

WEBVTT

NOTE duration: "00:04:47.914"

NOTE Confidence: 0.96310425

00:00:09.280 --> 00:00:11.519 The vascular system moves blood

NOTE Confidence: 0.96310425

00:00:11.519 --> 00:00:13.039 and it moves fluid all

NOTE Confidence: 0.96310425

00:00:13.039 --> 00:00:14.639 throughout your body for different

NOTE Confidence: 0.96310425

00:00:14.639 --> 00:00:15.139 purposes.

NOTE Confidence: 0.9923917

00:00:16.575 --> 00:00:18.255 So blood uses arteries to

NOTE Confidence: 0.9923917

00:00:18.255 --> 00:00:19.155 leave the heart,

NOTE Confidence: 0.9875835

00:00:19.535 --> 00:00:20.494 go out to all your

NOTE Confidence: 0.9875835

00:00:20.494 --> 00:00:21.855 organs, your brain, your liver,

NOTE Confidence: 0.9875835

00:00:21.855 --> 00:00:22.915 your toes, everywhere

NOTE Confidence: 0.94355345

00:00:23.295 --> 00:00:25.295 to provide nutritious blood so

NOTE Confidence: 0.94355345

00:00:25.295 --> 00:00:26.595 that you can keep working.

NOTE Confidence: 0.9966903

00:00:26.895 --> 00:00:28.335 And then the veins bring

NOTE Confidence: 0.9966903

00:00:28.335 --> 00:00:29.535 the blood back to the

NOTE Confidence: 0.9966903

00:00:29.535 --> 00:00:30.710 heart and then they pump

NOTE Confidence: 0.9966903

00:00:30.710 --> 00:00:31.590 it to the lungs to
NOTE Confidence: 0.9966903

00:00:31.590 --> 00:00:32.570 get more nutrients.
NOTE Confidence: 0.9858224

00:00:33.989 --> 00:00:35.750 There's another vascular system that
NOTE Confidence: 0.9858224

00:00:35.750 --> 00:00:36.550 a lot of people don't
NOTE Confidence: 0.9858224

00:00:36.550 --> 00:00:37.430 know is out there, which
NOTE Confidence: 0.9858224

00:00:37.430 --> 00:00:38.809 is the lymphatic system,
NOTE Confidence: 0.99378455

00:00:39.270 --> 00:00:41.370 which bathes the entire body
NOTE Confidence: 0.99378455

00:00:41.670 --> 00:00:43.155 with a fluid that helps
NOTE Confidence: 0.99378455

00:00:43.155 --> 00:00:44.055 keep you healthy.
NOTE Confidence: 0.98051435

00:00:45.395 --> 00:00:47.415 When blood vessels become disorganized
NOTE Confidence: 0.98051435

00:00:47.555 --> 00:00:49.655 or dysfunctional, they can become
NOTE Confidence: 0.99832124

00:00:50.114 --> 00:00:50.614 clustered
NOTE Confidence: 0.92964244

00:00:50.915 --> 00:00:52.275 and they can create a
NOTE Confidence: 0.92964244

00:00:52.275 --> 00:00:53.655 lump in the body.
NOTE Confidence: 0.9834962

00:00:54.035 --> 00:00:55.635 And when blood doesn't move
NOTE Confidence: 0.9834962

00:00:55.635 --> 00:00:56.135 normally,

NOTE Confidence: 0.9526932
00:00:56.515 --> 00:00:57.510 it can get caught up
NOTE Confidence: 0.9526932
00:00:57.510 --> 00:00:59.190 in these clusters and cause
NOTE Confidence: 0.9526932
00:00:59.190 --> 00:01:00.550 clots, and that can be
NOTE Confidence: 0.9526932
00:01:00.550 --> 00:01:02.309 very painful, and it can
NOTE Confidence: 0.9526932
00:01:02.309 --> 00:01:03.190 cause a lump on the
NOTE Confidence: 0.9526932
00:01:03.190 --> 00:01:04.569 body which can be disfiguring.
NOTE Confidence: 0.876045
00:01:05.670 --> 00:01:06.810 Vascular anomalies
NOTE Confidence: 0.97891694
00:01:07.190 --> 00:01:09.509 incorporates two separate types of
NOTE Confidence: 0.97891694
00:01:09.509 --> 00:01:10.009 conditions.
NOTE Confidence: 0.99801224
00:01:10.485 --> 00:01:11.465 There are hemangiomas
NOTE Confidence: 0.97261834
00:01:11.845 --> 00:01:12.885 on one side, which are
NOTE Confidence: 0.97261834
00:01:12.885 --> 00:01:14.325 benign tumors of the blood
NOTE Confidence: 0.97261834
00:01:14.325 --> 00:01:15.765 vessels, and then there are
NOTE Confidence: 0.97261834
00:01:15.765 --> 00:01:16.825 vascular malformations,
NOTE Confidence: 0.9980752
00:01:17.205 --> 00:01:18.825 which can occur in arteries,
NOTE Confidence: 0.93737537

00:01:19.205 --> 00:01:21.525 veins, lymphatic channels, or a
NOTE Confidence: 0.93737537

00:01:21.525 --> 00:01:22.025 combination.
NOTE Confidence: 0.92200077

00:01:31.310 --> 00:01:32.670 So I have this wonderful
NOTE Confidence: 0.92200077

00:01:32.670 --> 00:01:34.370 patient, Bella. She's a teenager
NOTE Confidence: 0.9624155

00:01:34.830 --> 00:01:36.350 and she noticed her arm
NOTE Confidence: 0.9624155

00:01:36.350 --> 00:01:37.470 was starting to hurt her
NOTE Confidence: 0.9624155

00:01:37.470 --> 00:01:38.430 a lot and the pain
NOTE Confidence: 0.9624155

00:01:38.430 --> 00:01:39.630 just kept getting worse and
NOTE Confidence: 0.9624155

00:01:39.630 --> 00:01:40.130 worse.
NOTE Confidence: 0.97860247

00:01:41.715 --> 00:01:43.395 So the pain, I guess,
NOTE Confidence: 0.97860247

00:01:43.395 --> 00:01:44.115 like, on a scale of
NOTE Confidence: 0.97860247

00:01:44.115 --> 00:01:45.555 one to ten, sometimes it
NOTE Confidence: 0.97860247

00:01:45.555 --> 00:01:46.355 would get to, like, a
NOTE Confidence: 0.97860247

00:01:46.355 --> 00:01:47.235 ten because I would sleep
NOTE Confidence: 0.97860247

00:01:47.235 --> 00:01:48.275 on it a lot, and
NOTE Confidence: 0.97860247

00:01:48.275 --> 00:01:49.635 I would just wake up

NOTE Confidence: 0.97860247
00:01:49.635 --> 00:01:50.435 in, like, the middle of
NOTE Confidence: 0.97860247
00:01:50.435 --> 00:01:51.235 the night or, like, right
NOTE Confidence: 0.97860247
00:01:51.235 --> 00:01:52.435 before I'd go to school.
NOTE Confidence: 0.97860247
00:01:52.435 --> 00:01:53.555 I would, like it would
NOTE Confidence: 0.97860247
00:01:53.555 --> 00:01:54.535 hurt me a lot.
NOTE Confidence: 0.9950994
00:01:54.940 --> 00:01:56.400 Knowing that something was wrong,
NOTE Confidence: 0.99959683
00:01:56.860 --> 00:01:57.600 not understanding
NOTE Confidence: 0.9684641
00:01:57.900 --> 00:01:59.600 what it was, we'd been
NOTE Confidence: 0.99003184
00:02:00.220 --> 00:02:01.500 given feedback that it could
NOTE Confidence: 0.99003184
00:02:01.500 --> 00:02:02.380 be any of a host
NOTE Confidence: 0.99003184
00:02:02.380 --> 00:02:03.759 of things. And
NOTE Confidence: 0.9918909
00:02:04.540 --> 00:02:06.000 in some of those conversations,
NOTE Confidence: 0.9931593
00:02:06.619 --> 00:02:08.239 it was worst case scenario.
NOTE Confidence: 0.90195453
00:02:12.305 --> 00:02:13.924 These things are misdiagnosed
NOTE Confidence: 0.996873
00:02:15.025 --> 00:02:15.764 so often.
NOTE Confidence: 0.9058941

00:02:16.224 --> 00:02:17.824 They're very rare, in fact.
NOTE Confidence: 0.9058941

00:02:17.824 --> 00:02:19.284 It makes you very special,
NOTE Confidence: 0.9764932

00:02:19.745 --> 00:02:21.204 but they are very rare.
NOTE Confidence: 0.9764932

00:02:21.460 --> 00:02:22.200 So oftentimes,
NOTE Confidence: 0.99935627

00:02:22.820 --> 00:02:24.919 kids go through appointments with
NOTE Confidence: 0.99935627

00:02:25.060 --> 00:02:26.680 multiple different kinds of doctors
NOTE Confidence: 0.9634327

00:02:27.220 --> 00:02:29.060 before they actually get to
NOTE Confidence: 0.9634327

00:02:29.060 --> 00:02:30.020 where they need to be.
NOTE Confidence: 0.9634327

00:02:30.180 --> 00:02:31.220 I'll never forget when we
NOTE Confidence: 0.9634327

00:02:31.220 --> 00:02:32.280 came to see you,
NOTE Confidence: 0.9601784

00:02:32.980 --> 00:02:34.200 your message was,
NOTE Confidence: 0.9390898

00:02:34.694 --> 00:02:35.915 yes, this is unusual,
NOTE Confidence: 0.9865144

00:02:36.215 --> 00:02:37.495 but we are expert at
NOTE Confidence: 0.9865144

00:02:37.495 --> 00:02:38.935 dealing with it, which was
NOTE Confidence: 0.9865144

00:02:38.935 --> 00:02:40.775 a really special kind of
NOTE Confidence: 0.9865144

00:02:40.775 --> 00:02:41.754 feeling together.

NOTE Confidence: 0.9456379

00:02:44.135 --> 00:02:46.075 So the vascular anomalies committee

NOTE Confidence: 0.9456379

00:02:46.135 --> 00:02:47.415 meets once a month where

NOTE Confidence: 0.9456379

00:02:47.415 --> 00:02:48.535 we all get together and

NOTE Confidence: 0.9456379

00:02:48.535 --> 00:02:50.300 talk about new or existing

NOTE Confidence: 0.9456379

00:02:50.300 --> 00:02:52.319 patients that need ongoing multidisciplinary

NOTE Confidence: 0.9818425

00:02:52.780 --> 00:02:54.160 care. And we have specialists

NOTE Confidence: 0.9818425

00:02:54.300 --> 00:02:55.580 for every single part of

NOTE Confidence: 0.9818425

00:02:55.580 --> 00:02:56.160 the body

NOTE Confidence: 0.99760973

00:02:56.540 --> 00:02:58.160 that will help with treating

NOTE Confidence: 0.974404

00:02:58.620 --> 00:02:59.600 these malformations.

NOTE Confidence: 0.9900257

00:03:00.139 --> 00:03:01.500 And we talk about each

NOTE Confidence: 0.9900257

00:03:01.500 --> 00:03:03.264 patient individually and come up

NOTE Confidence: 0.9900257

00:03:03.264 --> 00:03:04.945 with a specialized care plan.

NOTE Confidence: 0.9900257

00:03:04.945 --> 00:03:06.305 We diagnosed it immediately as

NOTE Confidence: 0.9900257

00:03:06.305 --> 00:03:07.285 a venous malformation

NOTE Confidence: 0.9381434

00:03:07.585 --> 00:03:08.965 and we got her enrolled
NOTE Confidence: 0.99930376

00:03:09.345 --> 00:03:10.645 to go through treatment.
NOTE Confidence: 0.965265

00:03:18.680 --> 00:03:20.120 There are many different ways
NOTE Confidence: 0.965265

00:03:20.120 --> 00:03:21.580 that we can treat the
NOTE Confidence: 0.965265

00:03:21.639 --> 00:03:23.660 malformations that the child has.
NOTE Confidence: 0.9931412

00:03:24.040 --> 00:03:25.660 So that can range from
NOTE Confidence: 0.9707536

00:03:26.280 --> 00:03:28.220 medical treatment with the pill,
NOTE Confidence: 0.9707536

00:03:28.280 --> 00:03:29.160 then we can do what's
NOTE Confidence: 0.9707536

00:03:29.160 --> 00:03:29.980 called sclerotherapy.
NOTE Confidence: 0.9769696

00:03:31.375 --> 00:03:33.935 Sclerotherapy means you inject a
NOTE Confidence: 0.9769696

00:03:33.935 --> 00:03:36.195 medication into the malformation,
NOTE Confidence: 0.9927055

00:03:36.895 --> 00:03:37.955 and that intentionally
NOTE Confidence: 0.9982407

00:03:38.335 --> 00:03:38.835 will
NOTE Confidence: 0.9802011

00:03:39.215 --> 00:03:41.155 essentially cause a localized
NOTE Confidence: 0.9991434

00:03:41.615 --> 00:03:43.475 chemical burn to the lesion.
NOTE Confidence: 0.9887066

00:03:45.090 --> 00:03:46.710 So going into the procedure,

NOTE Confidence: 0.9887066
00:03:46.850 --> 00:03:47.750 my expectation
NOTE Confidence: 0.9599672
00:03:48.130 --> 00:03:49.490 was that it would take
NOTE Confidence: 0.9599672
00:03:49.490 --> 00:03:50.530 a lot longer than it
NOTE Confidence: 0.9599672
00:03:50.530 --> 00:03:52.610 did. But, like, coming here,
NOTE Confidence: 0.9599672
00:03:52.610 --> 00:03:53.810 it was really easy and
NOTE Confidence: 0.9599672
00:03:53.810 --> 00:03:55.190 it was super quick and
NOTE Confidence: 0.9599672
00:03:55.330 --> 00:03:56.770 everyone told me what was
NOTE Confidence: 0.9599672
00:03:56.770 --> 00:03:57.510 gonna happen.
NOTE Confidence: 0.979543
00:03:57.905 --> 00:03:59.665 We injected a medication to
NOTE Confidence: 0.979543
00:03:59.665 --> 00:04:00.485 do the sclerotherapy.
NOTE Confidence: 0.9784756
00:04:01.265 --> 00:04:02.565 And then with one treatment,
NOTE Confidence: 0.98654276
00:04:03.105 --> 00:04:04.465 within a couple weeks later,
NOTE Confidence: 0.98654276
00:04:04.465 --> 00:04:05.905 she was fully recovered. She
NOTE Confidence: 0.98654276
00:04:05.905 --> 00:04:07.265 was able to to do
NOTE Confidence: 0.98654276
00:04:07.265 --> 00:04:08.385 everything that she wanted to
NOTE Confidence: 0.98654276

00:04:08.385 --> 00:04:09.685 do after one treatment.
NOTE Confidence: 0.9918372

00:04:11.120 --> 00:04:12.580 Yeah. I remember being
NOTE Confidence: 0.9968011

00:04:14.480 --> 00:04:15.840 very surprised in a good
NOTE Confidence: 0.9968011

00:04:15.840 --> 00:04:16.339 way
NOTE Confidence: 0.9815042

00:04:16.640 --> 00:04:18.400 and almost relieved at how
NOTE Confidence: 0.9815042

00:04:18.400 --> 00:04:19.600 fast it all went. And
NOTE Confidence: 0.9815042

00:04:19.600 --> 00:04:21.040 seeing your expression when you
NOTE Confidence: 0.9815042

00:04:21.040 --> 00:04:23.200 came out and how excited
NOTE Confidence: 0.9815042

00:04:23.200 --> 00:04:24.240 you were with how it
NOTE Confidence: 0.9815042

00:04:24.240 --> 00:04:24.740 went
NOTE Confidence: 0.9591472

00:04:25.200 --> 00:04:27.035 was huge. A big sigh
NOTE Confidence: 0.9591472

00:04:27.035 --> 00:04:28.555 of relief. That sense was
NOTE Confidence: 0.9591472

00:04:28.555 --> 00:04:29.835 with us the entire process
NOTE Confidence: 0.9591472

00:04:29.835 --> 00:04:30.735 all the way through.
NOTE Confidence: 0.9957431

00:04:31.675 --> 00:04:33.355 You can have a huge
NOTE Confidence: 0.9957431

00:04:33.355 --> 00:04:34.475 impact when you can help

NOTE Confidence: 0.9957431

00:04:34.475 --> 00:04:35.055 a child.

NOTE Confidence: 0.9926009

00:04:35.355 --> 00:04:36.555 Here at Yale, we have

NOTE Confidence: 0.9926009

00:04:36.555 --> 00:04:37.595 all the tools that we

NOTE Confidence: 0.9926009

00:04:37.595 --> 00:04:39.515 need in order to treat

NOTE Confidence: 0.9926009

00:04:39.515 --> 00:04:41.535 our most precious little patients.