55:09.765 \longrightarrow 00:55:10.885$ now what I now what

 $00{:}55{:}10.885 --> 00{:}55{:}11.845$ do we do? Right? And

NOTE Confidence: 0.9781652 00:55:11.845 --> 00:55:12.345 so NOTE Confidence: 0.99816300:55:12.690 --> 00:55:13.190 so,

NOTE Confidence: 0.9233217

 $00:55:13.570 \longrightarrow 00:55:14.609$ 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

 $00:55:18.849 \longrightarrow 00:55:19.730$ like, you know, is this

NOTE Confidence: 0.9264686

 $00:55:19.730 \longrightarrow 00:55:21.410$ a bookmarkable one? So those

NOTE Confidence: 0.9264686

 $00:55:21.410 \longrightarrow 00:55:22.530$ I think are are are

NOTE Confidence: 0.9264686

 $00:55:22.530 \longrightarrow 00:55:24.609$ 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

 $00{:}55{:}25.890 \to 00{:}55{:}27.989$ feel like there's just a

NOTE Confidence: 0.9264686

 $00:55:28.033 \longrightarrow 00:55:30.145$ a a hidden or

NOTE Confidence: 0.9264686

 $00:55:30.145 \longrightarrow 00:55:32.085$ not so hidden, like, potential

 $00:55:32.145 \longrightarrow 00:55:32.885$ to really,

NOTE Confidence: 0.928289

 $00:55:33.905 \longrightarrow 00:55:35.765$ improve the through the throughput

NOTE Confidence: 0.928289

 $00:55:35.985 \longrightarrow 00:55:37.985$ between, primary care and and

NOTE Confidence: 0.928289

00:55:37.985 --> 00:55:38.485 heme,

NOTE Confidence: 0.96129036

 $00:55:39.230 \longrightarrow 00:55:40.750$ with that. And so I

NOTE Confidence: 0.96129036

 $00:55:40.750 \longrightarrow 00:55:41.869$ think I feel like that's

NOTE Confidence: 0.96129036

 $00{:}55{:}41.869 \dashrightarrow 00{:}55{:}42.989$ something that we should take

NOTE Confidence: 0.96129036

 $00:55:42.989 \longrightarrow 00:55:43.489$ back,

NOTE Confidence: 0.96626747

 $00{:}55{:}43.950 \dashrightarrow 00{:}55{:}44.989$ and figure out how do

NOTE Confidence: 0.96626747

 $00:55:44.989 \longrightarrow 00:55:46.130$ we make this,

NOTE Confidence: 0.99572504

 $00:55:47.549 \longrightarrow 00:55:48.349$ more user

NOTE Confidence: 0.9337691

 $00:55:48.989 \longrightarrow 00:55:49.809$ used more.

NOTE Confidence: 0.9688559

00:55:50.589 --> 00:55:52.190 Mhmm. Yeah. It's pretty user

NOTE Confidence: 0.9688559

 $00:55:52.190 \longrightarrow 00:55:52.690$ friendly.

NOTE Confidence: 0.98178375

 $00:55:53.265 \longrightarrow 00:55:54.864$ And it it's nice, because

NOTE Confidence: 0.98178375

 $00:55:54.864 \longrightarrow 00:55:55.825$ so many of us kind

 $00:55:55.825 \longrightarrow 00:55:57.204$ of do curbsides. Right?

NOTE Confidence: 0.8535652

 $00:55:57.905 \longrightarrow 00:55:58.864$ We call we phone a

NOTE Confidence: 0.8535652

 $00:55:58.864 \longrightarrow 00:55:59.364$ friend.

NOTE Confidence: 0.9593945

 $00:56:00.145 \longrightarrow 00:56:01.265$ But that that's not in

NOTE Confidence: 0.9593945

 $00:56:01.265 \longrightarrow 00:56:01.924$ the chart,

NOTE Confidence: 0.9197286

00:56:02.545 --> 00:56:03.344 and it, you know, it

NOTE Confidence: 0.9197286

 $00:56:03.344 \longrightarrow 00:56:04.464$ it doesn't have any credit.

NOTE Confidence: 0.9197286

 $00:56:04.464 \longrightarrow 00:56:05.910$ The the there's actually billing

NOTE Confidence: 0.9197286

 $00:56:05.910 \longrightarrow 00:56:07.349$ credit for the specialist through

NOTE Confidence: 0.9197286

 $00:56:07.349 \longrightarrow 00:56:08.650$ the econsult. So,

NOTE Confidence: 0.9482699

 $00:56:09.270 \longrightarrow 00:56:10.230$ they they kind of get

NOTE Confidence: 0.9482699

 $00:56:10.230 \longrightarrow 00:56:11.989$ productivity credit and and

NOTE Confidence: 0.9482699

 $00:56:11.989 \longrightarrow 00:56:13.030$ we get a a very

NOTE Confidence: 0.9482699

 $00:56:13.030 \longrightarrow 00:56:13.849$ clear answer.

NOTE Confidence: 0.97764677

00:56:14.630 --> 00:56:15.829 And, again, if we want

 $00:56:15.829 \longrightarrow 00:56:16.869$ to, we can have a

NOTE Confidence: 0.97764677

 $00{:}56{:}16.869 \dashrightarrow 00{:}56{:}18.390$ whole another encounter to discuss

NOTE Confidence: 0.97764677

 $00:56:18.390 \longrightarrow 00:56:20.010$ the answer if it's complicated,

NOTE Confidence: 0.97764677

 $00:56:20.069 \longrightarrow 00:56:21.045$ or or we can just

NOTE Confidence: 0.97764677

 $00:56:21.204 \longrightarrow 00:56:22.244$ simply send the patient a

NOTE Confidence: 0.97764677

 $00:56:22.244 \longrightarrow 00:56:23.204$ note or or call the

NOTE Confidence: 0.97764677

 $00:56:23.204 \longrightarrow 00:56:24.325$ patient if it's kind of

NOTE Confidence: 0.97764677

 $00:56:24.325 \longrightarrow 00:56:25.305$ what we were expecting

NOTE Confidence: 0.98047906

 $00:56:25.605 \longrightarrow 00:56:26.424$ to say anyway.

NOTE Confidence: 0.9842136 00:56:27.684 --> 00:56:28.184 So NOTE Confidence: 0.9993308

 $00:56:28.898 \longrightarrow 00:56:30.658$ alright. Well, I have to

NOTE Confidence: 0.9993308

 $00:56:30.658 \longrightarrow 00:56:31.878$ thank our speakers

NOTE Confidence: 0.99957734

 $00:56:32.178 \longrightarrow 00:56:33.378$ very much for all of

NOTE Confidence: 0.99957734

 $00:56:33.378 \longrightarrow 00:56:33.958$ the preparation

NOTE Confidence: 0.96082836

00:56:34.258 --> 00:56:36.098 and wisdom and pearls that

NOTE Confidence: 0.96082836

 $00:56:36.098 \longrightarrow 00:56:36.838$ came through,

 $00:56:37.938 \longrightarrow 00:56:39.698$ and, and and, Frank, for

NOTE Confidence: 0.9558716

 $00:56:39.698 \longrightarrow 00:56:40.343$ keeping us on