

WEBVTT

NOTE duration:"00:59:07"

NOTE recognizability:0.830

NOTE language:en-us

NOTE Confidence: 0.808138418888889

00:00:03.000 --> 00:00:05.240 So good afternoon, everyone.

NOTE Confidence: 0.808138418888889

00:00:05.240 --> 00:00:08.040 My name is Andre Zinchuk,

NOTE Confidence: 0.808138418888889

00:00:08.040 --> 00:00:10.476 and I am an assistant professor

NOTE Confidence: 0.808138418888889

00:00:10.476 --> 00:00:12.100 here at Yale University.

NOTE Confidence: 0.808138418888889

00:00:12.100 --> 00:00:14.194 And thank you for joining yet

NOTE Confidence: 0.808138418888889

00:00:14.194 --> 00:00:16.422 another edition of our joint sleep

NOTE Confidence: 0.808138418888889

00:00:16.422 --> 00:00:18.954 seminars that we conduct with folks.

NOTE Confidence: 0.808138418888889

00:00:18.960 --> 00:00:20.802 Really sounds like all over the

NOTE Confidence: 0.808138418888889

00:00:20.802 --> 00:00:23.340 Northeast now, which is great.

NOTE Confidence: 0.808138418888889

00:00:23.340 --> 00:00:26.580 And we have a very special guest today.

NOTE Confidence: 0.808138418888889

00:00:26.580 --> 00:00:29.527 And I will let Doctor already Grover

NOTE Confidence: 0.808138418888889

00:00:29.527 --> 00:00:31.738 introduce our speaker for the day.

NOTE Confidence: 0.808138418888889

00:00:31.740 --> 00:00:32.560 Take it away already.

NOTE Confidence: 0.886855476666667

00:00:34.200 --> 00:00:35.673 Alright, thank you.
NOTE Confidence: 0.886855476666667

00:00:35.673 --> 00:00:37.146 Good afternoon everyone.
NOTE Confidence: 0.886855476666667

00:00:37.150 --> 00:00:39.684 Thank you Doctor Scott for coming in
NOTE Confidence: 0.886855476666667

00:00:39.684 --> 00:00:42.270 today from Tufts and Doctor Scott is
NOTE Confidence: 0.886855476666667

00:00:42.270 --> 00:00:44.520 going to talk about pediatric obstructive
NOTE Confidence: 0.886855476666667

00:00:44.586 --> 00:00:46.826 sleep apnea and he's going to give
NOTE Confidence: 0.886855476666667

00:00:46.826 --> 00:00:49.079 us their surgeons perspective on this.
NOTE Confidence: 0.886855476666667

00:00:49.080 --> 00:00:50.744 So just by introduction,
NOTE Confidence: 0.886855476666667

00:00:50.744 --> 00:00:53.240 Doctor Andrew Scott is an associate
NOTE Confidence: 0.886855476666667

00:00:53.313 --> 00:00:55.505 professor of otolaryngology and
NOTE Confidence: 0.886855476666667

00:00:55.505 --> 00:00:58.245 pediatric Pediatrics as Tufts University
NOTE Confidence: 0.886855476666667

00:00:58.245 --> 00:01:00.387 School of Medicine in Boston.
NOTE Confidence: 0.886855476666667

00:01:00.390 --> 00:01:02.958 Uh he serves as a medical director for
NOTE Confidence: 0.886855476666667

00:01:02.958 --> 00:01:05.598 cleft and craniofacial team at Tufts
NOTE Confidence: 0.886855476666667

00:01:05.598 --> 00:01:08.490 Children's Hospital and Tufts Medical Center.
NOTE Confidence: 0.886855476666667

00:01:08.490 --> 00:01:10.572 He attended Uh Vaseline University of

NOTE Confidence: 0.886855476666667
00:01:10.572 --> 00:01:13.630 his uh for his undergraduate education,
NOTE Confidence: 0.886855476666667
00:01:13.630 --> 00:01:15.930 followed by Harvard Medical School
NOTE Confidence: 0.886855476666667
00:01:15.930 --> 00:01:18.830 where he earned his medical degree.
NOTE Confidence: 0.886855476666667
00:01:18.830 --> 00:01:21.665 He completed a residency in oral Laryngology,
NOTE Confidence: 0.886855476666667
00:01:21.670 --> 00:01:23.836 had a neck surgery through the
NOTE Confidence: 0.886855476666667
00:01:23.836 --> 00:01:25.280 Harvard system and additional
NOTE Confidence: 0.886855476666667
00:01:25.345 --> 00:01:27.600 subspecialty training and cop complex
NOTE Confidence: 0.886855476666667
00:01:27.600 --> 00:01:29.404 and pediatric laryngology through
NOTE Confidence: 0.886855476666667
00:01:29.404 --> 00:01:31.370 the University of Minnesota.
NOTE Confidence: 0.886855476666667
00:01:31.370 --> 00:01:33.555 He practices the full spectrum
NOTE Confidence: 0.886855476666667
00:01:33.555 --> 00:01:35.303 of pediatric auto laryngology,
NOTE Confidence: 0.886855476666667
00:01:35.310 --> 00:01:37.560 including open and endoscopic air research,
NOTE Confidence: 0.886855476666667
00:01:37.560 --> 00:01:41.790 very the full spectrum of pediatric facial
NOTE Confidence: 0.886855476666667
00:01:41.790 --> 00:01:45.090 plastic surgery and craniofacial surgery.
NOTE Confidence: 0.886855476666667
00:01:45.090 --> 00:01:46.498 In collaboration with his
NOTE Confidence: 0.886855476666667

00:01:46.498 --> 00:01:47.906 colleagues in neurosurgery and
NOTE Confidence: 0.886855476666667

00:01:47.906 --> 00:01:49.859 oral and maxillofacial surgery,
NOTE Confidence: 0.886855476666667

00:01:49.860 --> 00:01:52.465 doctor Scott also performs transmural
NOTE Confidence: 0.886855476666667

00:01:52.465 --> 00:01:55.400 procedures for cranius and stenosis
NOTE Confidence: 0.886855476666667

00:01:55.400 --> 00:01:57.950 and orthognathic surgeries.
NOTE Confidence: 0.886855476666667

00:01:57.950 --> 00:01:59.280 Again, thank you,
NOTE Confidence: 0.886855476666667

00:01:59.280 --> 00:02:00.720 Doctor Scott for doing this today.
NOTE Confidence: 0.92786010375

00:02:03.600 --> 00:02:05.598 Thank you. Thank you for the
NOTE Confidence: 0.92786010375

00:02:05.598 --> 00:02:07.284 kind introduction. Umm, I I.
NOTE Confidence: 0.92786010375

00:02:07.284 --> 00:02:09.650 The format of these is always a
NOTE Confidence: 0.92786010375

00:02:09.735 --> 00:02:12.450 little tricky, but I would like to,
NOTE Confidence: 0.92786010375

00:02:12.450 --> 00:02:13.710 as much as it's possible,
NOTE Confidence: 0.92786010375

00:02:13.710 --> 00:02:15.458 keep this fairly informal.
NOTE Confidence: 0.92786010375

00:02:15.458 --> 00:02:17.643 If you see a typo,
NOTE Confidence: 0.92786010375

00:02:17.650 --> 00:02:19.346 I'd love for you to point it out.
NOTE Confidence: 0.92786010375

00:02:19.350 --> 00:02:21.750 If you have questions or corrections,

NOTE Confidence: 0.92786010375

00:02:21.750 --> 00:02:22.814 that is welcome to.

NOTE Confidence: 0.92786010375

00:02:22.814 --> 00:02:25.650 I think a lot of us are are are

NOTE Confidence: 0.92786010375

00:02:25.650 --> 00:02:27.595 knowledgeable and come at this

NOTE Confidence: 0.92786010375

00:02:27.595 --> 00:02:28.835 from different perspectives

NOTE Confidence: 0.92786010375

00:02:28.835 --> 00:02:31.169 and and I always learn from

NOTE Confidence: 0.92786010375

00:02:31.169 --> 00:02:33.112 the audience and these things.

NOTE Confidence: 0.92786010375

00:02:33.112 --> 00:02:35.428 So so please speak up with

NOTE Confidence: 0.92786010375

00:02:35.428 --> 00:02:36.720 questions as we go.

NOTE Confidence: 0.92786010375

00:02:36.720 --> 00:02:39.156 Forward, I'm going to try to spend

NOTE Confidence: 0.92786010375

00:02:39.156 --> 00:02:41.267 about 45 minutes and then have

NOTE Confidence: 0.92786010375

00:02:41.267 --> 00:02:43.265 time for questions at the end.

NOTE Confidence: 0.92786010375

00:02:43.270 --> 00:02:45.350 I am a surgeon and so I have

NOTE Confidence: 0.92786010375

00:02:45.350 --> 00:02:46.970 a limited attention span.

NOTE Confidence: 0.92786010375

00:02:46.970 --> 00:02:49.463 We are very visual and we like boom boom,

NOTE Confidence: 0.92786010375

00:02:49.470 --> 00:02:49.944 boom, boom, boom.

NOTE Confidence: 0.92786010375

00:02:49.944 --> 00:02:51.658 So this is going to be a little bit of a
NOTE Confidence: 0.811573137142857

00:02:54.030 --> 00:02:56.207 MTV TikTok, not quite to that extent,
NOTE Confidence: 0.811573137142857

00:02:56.210 --> 00:02:58.590 but lecture with lots of of quick
NOTE Confidence: 0.811573137142857

00:02:58.590 --> 00:03:00.431 changes and videos and hopefully
NOTE Confidence: 0.811573137142857

00:03:00.431 --> 00:03:02.687 that will be interesting to you.
NOTE Confidence: 0.811573137142857

00:03:02.690 --> 00:03:04.434 I have no disclosures,
NOTE Confidence: 0.811573137142857

00:03:04.434 --> 00:03:07.440 but I'm always interested in the. Closure.
NOTE Confidence: 0.811573137142857

00:03:07.440 --> 00:03:10.534 If anyone has any good ideas and this
NOTE Confidence: 0.811573137142857

00:03:10.534 --> 00:03:12.796 is the CME information and whatnot,
NOTE Confidence: 0.811573137142857

00:03:12.800 --> 00:03:14.348 I think this is boilerplate for
NOTE Confidence: 0.811573137142857

00:03:14.348 --> 00:03:15.730 most of your lectures today,
NOTE Confidence: 0.811573137142857

00:03:15.730 --> 00:03:16.970 but for those of you who need it,
NOTE Confidence: 0.811573137142857

00:03:16.970 --> 00:03:18.170 this is that information.
NOTE Confidence: 0.830495163125

00:03:20.180 --> 00:03:21.852 Give that a second.
NOTE Confidence: 0.830495163125

00:03:21.852 --> 00:03:24.360 I went to Wesleyan for undergrad
NOTE Confidence: 0.830495163125

00:03:24.445 --> 00:03:26.935 and and Harvard for Med school,

NOTE Confidence: 0.830495163125

00:03:26.940 --> 00:03:27.968 and I'm perfectly aware

NOTE Confidence: 0.830495163125

00:03:27.968 --> 00:03:29.253 that I'm speaking to Yale,

NOTE Confidence: 0.830495163125

00:03:29.260 --> 00:03:30.862 but I have great affection for

NOTE Confidence: 0.830495163125

00:03:30.862 --> 00:03:34.340 anyone on the 91 corridor, so.

NOTE Confidence: 0.830495163125

00:03:34.340 --> 00:03:35.858 So we're all,

NOTE Confidence: 0.830495163125

00:03:35.858 --> 00:03:39.400 I have a lot of Connecticut ties.

NOTE Confidence: 0.830495163125

00:03:39.400 --> 00:03:41.661 So the goals today are to review

NOTE Confidence: 0.830495163125

00:03:41.661 --> 00:03:43.928 current guidelines that we have from

NOTE Confidence: 0.830495163125

00:03:43.928 --> 00:03:45.576 the pediatric allergology literature.

NOTE Confidence: 0.830495163125

00:03:45.580 --> 00:03:47.842 And I think that sometimes is

NOTE Confidence: 0.830495163125

00:03:47.842 --> 00:03:49.222 an interesting perspective to

NOTE Confidence: 0.830495163125

00:03:49.222 --> 00:03:51.088 sort of see where your surgical

NOTE Confidence: 0.830495163125

00:03:51.088 --> 00:03:52.379 colleagues are coming from.

NOTE Confidence: 0.830495163125

00:03:52.380 --> 00:03:53.952 There is a lot of overlap

NOTE Confidence: 0.830495163125

00:03:53.952 --> 00:03:55.000 as you would imagine,

NOTE Confidence: 0.830495163125

00:03:55.000 --> 00:03:57.082 but sometimes there isn't and you
NOTE Confidence: 0.830495163125

00:03:57.082 --> 00:03:59.142 might think somebody is doing something
NOTE Confidence: 0.830495163125

00:03:59.142 --> 00:04:01.574 kind of crazy and it may come from
NOTE Confidence: 0.830495163125

00:04:01.642 --> 00:04:03.467 our guidelines and vice versa.
NOTE Confidence: 0.830495163125

00:04:03.470 --> 00:04:07.030 We'll talk about a off label use of
NOTE Confidence: 0.830495163125

00:04:07.030 --> 00:04:10.058 nasal steroids for adenoid hypertrophy
NOTE Confidence: 0.830495163125

00:04:10.060 --> 00:04:12.636 and I'm going to talk about the
NOTE Confidence: 0.830495163125

00:04:12.636 --> 00:04:14.536 surgical strategies that we have
NOTE Confidence: 0.830495163125

00:04:14.536 --> 00:04:16.316 for addressing patients who still
NOTE Confidence: 0.830495163125

00:04:16.316 --> 00:04:18.076 have residual sleep apnea after
NOTE Confidence: 0.830495163125

00:04:18.076 --> 00:04:19.560 tonsillectomy and adenoidectomy,
NOTE Confidence: 0.830495163125

00:04:19.560 --> 00:04:22.624 which does come up from time to time.
NOTE Confidence: 0.830495163125

00:04:22.630 --> 00:04:25.534 And then we'll talk about some of the
NOTE Confidence: 0.830495163125

00:04:25.534 --> 00:04:27.853 more advanced soft tissue and orthognathic,
NOTE Confidence: 0.830495163125

00:04:27.853 --> 00:04:31.024 so Bony surgeries that we do for
NOTE Confidence: 0.830495163125

00:04:31.024 --> 00:04:34.157 on the maxilla and the mandible.

NOTE Confidence: 0.830495163125

00:04:34.160 --> 00:04:34.415 OK.

NOTE Confidence: 0.830495163125

00:04:34.415 --> 00:04:36.200 So this is the basic outline of

NOTE Confidence: 0.830495163125

00:04:36.200 --> 00:04:38.509 this talk and again I'm going to go

NOTE Confidence: 0.830495163125

00:04:38.509 --> 00:04:40.810 through it pretty quickly given our audience.

NOTE Confidence: 0.830495163125

00:04:40.810 --> 00:04:43.834 I'm not going to go into the

NOTE Confidence: 0.830495163125

00:04:43.834 --> 00:04:45.888 the definitions of sleep apnea.

NOTE Confidence: 0.830495163125

00:04:45.888 --> 00:04:48.264 You are all far more knowledgeable

NOTE Confidence: 0.830495163125

00:04:48.264 --> 00:04:49.797 about that than I am.

NOTE Confidence: 0.830495163125

00:04:49.800 --> 00:04:51.360 But just as a basic review,

NOTE Confidence: 0.830495163125

00:04:51.360 --> 00:04:53.572 we can all agree that this happens

NOTE Confidence: 0.830495163125

00:04:53.572 --> 00:04:54.863 when there's intermittent upper

NOTE Confidence: 0.830495163125

00:04:54.863 --> 00:04:56.308 airway collapse during sleep and

NOTE Confidence: 0.830495163125

00:04:56.308 --> 00:04:58.614 there can be any number of anatomic

NOTE Confidence: 0.830495163125

00:04:58.614 --> 00:05:00.066 or neuromuscular factors and

NOTE Confidence: 0.830495163125

00:05:00.066 --> 00:05:02.424 that's very important for me as a

NOTE Confidence: 0.830495163125

00:05:02.424 --> 00:05:04.320 surgeon to keep in mind because.
NOTE Confidence: 0.830495163125

00:05:04.320 --> 00:05:06.510 Sometimes when you're a hammer,
NOTE Confidence: 0.830495163125

00:05:06.510 --> 00:05:07.983 everything's a nail,
NOTE Confidence: 0.830495163125

00:05:07.983 --> 00:05:10.929 and having us as surgeons treat
NOTE Confidence: 0.830495163125

00:05:10.929 --> 00:05:13.479 everything as an anatomic problem
NOTE Confidence: 0.830495163125

00:05:13.479 --> 00:05:15.949 will lead to failed interventions.
NOTE Confidence: 0.830495163125

00:05:15.950 --> 00:05:17.862 You can't treat hypotonia
NOTE Confidence: 0.830495163125

00:05:17.862 --> 00:05:19.774 with a static surgery,
NOTE Confidence: 0.830495163125

00:05:19.780 --> 00:05:22.727 and so that's really the best way
NOTE Confidence: 0.830495163125

00:05:22.727 --> 00:05:25.766 for us to assess patients for who
NOTE Confidence: 0.830495163125

00:05:25.766 --> 00:05:28.430 are good candidates and who aren't.
NOTE Confidence: 0.830495163125

00:05:28.430 --> 00:05:29.906 But that being said,
NOTE Confidence: 0.830495163125

00:05:29.906 --> 00:05:31.751 there are still many patients
NOTE Confidence: 0.830495163125

00:05:31.751 --> 00:05:33.420 that might be thought of as,
NOTE Confidence: 0.830495163125

00:05:33.420 --> 00:05:34.590 oh, they don't have options,
NOTE Confidence: 0.830495163125

00:05:34.590 --> 00:05:35.960 when in fact they do.

NOTE Confidence: 0.830495163125

00:05:35.960 --> 00:05:38.214 And in the era of sleep endoscopy

NOTE Confidence: 0.830495163125

00:05:38.214 --> 00:05:41.104 and being able to localize the site

NOTE Confidence: 0.830495163125

00:05:41.104 --> 00:05:42.956 of obstruction focused surgical

NOTE Confidence: 0.830495163125

00:05:42.956 --> 00:05:44.760 interventions in those areas,

NOTE Confidence: 0.830495163125

00:05:44.760 --> 00:05:45.876 while not perfect,

NOTE Confidence: 0.830495163125

00:05:45.876 --> 00:05:48.108 are definitely far more efficacious than

NOTE Confidence: 0.830495163125

00:05:48.108 --> 00:05:50.758 when we used to just blindly try something.

NOTE Confidence: 0.830495163125

00:05:50.760 --> 00:05:53.007 It is important to also remember that

NOTE Confidence: 0.830495163125

00:05:53.007 --> 00:05:55.510 the criteria for sleep apnea is quite

NOTE Confidence: 0.830495163125

00:05:55.510 --> 00:05:57.360 different than adults and children.

NOTE Confidence: 0.830495163125

00:05:57.360 --> 00:05:58.420 The bar is much,

NOTE Confidence: 0.830495163125

00:05:58.420 --> 00:05:58.950 much higher.

NOTE Confidence: 0.830495163125

00:05:58.950 --> 00:06:02.310 Kids to say that cure for obstructive

NOTE Confidence: 0.830495163125

00:06:02.310 --> 00:06:04.642 sleep apnea child is bringing

NOTE Confidence: 0.830495163125

00:06:04.642 --> 00:06:07.428 the HIV to below one is very,

NOTE Confidence: 0.830495163125

00:06:07.430 --> 00:06:10.180 very difficult.
NOTE Confidence: 0.830495163125

00:06:10.180 --> 00:06:11.476 But to do so,
NOTE Confidence: 0.830495163125

00:06:11.476 --> 00:06:13.420 to achieve absolute cure and a
NOTE Confidence: 0.830495163125

00:06:13.494 --> 00:06:15.846 child is is not always possible.
NOTE Confidence: 0.830495163125

00:06:15.850 --> 00:06:17.618 But that being said,
NOTE Confidence: 0.830495163125

00:06:17.618 --> 00:06:20.815 when you look at what contributes to
NOTE Confidence: 0.830495163125

00:06:20.815 --> 00:06:24.035 sleep apnea in children and versus adults,
NOTE Confidence: 0.830495163125

00:06:24.040 --> 00:06:27.040 it is far more skewed towards
NOTE Confidence: 0.830495163125

00:06:27.040 --> 00:06:29.254 obesity and other factors such as
NOTE Confidence: 0.830495163125

00:06:29.254 --> 00:06:32.290 that for adults as opposed to just
NOTE Confidence: 0.830495163125

00:06:32.290 --> 00:06:34.274 lymphoid hypertrophy in children.
NOTE Confidence: 0.859313783157895

00:06:34.280 --> 00:06:36.488 And while we do have adults with big
NOTE Confidence: 0.859313783157895

00:06:36.488 --> 00:06:38.619 tonsils who have their snoring and
NOTE Confidence: 0.859313783157895

00:06:38.619 --> 00:06:40.509 sometimes even sleep apnea improved.
NOTE Confidence: 0.859313783157895

00:06:40.510 --> 00:06:42.562 By tonsillectomy, it is nowhere near
NOTE Confidence: 0.859313783157895

00:06:42.562 --> 00:06:44.890 as efficacious as it is in children.

NOTE Confidence: 0.859313783157895

00:06:44.890 --> 00:06:46.807 And a big part of that is because of

NOTE Confidence: 0.859313783157895

00:06:46.807 --> 00:06:48.873 just the ratio of the size of the tonsils

NOTE Confidence: 0.859313783157895

00:06:48.873 --> 00:06:51.469 to the pharynx and the fact that what's

NOTE Confidence: 0.859313783157895

00:06:51.469 --> 00:06:52.865 causing these obstructive symptoms

NOTE Confidence: 0.859313783157895

00:06:52.870 --> 00:06:54.946 in kids is different than adults.

NOTE Confidence: 0.859313783157895

00:06:54.950 --> 00:06:57.598 But then it's makes it difficult for us

NOTE Confidence: 0.859313783157895

00:06:57.598 --> 00:07:00.110 to translate that paradigm for teenagers,

NOTE Confidence: 0.859313783157895

00:07:00.110 --> 00:07:01.470 saying that there's still children,

NOTE Confidence: 0.859313783157895

00:07:01.470 --> 00:07:02.802 even though, you know,

NOTE Confidence: 0.859313783157895

00:07:02.802 --> 00:07:04.800 sometimes we have a teenager in

NOTE Confidence: 0.859313783157895

00:07:04.865 --> 00:07:06.467 the office at 6 feet tall.

NOTE Confidence: 0.859313783157895

00:07:06.470 --> 00:07:08.370 And yes, they can't vote,

NOTE Confidence: 0.859313783157895

00:07:08.370 --> 00:07:09.674 but that doesn't necessarily

NOTE Confidence: 0.859313783157895

00:07:09.674 --> 00:07:11.940 make them have to have an HIV.

NOTE Confidence: 0.859313783157895

00:07:11.940 --> 00:07:13.890 1.0 and doesn't make treating

NOTE Confidence: 0.859313783157895

00:07:13.890 --> 00:07:15.777 them as an infant logical,
NOTE Confidence: 0.859313783157895

00:07:15.777 --> 00:07:18.066 and so we do have some arbitrary
NOTE Confidence: 0.859313783157895

00:07:18.066 --> 00:07:20.794 cut offs that are based on age
NOTE Confidence: 0.859313783157895

00:07:20.794 --> 00:07:22.394 rather than developmental status.
NOTE Confidence: 0.85405045

00:07:24.490 --> 00:07:26.490 So looking at, you know,
NOTE Confidence: 0.85405045

00:07:26.490 --> 00:07:28.855 the anatomical factors and relevant
NOTE Confidence: 0.85405045

00:07:28.855 --> 00:07:30.308 anatomy, the mallampati scale
NOTE Confidence: 0.85405045

00:07:30.308 --> 00:07:32.590 I know you are all aware of.
NOTE Confidence: 0.85405045

00:07:32.590 --> 00:07:34.310 That's a scale for determining
NOTE Confidence: 0.85405045

00:07:34.310 --> 00:07:35.686 the difficulty of intubation.
NOTE Confidence: 0.85405045

00:07:35.690 --> 00:07:38.642 It's been hijacked for use for thinking about
NOTE Confidence: 0.85405045

00:07:38.642 --> 00:07:41.048 examining soft palate length and whatnot,
NOTE Confidence: 0.85405045

00:07:41.050 --> 00:07:43.084 and it can be a bit of a surrogate,
NOTE Confidence: 0.85405045

00:07:43.090 --> 00:07:45.259 but it is important for us all to remember
NOTE Confidence: 0.85405045

00:07:45.259 --> 00:07:47.510 that that's not what this was designed for.
NOTE Confidence: 0.85405045

00:07:47.510 --> 00:07:49.196 This is simply to decide whether

NOTE Confidence: 0.85405045

00:07:49.196 --> 00:07:50.863 you know you're going to be

NOTE Confidence: 0.85405045

00:07:50.863 --> 00:07:52.088 a tricky intubation or not,

NOTE Confidence: 0.85405045

00:07:52.090 --> 00:07:54.938 or what your mask airway might be like.

NOTE Confidence: 0.85405045

00:07:54.940 --> 00:07:57.202 The tonsil grading scale in children

NOTE Confidence: 0.85405045

00:07:57.202 --> 00:07:59.563 zero or the surgically absent are

NOTE Confidence: 0.85405045

00:07:59.563 --> 00:08:01.139 are practically not there.

NOTE Confidence: 0.85405045

00:08:01.140 --> 00:08:03.576 One, they're there but they're super small.

NOTE Confidence: 0.85405045

00:08:03.580 --> 00:08:06.296 2 They're there and they're about average,

NOTE Confidence: 0.85405045

00:08:06.300 --> 00:08:08.310 3 they're big and four they're

NOTE Confidence: 0.85405045

00:08:08.310 --> 00:08:10.382 enormous and touching and then four

NOTE Confidence: 0.85405045

00:08:10.382 --> 00:08:12.727 plus plus would be like if they're

NOTE Confidence: 0.85405045

00:08:12.727 --> 00:08:14.560 practically overlapping and whatnot.

NOTE Confidence: 0.85405045

00:08:14.560 --> 00:08:16.960 Our literature does not clearly show

NOTE Confidence: 0.85405045

00:08:16.960 --> 00:08:19.455 much of a correlation between tonsil

NOTE Confidence: 0.85405045

00:08:19.455 --> 00:08:21.933 size and severity of sleep apnea,

NOTE Confidence: 0.85405045

00:08:21.940 --> 00:08:23.428 and that's important because a lot
NOTE Confidence: 0.85405045

00:08:23.428 --> 00:08:25.299 of kids are sent. Or big tonsils.
NOTE Confidence: 0.85405045

00:08:25.299 --> 00:08:26.764 Ohh, it's gotta be bad.
NOTE Confidence: 0.85405045

00:08:26.770 --> 00:08:29.590 But sometimes the tonsils are exophytic,
NOTE Confidence: 0.85405045

00:08:29.590 --> 00:08:30.910 meaning they're almost pedicled
NOTE Confidence: 0.85405045

00:08:30.910 --> 00:08:32.890 and what you see looks huge,
NOTE Confidence: 0.85405045

00:08:32.890 --> 00:08:34.546 and other times they look small.
NOTE Confidence: 0.85405045

00:08:34.550 --> 00:08:36.606 One plus or two plus and they're very
NOTE Confidence: 0.85405045

00:08:36.606 --> 00:08:38.308 endophytic and they go very laterally.
NOTE Confidence: 0.85405045

00:08:38.310 --> 00:08:39.618 But when you're asleep,
NOTE Confidence: 0.85405045

00:08:39.618 --> 00:08:42.269 that same Mass Effect is apparent either way.
NOTE Confidence: 0.85405045

00:08:42.270 --> 00:08:44.520 And so you can have a child with two plus
NOTE Confidence: 0.85405045

00:08:44.577 --> 00:08:46.607 tonsils that is terribly obstructing,
NOTE Confidence: 0.85405045

00:08:46.610 --> 00:08:48.882 and one with four plus tonsils who snores
NOTE Confidence: 0.85405045

00:08:48.882 --> 00:08:51.029 but actually doesn't have any sleep apnea.
NOTE Confidence: 0.85405045

00:08:51.030 --> 00:08:53.030 And so it's an approximation,

NOTE Confidence: 0.85405045

00:08:53.030 --> 00:08:55.697 but none of this is perfect.

NOTE Confidence: 0.85405045

00:08:55.700 --> 00:08:56.956 I just want to show you an example.

NOTE Confidence: 0.85405045

00:08:56.960 --> 00:08:58.400 I put sleep inducing quotation

NOTE Confidence: 0.85405045

00:08:58.400 --> 00:09:00.478 because this is a child that I saw.

NOTE Confidence: 0.85405045

00:09:00.480 --> 00:09:01.776 This is a pretty old video.

NOTE Confidence: 0.85405045

00:09:01.780 --> 00:09:04.216 It's from like maybe 8-10 years ago.

NOTE Confidence: 0.85405045

00:09:04.220 --> 00:09:07.244 But he was in my office for sleep apnea

NOTE Confidence: 0.85405045

00:09:07.244 --> 00:09:10.479 and came in and was asleep in the chair.

NOTE Confidence: 0.85405045

00:09:10.480 --> 00:09:11.660 And so just for Giggles,

NOTE Confidence: 0.85405045

00:09:11.660 --> 00:09:15.340 I put a scope in him and he was still asleep.

NOTE Confidence: 0.85405045

00:09:15.340 --> 00:09:16.540 And this is not under anesthesia,

NOTE Confidence: 0.85405045

00:09:16.540 --> 00:09:17.440 this is in the office,

NOTE Confidence: 0.85405045

00:09:17.440 --> 00:09:19.960 just with excessive daytime somnolence.

NOTE Confidence: 0.85405045

00:09:19.960 --> 00:09:21.010 And as we scope him now,

NOTE Confidence: 0.85405045

00:09:21.010 --> 00:09:24.209 we're looking at the tonsils that are

NOTE Confidence: 0.85405045

00:09:24.209 --> 00:09:26.629 collapsing almost completely on themselves.
NOTE Confidence: 0.85405045

00:09:26.630 --> 00:09:27.838 Posterior is up top,
NOTE Confidence: 0.85405045

00:09:27.838 --> 00:09:29.650 anterior is in the bottom of
NOTE Confidence: 0.85405045

00:09:29.721 --> 00:09:31.386 6:00 o'clock of the screen.
NOTE Confidence: 0.85405045

00:09:31.390 --> 00:09:33.667 And now you'll see the larynx way down here,
NOTE Confidence: 0.85405045

00:09:33.670 --> 00:09:35.632 that the tonsils are sitting on
NOTE Confidence: 0.85405045

00:09:35.632 --> 00:09:37.750 the larynx and that's the cricoid,
NOTE Confidence: 0.85405045

00:09:37.750 --> 00:09:39.582 and the vocal folds are just about to
NOTE Confidence: 0.85405045

00:09:39.582 --> 00:09:41.306 come into view right there and now.
NOTE Confidence: 0.85405045

00:09:41.310 --> 00:09:43.446 He startles as I wake him up and
NOTE Confidence: 0.85405045

00:09:43.446 --> 00:09:45.491 watch how different this airway looks
NOTE Confidence: 0.85405045

00:09:45.491 --> 00:09:48.546 when he coughs and he's awake of how
NOTE Confidence: 0.85405045

00:09:48.546 --> 00:09:50.586 dramatically different this will look.
NOTE Confidence: 0.85405045

00:09:50.590 --> 00:09:52.250 He coughs and now everything
NOTE Confidence: 0.85405045

00:09:52.250 --> 00:09:53.910 opens up and that's him.
NOTE Confidence: 0.85405045

00:09:53.910 --> 00:09:56.518 Whoops, that's what he looks like when awake.

NOTE Confidence: 0.85405045

00:09:56.520 --> 00:09:59.976 And so it's a pretty big

NOTE Confidence: 0.85405045

00:09:59.976 --> 00:10:02.280 difference to see this.

NOTE Confidence: 0.85405045

00:10:02.280 --> 00:10:04.650 You could very much underestimate how

NOTE Confidence: 0.85405045

00:10:04.650 --> 00:10:07.280 bad his obstruction would be just by

NOTE Confidence: 0.85405045

00:10:07.280 --> 00:10:09.562 looking at him awakened clinic and that's

NOTE Confidence: 0.815772061153846

00:10:09.633 --> 00:10:11.769 why sleep endoscopy is so helpful.

NOTE Confidence: 0.815772061153846

00:10:11.770 --> 00:10:13.807 So looking at the epidemiology and children,

NOTE Confidence: 0.815772061153846

00:10:13.810 --> 00:10:15.842 the prevalence in kids in my clinic, I mean,

NOTE Confidence: 0.815772061153846

00:10:15.842 --> 00:10:17.330 I think the whole world has sleep apnea.

NOTE Confidence: 0.815772061153846

00:10:17.330 --> 00:10:18.610 Every single child must be

NOTE Confidence: 0.815772061153846

00:10:18.610 --> 00:10:19.634 having this because they're

NOTE Confidence: 0.815772061153846

00:10:19.634 --> 00:10:21.127 the ones who show up to see me.

NOTE Confidence: 0.815772061153846

00:10:21.130 --> 00:10:23.384 But in reality, it's actually pretty low.

NOTE Confidence: 0.815772061153846

00:10:23.390 --> 00:10:25.289 It's probably higher now than it used to be,

NOTE Confidence: 0.815772061153846

00:10:25.290 --> 00:10:30.050 but but it it's under 10%.

NOTE Confidence: 0.815772061153846

00:10:30.050 --> 00:10:31.964 And these children often present in
NOTE Confidence: 0.815772061153846

00:10:31.964 --> 00:10:33.890 their preschool years and of that has
NOTE Confidence: 0.815772061153846

00:10:33.890 --> 00:10:35.965 to do with the size of the tonsils to
NOTE Confidence: 0.815772061153846

00:10:35.965 --> 00:10:37.849 the caliber of the pharyngeal airway.
NOTE Confidence: 0.815772061153846

00:10:37.850 --> 00:10:38.654 It's that ratio.
NOTE Confidence: 0.815772061153846

00:10:38.654 --> 00:10:40.262 And many times these kids are
NOTE Confidence: 0.815772061153846

00:10:40.262 --> 00:10:41.360 in normal weight.
NOTE Confidence: 0.815772061153846

00:10:41.360 --> 00:10:43.252 Obesity certainly can contribute,
NOTE Confidence: 0.815772061153846

00:10:43.252 --> 00:10:46.493 but the scariest sleep apnea patient to
NOTE Confidence: 0.815772061153846

00:10:46.493 --> 00:10:49.133 me in my clinic is the underweight child,
NOTE Confidence: 0.815772061153846

00:10:49.140 --> 00:10:52.416 the one who has large tonsils and is skinny,
NOTE Confidence: 0.815772061153846

00:10:52.420 --> 00:10:54.586 because that tells me that that
NOTE Confidence: 0.815772061153846

00:10:54.586 --> 00:10:56.837 kid is burning more calories at
NOTE Confidence: 0.815772061153846

00:10:56.837 --> 00:10:59.045 night to stay alive than they're
NOTE Confidence: 0.815772061153846

00:10:59.045 --> 00:11:01.480 able to consume during the day.
NOTE Confidence: 0.815772061153846

00:11:01.480 --> 00:11:03.688 When a child has airway obstruction

NOTE Confidence: 0.815772061153846
00:11:03.688 --> 00:11:04.792 that is bad,
NOTE Confidence: 0.815772061153846
00:11:04.800 --> 00:11:07.068 they will develop failure to thrive
NOTE Confidence: 0.815772061153846
00:11:07.068 --> 00:11:09.043 just from caloric expenditure and
NOTE Confidence: 0.815772061153846
00:11:09.043 --> 00:11:11.023 sometimes dysphasia if the airway
NOTE Confidence: 0.815772061153846
00:11:11.023 --> 00:11:12.960 obstruction is contributing to that.
NOTE Confidence: 0.815772061153846
00:11:12.960 --> 00:11:15.688 And so those kids that are really skinny
NOTE Confidence: 0.815772061153846
00:11:15.688 --> 00:11:18.448 and small are are often the ones that
NOTE Confidence: 0.815772061153846
00:11:18.448 --> 00:11:20.680 have the worst airway obstruction.
NOTE Confidence: 0.895905356
00:11:23.070 --> 00:11:24.960 So when we think about the Natural
NOTE Confidence: 0.895905356
00:11:24.960 --> 00:11:26.538 History of this, it would be nice
NOTE Confidence: 0.895905356
00:11:26.538 --> 00:11:27.910 in adults if you could just say,
NOTE Confidence: 0.895905356
00:11:27.910 --> 00:11:29.812 oh, just wait, wait six months
NOTE Confidence: 0.895905356
00:11:29.812 --> 00:11:31.949 and your sleep apnea will go away.
NOTE Confidence: 0.895905356
00:11:31.950 --> 00:11:33.530 I mean that doesn't happen.
NOTE Confidence: 0.895905356
00:11:33.530 --> 00:11:35.250 I gain weight every year it feels like.
NOTE Confidence: 0.895905356

00:11:35.250 --> 00:11:36.858 So, I mean that's that what
NOTE Confidence: 0.895905356

00:11:36.858 --> 00:11:37.930 happens to us adults.
NOTE Confidence: 0.895905356

00:11:37.930 --> 00:11:38.833 But in children,
NOTE Confidence: 0.895905356

00:11:38.833 --> 00:11:40.639 they're growing and they can sort
NOTE Confidence: 0.895905356

00:11:40.639 --> 00:11:42.527 of auto UN grow their tonsils,
NOTE Confidence: 0.895905356

00:11:42.530 --> 00:11:43.361 outgrow their tonsils.
NOTE Confidence: 0.895905356

00:11:43.361 --> 00:11:45.703 And so when we look at the Natural
NOTE Confidence: 0.895905356

00:11:45.703 --> 00:11:47.773 History of untreated sleep apnea in
NOTE Confidence: 0.895905356

00:11:47.773 --> 00:11:49.881 children and this was a very happy
NOTE Confidence: 0.895905356

00:11:49.881 --> 00:11:52.386 thing to know about when the COVID.
NOTE Confidence: 0.895905356

00:11:52.386 --> 00:11:55.684 Pandemic struck is that although untreated,
NOTE Confidence: 0.895905356

00:11:55.684 --> 00:11:57.700 sleep apnea is obviously a problem
NOTE Confidence: 0.895905356

00:11:57.759 --> 00:11:59.414 and certainly severe sleep apnea
NOTE Confidence: 0.895905356

00:11:59.414 --> 00:12:01.388 can cause all the downstream effects
NOTE Confidence: 0.895905356

00:12:01.388 --> 00:12:03.236 that you are all well aware of.
NOTE Confidence: 0.895905356

00:12:03.240 --> 00:12:05.490 Spontaneous resolution can occur in

NOTE Confidence: 0.895905356

00:12:05.490 --> 00:12:09.084 kids and that's up to 42% of children

NOTE Confidence: 0.895905356

00:12:09.084 --> 00:12:12.680 will go from mild OSA or moderate OSA.

NOTE Confidence: 0.895905356

00:12:12.680 --> 00:12:14.040 Again remember the pediatric

NOTE Confidence: 0.895905356

00:12:14.040 --> 00:12:15.400 criteria are much lower,

NOTE Confidence: 0.895905356

00:12:15.400 --> 00:12:18.824 moderate OSA being 5HI510 with

NOTE Confidence: 0.895905356

00:12:18.824 --> 00:12:21.236 with a growth spurt and their

NOTE Confidence: 0.895905356

00:12:21.236 --> 00:12:23.360 tonsils going down they can be.

NOTE Confidence: 0.895905356

00:12:23.360 --> 00:12:25.568 Care of their sleep apnea by doing nothing,

NOTE Confidence: 0.895905356

00:12:25.570 --> 00:12:26.626 absolutely nothing.

NOTE Confidence: 0.895905356

00:12:26.626 --> 00:12:30.290 And that happens 42% of the time by

NOTE Confidence: 0.895905356

00:12:30.290 --> 00:12:32.370 the numbers within seven months.

NOTE Confidence: 0.895905356

00:12:32.370 --> 00:12:34.608 Now it's need to understand that

NOTE Confidence: 0.895905356

00:12:34.608 --> 00:12:37.077 these are kids often with mild OSA

NOTE Confidence: 0.895905356

00:12:37.077 --> 00:12:39.690 and a low HIV and they're not obese.

NOTE Confidence: 0.895905356

00:12:39.690 --> 00:12:41.720 And if you look at their pediatric

NOTE Confidence: 0.895905356

00:12:41.720 --> 00:12:42.590 Sleep Questionnaire scores,
NOTE Confidence: 0.895905356

00:12:42.590 --> 00:12:43.217 that Michigan questionnaire,
NOTE Confidence: 0.895905356

00:12:43.217 --> 00:12:44.969 I'm not sure if you guys still use it,
NOTE Confidence: 0.895905356

00:12:44.970 --> 00:12:48.386 but we love it. It's from 2000.
NOTE Confidence: 0.895905356

00:12:48.390 --> 00:12:51.870 They are often ones that are like in the 33,
NOTE Confidence: 0.895905356

00:12:51.870 --> 00:12:53.694 you know, under 50%.
NOTE Confidence: 0.895905356

00:12:53.694 --> 00:12:55.518 Score of that index.
NOTE Confidence: 0.895905356

00:12:55.520 --> 00:12:57.856 Not the ones that are off the charts.
NOTE Confidence: 0.895905356

00:12:57.860 --> 00:12:59.390 But this is just another reason
NOTE Confidence: 0.895905356

00:12:59.390 --> 00:13:00.950 why sometimes if you just wait,
NOTE Confidence: 0.895905356

00:13:00.950 --> 00:13:02.330 things will get better.
NOTE Confidence: 0.895905356

00:13:02.330 --> 00:13:04.055 The tonsils are lymph nodes,
NOTE Confidence: 0.895905356

00:13:04.060 --> 00:13:05.740 and in the same way that a lymph node in
NOTE Confidence: 0.895905356

00:13:05.787 --> 00:13:07.632 your neck can get swollen when you get sick.
NOTE Confidence: 0.895905356

00:13:07.640 --> 00:13:08.606 And then it takes a little
NOTE Confidence: 0.895905356

00:13:08.606 --> 00:13:09.480 while to go back down,

NOTE Confidence: 0.895905356

00:13:09.480 --> 00:13:10.828 but eventually it might.

NOTE Confidence: 0.895905356

00:13:10.828 --> 00:13:12.513 Same thing happens to tonsils.

NOTE Confidence: 0.895905356

00:13:12.520 --> 00:13:14.572 If you get 6 over and over again in

NOTE Confidence: 0.895905356

00:13:14.572 --> 00:13:16.458 daycare and your tonsils are enormous,

NOTE Confidence: 0.895905356

00:13:16.460 --> 00:13:18.830 summer comes around and they shrink.

NOTE Confidence: 0.895905356

00:13:18.830 --> 00:13:21.070 And if you do that tonsillectomy in the

NOTE Confidence: 0.895905356

00:13:21.070 --> 00:13:23.407 spring or you don't do it come the fall,

NOTE Confidence: 0.895905356

00:13:23.410 --> 00:13:25.150 everyone's cure of sleep apnea.

NOTE Confidence: 0.895905356

00:13:25.150 --> 00:13:28.699 So those are things to think about.

NOTE Confidence: 0.895905356

00:13:28.700 --> 00:13:29.254 Let's see.

NOTE Confidence: 0.895905356

00:13:29.254 --> 00:13:31.193 I'm just seeing what's in the chat,

NOTE Confidence: 0.895905356

00:13:31.200 --> 00:13:33.276 making sure there's no questions there,

NOTE Confidence: 0.895905356

00:13:33.280 --> 00:13:34.050 OK?

NOTE Confidence: 0.871686091666667

00:13:36.610 --> 00:13:41.230 So moving through here. So diagnosis.

NOTE Confidence: 0.871686091666667

00:13:41.230 --> 00:13:43.222 And again, I'm going to gloss over this

NOTE Confidence: 0.871686091666667

00:13:43.222 --> 00:13:45.385 because you were all very well aware of this.

NOTE Confidence: 0.871686091666667

00:13:45.390 --> 00:13:47.748 But for patients who appear to us in in

NOTE Confidence: 0.871686091666667

00:13:47.748 --> 00:13:49.906 clinic, and I always make the point to my

NOTE Confidence: 0.871686091666667

00:13:49.906 --> 00:13:51.846 trainees that there's a difference between

NOTE Confidence: 0.871686091666667

00:13:51.846 --> 00:13:53.964 sleep apnea and sleep disorder breathing.

NOTE Confidence: 0.871686091666667

00:13:53.970 --> 00:13:55.410 And so most of the kids that we

NOTE Confidence: 0.871686091666667

00:13:55.410 --> 00:13:56.940 see have sleep disorder breathing.

NOTE Confidence: 0.871686091666667

00:13:56.940 --> 00:13:58.506 They have symptoms of sleep apnea,

NOTE Confidence: 0.871686091666667

00:13:58.510 --> 00:14:00.126 but if they don't have a sleep study,

NOTE Confidence: 0.871686091666667

00:14:00.130 --> 00:14:02.370 you can't say they have sleep apnea.

NOTE Confidence: 0.871686091666667

00:14:02.370 --> 00:14:05.436 And the most common symptom is snoring.

NOTE Confidence: 0.871686091666667

00:14:05.440 --> 00:14:07.748 Witness pauses or arousals

NOTE Confidence: 0.871686091666667

00:14:07.748 --> 00:14:10.056 that the parent sees.

NOTE Confidence: 0.871686091666667

00:14:10.060 --> 00:14:11.632 Often if the adenoids are large

NOTE Confidence: 0.871686091666667

00:14:11.632 --> 00:14:13.180 or the turbinates are enlarged,

NOTE Confidence: 0.871686091666667

00:14:13.180 --> 00:14:14.464 or there's chronic rhinitis,

NOTE Confidence: 0.871686091666667
00:14:14.464 --> 00:14:16.960 they will have constant open mouth breathing.
NOTE Confidence: 0.871686091666667
00:14:16.960 --> 00:14:18.960 Open mouth breathing is now
NOTE Confidence: 0.871686091666667
00:14:18.960 --> 00:14:21.616 this like Internet, you know,
NOTE Confidence: 0.871686091666667
00:14:21.616 --> 00:14:23.072 horror epidemic,
NOTE Confidence: 0.871686091666667
00:14:23.072 --> 00:14:26.876 that some very well educated and affluent
NOTE Confidence: 0.871686091666667
00:14:26.876 --> 00:14:29.300 families will come in and terrified
NOTE Confidence: 0.871686091666667
00:14:29.371 --> 00:14:31.717 that their child is mouth breathing,
NOTE Confidence: 0.871686091666667
00:14:31.720 --> 00:14:32.910 they've been taping their mouth
NOTE Confidence: 0.871686091666667
00:14:32.910 --> 00:14:34.364 shut at night and there's what's
NOTE Confidence: 0.871686091666667
00:14:34.364 --> 00:14:35.684 going to happen to the palate.
NOTE Confidence: 0.871686091666667
00:14:35.690 --> 00:14:37.874 This is been a lot driven by the
NOTE Confidence: 0.871686091666667
00:14:37.874 --> 00:14:39.540 dentist and the orthodontist.
NOTE Confidence: 0.871686091666667
00:14:39.540 --> 00:14:41.676 Umm, we don't have evidence that
NOTE Confidence: 0.871686091666667
00:14:41.676 --> 00:14:43.525 shows that this really matters
NOTE Confidence: 0.871686091666667
00:14:43.525 --> 00:14:45.685 at all from a sleep standpoint.
NOTE Confidence: 0.871686091666667

00:14:45.690 --> 00:14:46.083 Yes,
NOTE Confidence: 0.871686091666667

00:14:46.083 --> 00:14:48.048 if your palette is narrow,
NOTE Confidence: 0.871686091666667

00:14:48.050 --> 00:14:51.026 your nasal cavities are slightly narrower,
NOTE Confidence: 0.871686091666667

00:14:51.030 --> 00:14:52.926 and if you do palatal expansion,
NOTE Confidence: 0.871686091666667

00:14:52.930 --> 00:14:55.888 it will slightly decrease nasal resistance.
NOTE Confidence: 0.871686091666667

00:14:55.890 --> 00:14:57.390 But from a sleep study standpoint,
NOTE Confidence: 0.871686091666667

00:14:57.390 --> 00:14:58.394 and certainly in adults,
NOTE Confidence: 0.871686091666667

00:14:58.394 --> 00:15:00.576 it has not been shown to make a
NOTE Confidence: 0.871686091666667

00:15:00.576 --> 00:15:01.808 meaningful difference in HIV.
NOTE Confidence: 0.871686091666667

00:15:01.810 --> 00:15:03.810 That actually is the difference
NOTE Confidence: 0.871686091666667

00:15:03.810 --> 00:15:05.410 between having sleep apnea
NOTE Confidence: 0.871686091666667

00:15:05.410 --> 00:15:07.360 and not having sleep apnea.
NOTE Confidence: 0.871686091666667

00:15:07.360 --> 00:15:09.425 But powerful expansion will improve
NOTE Confidence: 0.871686091666667

00:15:09.425 --> 00:15:11.077 your nasal airway resistance,
NOTE Confidence: 0.871686091666667

00:15:11.080 --> 00:15:13.606 and it can help with snoring.
NOTE Confidence: 0.871686091666667

00:15:13.610 --> 00:15:15.490 But these kids will have restless sleep and

NOTE Confidence: 0.871686091666667
00:15:15.490 --> 00:15:17.838 a lot of chronic nasal obstruction symptoms.
NOTE Confidence: 0.871686091666667
00:15:17.840 --> 00:15:20.328 And what we do is is administer
NOTE Confidence: 0.871686091666667
00:15:20.328 --> 00:15:21.930 that Michigan questionnaire,
NOTE Confidence: 0.871686091666667
00:15:21.930 --> 00:15:24.150 which often will ask parents the
NOTE Confidence: 0.871686091666667
00:15:24.150 --> 00:15:26.390 questions in just the right way.
NOTE Confidence: 0.871686091666667
00:15:26.390 --> 00:15:28.819 I'm always amazed that they will answer
NOTE Confidence: 0.871686091666667
00:15:28.819 --> 00:15:31.838 one way on the questionnaire and then
NOTE Confidence: 0.871686091666667
00:15:31.838 --> 00:15:34.370 their response to me asking the same
NOTE Confidence: 0.871686091666667
00:15:34.370 --> 00:15:35.950 question will sometimes be different.
NOTE Confidence: 0.871686091666667
00:15:35.950 --> 00:15:37.275 So occasionally you have to
NOTE Confidence: 0.871686091666667
00:15:37.275 --> 00:15:38.600 sort of double check that.
NOTE Confidence: 0.832442792
00:15:40.640 --> 00:15:43.170 Just seeing if there's any.
NOTE Confidence: 0.832442792
00:15:43.170 --> 00:15:45.218 I just saw a text thing come up
NOTE Confidence: 0.832442792
00:15:45.218 --> 00:15:47.148 for the chat but I'm not seeing
NOTE Confidence: 0.832442792
00:15:47.148 --> 00:15:49.160 able to read it I guess OK.
NOTE Confidence: 0.29769713

00:15:52.110 --> 00:15:53.318 Let's listen to this kid.
NOTE Confidence: 0.7632172

00:15:59.040 --> 00:16:01.400 So she's asleep in her car seat.
NOTE Confidence: 0.7632172

00:16:01.400 --> 00:16:04.520 You can see her abdominal retraction,
NOTE Confidence: 0.7632172

00:16:04.520 --> 00:16:06.800 super sternal retractions.
NOTE Confidence: 0.7632172

00:16:06.800 --> 00:16:09.440 She's clearly pretty obstructive.
NOTE Confidence: 0.7632172

00:16:09.440 --> 00:16:12.424 This is the child of a physician who brought
NOTE Confidence: 0.7632172

00:16:12.424 --> 00:16:15.480 in this video sort of as a curiosity.
NOTE Confidence: 0.7632172

00:16:15.480 --> 00:16:17.740 She wasn't particularly worried.
NOTE Confidence: 0.7632172

00:16:17.740 --> 00:16:19.715 So sometimes parents are pretty
NOTE Confidence: 0.7632172

00:16:19.715 --> 00:16:22.160 underwhelmed by this sort of thing,
NOTE Confidence: 0.7632172

00:16:22.160 --> 00:16:24.080 and other times they are.
NOTE Confidence: 0.7632172

00:16:24.080 --> 00:16:24.982 They're terrified.
NOTE Confidence: 0.7632172

00:16:24.982 --> 00:16:28.590 But parents will tolerate this for a while.
NOTE Confidence: 0.7632172

00:16:28.590 --> 00:16:29.820 They kind of think it's cute,
NOTE Confidence: 0.7632172

00:16:29.820 --> 00:16:31.764 and we have to sort of let them
NOTE Confidence: 0.7632172

00:16:31.764 --> 00:16:33.440 know that this is not normal.

NOTE Confidence: 0.7632172

00:16:33.440 --> 00:16:35.196 Children shouldn't be snoring,

NOTE Confidence: 0.7632172

00:16:35.196 --> 00:16:38.520 and the sound that you're hearing there is.

NOTE Confidence: 0.7632172

00:16:38.520 --> 00:16:40.776 You can describe it as Strider,

NOTE Confidence: 0.7632172

00:16:40.780 --> 00:16:42.170 but the it's probably more

NOTE Confidence: 0.7632172

00:16:42.170 --> 00:16:43.560 accurate to call it sturdier,

NOTE Confidence: 0.7632172

00:16:43.560 --> 00:16:46.080 which is a term that everyone knows or uses.

NOTE Confidence: 0.7632172

00:16:46.080 --> 00:16:48.390 But that's basically the sound of snoring.

NOTE Confidence: 0.7632172

00:16:48.390 --> 00:16:49.545 And especially the sound of

NOTE Confidence: 0.7632172

00:16:49.545 --> 00:16:50.469 snoring when you're awake.

NOTE Confidence: 0.7632172

00:16:50.470 --> 00:16:52.540 So someone who's.

NOTE Confidence: 0.7632172

00:16:52.540 --> 00:16:54.436 In your office and you think they're snoring,

NOTE Confidence: 0.7632172

00:16:54.440 --> 00:16:56.225 you turn around in their

NOTE Confidence: 0.7632172

00:16:56.225 --> 00:16:57.296 wake that's sturdier,

NOTE Confidence: 0.7632172

00:16:57.300 --> 00:17:00.016 that's sort of the open mouth breathing

NOTE Confidence: 0.7632172

00:17:00.016 --> 00:17:01.748 nasal obstruction and and that's really

NOTE Confidence: 0.7632172

00:17:01.748 --> 00:17:03.480 what we're looking for and asking about.
NOTE Confidence: 0.7632172

00:17:03.480 --> 00:17:06.168 Strider is at the laryngeal level
NOTE Confidence: 0.7632172

00:17:06.168 --> 00:17:08.519 and that's more musical like a
NOTE Confidence: 0.7632172

00:17:08.520 --> 00:17:10.970 sound like what we call the Ringo
NOTE Confidence: 0.7632172

00:17:10.970 --> 00:17:13.168 Malaysia in the in the infants.
NOTE Confidence: 0.7632172

00:17:13.170 --> 00:17:16.446 Starter is often caused by nasal obstruction,
NOTE Confidence: 0.7632172

00:17:16.450 --> 00:17:18.310 obstruction of the soft palate level.
NOTE Confidence: 0.7632172

00:17:18.310 --> 00:17:19.540 And so here you can see
NOTE Confidence: 0.7632172

00:17:19.540 --> 00:17:20.650 in the lateral neck film,
NOTE Confidence: 0.7632172

00:17:20.650 --> 00:17:22.370 which we actually don't get that often now,
NOTE Confidence: 0.7632172

00:17:22.370 --> 00:17:23.166 but you always can.
NOTE Confidence: 0.7632172

00:17:23.166 --> 00:17:24.360 If you have a patient that
NOTE Confidence: 0.7632172

00:17:24.407 --> 00:17:25.747 can't tolerate nasal endoscopy,
NOTE Confidence: 0.7632172

00:17:25.750 --> 00:17:28.130 you will see that adenoid which is
NOTE Confidence: 0.7632172

00:17:28.130 --> 00:17:30.007 is partially blocking the nasal
NOTE Confidence: 0.7632172

00:17:30.007 --> 00:17:31.587 pharyngeal airway right here.

NOTE Confidence: 0.7632172

00:17:31.590 --> 00:17:33.126 So we can see the borders of the

NOTE Confidence: 0.7632172

00:17:33.126 --> 00:17:34.555 adenoid here in the soft palate here

NOTE Confidence: 0.7632172

00:17:34.555 --> 00:17:36.259 and there's a column of air and that

NOTE Confidence: 0.7632172

00:17:36.259 --> 00:17:37.567 patient is able to breathe there.

NOTE Confidence: 0.7632172

00:17:37.570 --> 00:17:39.481 But the adenoid really should be about

NOTE Confidence: 0.7632172

00:17:39.481 --> 00:17:41.826 half the size and so this will cause

NOTE Confidence: 0.7632172

00:17:41.826 --> 00:17:43.296 some degree of nasal obstruction.

NOTE Confidence: 0.7632172

00:17:43.300 --> 00:17:43.654 Good.

NOTE Confidence: 0.7632172

00:17:43.654 --> 00:17:46.840 And so this is a view on nasal endoscopy

NOTE Confidence: 0.7632172

00:17:46.917 --> 00:17:49.374 of a three to four plus adenoid,

NOTE Confidence: 0.7632172

00:17:49.380 --> 00:17:50.865 it's it's four plus would

NOTE Confidence: 0.7632172

00:17:50.865 --> 00:17:51.756 be completely obstructed,

NOTE Confidence: 0.7632172

00:17:51.760 --> 00:17:53.208 but it's pretty close.

NOTE Confidence: 0.7632172

00:17:53.208 --> 00:17:55.890 And so this is the patients left

NOTE Confidence: 0.7632172

00:17:55.890 --> 00:17:56.758 nasal cavity.

NOTE Confidence: 0.7632172

00:17:56.760 --> 00:17:59.072 So this is the nasal septum and the
NOTE Confidence: 0.7632172

00:17:59.072 --> 00:18:01.284 adenoid is filling that area and this
NOTE Confidence: 0.7632172

00:18:01.284 --> 00:18:03.918 is pretty much the same view but with
NOTE Confidence: 0.7632172

00:18:03.918 --> 00:18:05.916 the adenoid removed or shrunk back
NOTE Confidence: 0.7632172

00:18:05.916 --> 00:18:08.154 that we would call this A1 plus adenoid.
NOTE Confidence: 0.7632172

00:18:08.160 --> 00:18:11.016 It's present but it isn't larger obstructive.
NOTE Confidence: 0.7632172

00:18:11.020 --> 00:18:13.050 So you can see that's a pretty
NOTE Confidence: 0.7632172

00:18:13.050 --> 00:18:14.461 big hole that is plugged.
NOTE Confidence: 0.7632172

00:18:14.461 --> 00:18:16.507 By that adenoid and in children
NOTE Confidence: 0.7632172

00:18:16.507 --> 00:18:18.550 who are obligate nasal breathers,
NOTE Confidence: 0.7632172

00:18:18.550 --> 00:18:19.570 they they really want to
NOTE Confidence: 0.7632172

00:18:19.570 --> 00:18:20.386 breathe through their nose.
NOTE Confidence: 0.7632172

00:18:20.390 --> 00:18:22.688 A large adenoid is is debilitating.
NOTE Confidence: 0.7632172

00:18:22.690 --> 00:18:23.244 It's hard,
NOTE Confidence: 0.7632172

00:18:23.244 --> 00:18:24.906 they can't chew because they can't,
NOTE Confidence: 0.7632172

00:18:24.910 --> 00:18:26.015 and they can't drink because

NOTE Confidence: 0.7632172

00:18:26.015 --> 00:18:27.681 they need to be able to breathe

NOTE Confidence: 0.7632172

00:18:27.681 --> 00:18:29.205 through their nose while they eat,

NOTE Confidence: 0.7632172

00:18:29.210 --> 00:18:31.328 and that can cause coughing and

NOTE Confidence: 0.7632172

00:18:31.328 --> 00:18:33.242 dysphasia because they can't coordinate

NOTE Confidence: 0.7632172

00:18:33.242 --> 00:18:35.447 their suck swallow breed sequence.

NOTE Confidence: 0.7632172

00:18:35.450 --> 00:18:37.136 This is the Eustachian tube Orpheus.

NOTE Confidence: 0.7632172

00:18:37.140 --> 00:18:39.646 What's popping your ears on the airplane?

NOTE Confidence: 0.7632172

00:18:39.650 --> 00:18:39.898 Why?

NOTE Confidence: 0.7632172

00:18:39.898 --> 00:18:42.130 When you swallow or chew gum it will open

NOTE Confidence: 0.850880301818182

00:18:42.189 --> 00:18:44.149 your ears and you can see it's

NOTE Confidence: 0.850880301818182

00:18:44.149 --> 00:18:45.700 completely blocked by the adenoid.

NOTE Confidence: 0.850880301818182

00:18:45.700 --> 00:18:47.968 So many of these kids will have

NOTE Confidence: 0.850880301818182

00:18:47.968 --> 00:18:49.612 a serious effusions, you know,

NOTE Confidence: 0.850880301818182

00:18:49.612 --> 00:18:50.956 fluid behind their eardrums.

NOTE Confidence: 0.850880301818182

00:18:50.960 --> 00:18:53.528 And so the overlap of children that have

NOTE Confidence: 0.850880301818182

00:18:53.528 --> 00:18:55.426 conductive hearing loss because of ear
NOTE Confidence: 0.850880301818182

00:18:55.426 --> 00:18:57.581 fluid or recurrent otitis media and also
NOTE Confidence: 0.850880301818182

00:18:57.581 --> 00:18:59.516 have large adenoids is very, very high.
NOTE Confidence: 0.850880301818182

00:18:59.516 --> 00:19:01.260 And that's why if you're looking at past
NOTE Confidence: 0.850880301818182

00:19:01.305 --> 00:19:03.057 medical history or past surgical history,
NOTE Confidence: 0.850880301818182

00:19:03.060 --> 00:19:05.841 you'll see a lot of these kids have had
NOTE Confidence: 0.850880301818182

00:19:05.841 --> 00:19:08.783 tubes and adenoids at the same time or
NOTE Confidence: 0.850880301818182

00:19:08.783 --> 00:19:10.979 adenoids and tonsils with ear tubes.
NOTE Confidence: 0.850880301818182

00:19:10.980 --> 00:19:12.792 That's why, because that's
NOTE Confidence: 0.850880301818182

00:19:12.792 --> 00:19:14.604 where they overlap is.
NOTE Confidence: 0.850880301818182

00:19:14.610 --> 00:19:15.651 So sleep study.
NOTE Confidence: 0.850880301818182

00:19:15.651 --> 00:19:17.733 I would argue is not really
NOTE Confidence: 0.850880301818182

00:19:17.733 --> 00:19:19.547 necessary in healthy children
NOTE Confidence: 0.850880301818182

00:19:19.547 --> 00:19:21.415 with sleep disorder breathing,
NOTE Confidence: 0.850880301818182

00:19:21.420 --> 00:19:23.692 if they have a high enough score and
NOTE Confidence: 0.850880301818182

00:19:23.692 --> 00:19:25.263 they're struggling to breathe enough

NOTE Confidence: 0.850880301818182
00:19:25.263 --> 00:19:27.153 and it's disrupting their sleep and
NOTE Confidence: 0.850880301818182
00:19:27.153 --> 00:19:28.829 leading to what we can all guess
NOTE Confidence: 0.850880301818182
00:19:28.829 --> 00:19:30.078 is at least sleep fragmentation,
NOTE Confidence: 0.850880301818182
00:19:30.078 --> 00:19:33.480 then you have what you need to do surgery.
NOTE Confidence: 0.850880301818182
00:19:33.480 --> 00:19:34.592 That's what insurance says.
NOTE Confidence: 0.850880301818182
00:19:34.592 --> 00:19:37.360 And so if a child is otherwise healthy,
NOTE Confidence: 0.850880301818182
00:19:37.360 --> 00:19:38.680 we will take their tonsils and
NOTE Confidence: 0.850880301818182
00:19:38.680 --> 00:19:40.239 adenoids out based on those symptoms.
NOTE Confidence: 0.850880301818182
00:19:40.240 --> 00:19:41.870 You don't have to necessarily
NOTE Confidence: 0.850880301818182
00:19:41.870 --> 00:19:43.174 get a sleep study.
NOTE Confidence: 0.850880301818182
00:19:43.180 --> 00:19:45.511 That matters because you guys know how
NOTE Confidence: 0.850880301818182
00:19:45.511 --> 00:19:47.919 long the wait is for sleep studies.
NOTE Confidence: 0.850880301818182
00:19:47.920 --> 00:19:49.780 And in the era of RSV,
NOTE Confidence: 0.850880301818182
00:19:49.780 --> 00:19:51.523 and every kid is now sick with
NOTE Confidence: 0.850880301818182
00:19:51.523 --> 00:19:53.573 that calling at the last minute and
NOTE Confidence: 0.850880301818182

00:19:53.573 --> 00:19:55.133 all the cancellations are COVID.
NOTE Confidence: 0.850880301818182

00:19:55.140 --> 00:19:58.395 The access for sleep studies is very,
NOTE Confidence: 0.850880301818182

00:19:58.400 --> 00:19:59.228 very difficult.
NOTE Confidence: 0.850880301818182

00:19:59.228 --> 00:20:02.540 And so if we send every single snoring
NOTE Confidence: 0.850880301818182

00:20:02.623 --> 00:20:05.077 healthy child for a sleep study,
NOTE Confidence: 0.850880301818182

00:20:05.080 --> 00:20:07.474 there would never be the opportunity
NOTE Confidence: 0.850880301818182

00:20:07.474 --> 00:20:10.599 to to assess those that really need it.
NOTE Confidence: 0.850880301818182

00:20:10.600 --> 00:20:12.082 Of course it's important for adults
NOTE Confidence: 0.850880301818182

00:20:12.082 --> 00:20:13.610 and older kids if you're going
NOTE Confidence: 0.850880301818182

00:20:13.610 --> 00:20:15.080 to use it for CPAP titration,
NOTE Confidence: 0.850880301818182

00:20:15.080 --> 00:20:17.240 but if the answer is the kid is big tonsils,
NOTE Confidence: 0.850880301818182

00:20:17.240 --> 00:20:18.398 we're going to take them out.
NOTE Confidence: 0.850880301818182

00:20:18.400 --> 00:20:20.272 You're probably not going to get a post
NOTE Confidence: 0.850880301818182

00:20:20.272 --> 00:20:22.310 op sleep study if all symptoms resolved,
NOTE Confidence: 0.850880301818182

00:20:22.310 --> 00:20:25.100 so we don't reflexively get it.
NOTE Confidence: 0.850880301818182

00:20:25.100 --> 00:20:28.265 Hartfield in otolaryngology says these

NOTE Confidence: 0.850880301818182
00:20:28.265 --> 00:20:31.028 are the absolute, like essential.
NOTE Confidence: 0.850880301818182
00:20:31.028 --> 00:20:33.173 Instances in which one must
NOTE Confidence: 0.850880301818182
00:20:33.173 --> 00:20:35.010 get a sleep study.
NOTE Confidence: 0.850880301818182
00:20:35.010 --> 00:20:36.459 If you do not get a sleep
NOTE Confidence: 0.850880301818182
00:20:36.459 --> 00:20:37.450 study in these cases,
NOTE Confidence: 0.850880301818182
00:20:37.450 --> 00:20:40.002 you are out of left field and probably
NOTE Confidence: 0.850880301818182
00:20:40.002 --> 00:20:41.968 not practicing the standard of care.
NOTE Confidence: 0.850880301818182
00:20:41.970 --> 00:20:43.266 And so that's important I think
NOTE Confidence: 0.850880301818182
00:20:43.266 --> 00:20:44.942 for you guys to know, you know,
NOTE Confidence: 0.850880301818182
00:20:44.942 --> 00:20:47.070 if you're in charge of a sleep center,
NOTE Confidence: 0.850880301818182
00:20:47.070 --> 00:20:49.686 understand like why is this kid getting this?
NOTE Confidence: 0.850880301818182
00:20:49.690 --> 00:20:52.042 If their BMI for age is above the
NOTE Confidence: 0.850880301818182
00:20:52.042 --> 00:20:53.770 98th percentile and some say 95th,
NOTE Confidence: 0.850880301818182
00:20:53.770 --> 00:20:55.044 they have to get a sleep study.
NOTE Confidence: 0.850880301818182
00:20:55.050 --> 00:20:57.482 If I take that kid to the OR
NOTE Confidence: 0.850880301818182

00:20:57.482 --> 00:20:59.130 without a sleep study,
NOTE Confidence: 0.850880301818182

00:20:59.130 --> 00:21:00.417 that is not,
NOTE Confidence: 0.850880301818182

00:21:00.417 --> 00:21:03.420 that's a direct violation of our guidelines.
NOTE Confidence: 0.850880301818182

00:21:03.420 --> 00:21:05.764 And the reason why is because the pretest
NOTE Confidence: 0.850880301818182

00:21:05.764 --> 00:21:07.818 probability of patients with these issues,
NOTE Confidence: 0.850880301818182

00:21:07.820 --> 00:21:09.710 the pretest probability of they're
NOTE Confidence: 0.850880301818182

00:21:09.710 --> 00:21:11.980 having severe OSA is very high.
NOTE Confidence: 0.850880301818182

00:21:11.980 --> 00:21:14.333 And so if you just turn a blind eye to it
NOTE Confidence: 0.850880301818182

00:21:14.333 --> 00:21:16.610 and go and take out the tonsils or adenoids,
NOTE Confidence: 0.850880301818182

00:21:16.610 --> 00:21:18.114 your complication rate afterwards,
NOTE Confidence: 0.850880301818182

00:21:18.114 --> 00:21:20.911 your likelihood of needing to all of a
NOTE Confidence: 0.850880301818182

00:21:20.911 --> 00:21:22.855 sudden go to the ICU minimally to admit
NOTE Confidence: 0.800198402083333

00:21:22.913 --> 00:21:25.154 them afterwards is very, very high.
NOTE Confidence: 0.800198402083333

00:21:25.154 --> 00:21:27.896 So patients with sickle cell anemia,
NOTE Confidence: 0.800198402083333

00:21:27.900 --> 00:21:30.275 obesity of mucopolysaccharidosis or some
NOTE Confidence: 0.800198402083333

00:21:30.275 --> 00:21:32.715 sort of storage disease, craniosynostosis.

NOTE Confidence: 0.800198402083333
00:21:32.715 --> 00:21:36.460 Cleft lip and palate rail ban sequence,
NOTE Confidence: 0.800198402083333
00:21:36.460 --> 00:21:38.479 micrognathia, craniofacial stuff,
NOTE Confidence: 0.800198402083333
00:21:38.479 --> 00:21:40.984 anyone with hypotonia, Charcot,
NOTE Confidence: 0.800198402083333
00:21:40.984 --> 00:21:42.920 Marie Tooth, cerebral palsy,
NOTE Confidence: 0.800198402083333
00:21:42.920 --> 00:21:45.260 those kids all need sleep studies.
NOTE Confidence: 0.800198402083333
00:21:45.260 --> 00:21:46.560 And then there's the
NOTE Confidence: 0.800198402083333
00:21:46.560 --> 00:21:47.860 recommendation that like look,
NOTE Confidence: 0.800198402083333
00:21:47.860 --> 00:21:49.234 if they're under two that's that's
NOTE Confidence: 0.800198402083333
00:21:49.234 --> 00:21:50.948 pretty young to take their tonsils out.
NOTE Confidence: 0.800198402083333
00:21:50.950 --> 00:21:52.348 You probably want to sleep study
NOTE Confidence: 0.800198402083333
00:21:52.348 --> 00:21:53.840 that says it's OK to do that.
NOTE Confidence: 0.800198402083333
00:21:53.840 --> 00:21:54.904 I would just make the argument that
NOTE Confidence: 0.800198402083333
00:21:54.904 --> 00:21:56.152 by the time you get the sleep study
NOTE Confidence: 0.800198402083333
00:21:56.152 --> 00:21:58.062 and it comes back, they're over too,
NOTE Confidence: 0.800198402083333
00:21:58.062 --> 00:21:59.798 because they rarely are.
NOTE Confidence: 0.800198402083333

00:21:59.800 --> 00:22:01.880 Are are presenting that young,
NOTE Confidence: 0.800198402083333

00:22:01.880 --> 00:22:03.595 it can be helpful for the infants,
NOTE Confidence: 0.800198402083333

00:22:03.600 --> 00:22:05.092 especially if there's something
NOTE Confidence: 0.800198402083333

00:22:05.092 --> 00:22:05.838 else happening.
NOTE Confidence: 0.800198402083333

00:22:05.840 --> 00:22:07.984 And then the big one, and I had a
NOTE Confidence: 0.800198402083333

00:22:07.984 --> 00:22:09.580 a perfect example of it on Friday,
NOTE Confidence: 0.800198402083333

00:22:09.580 --> 00:22:10.678 is parental disagreement.
NOTE Confidence: 0.800198402083333

00:22:10.678 --> 00:22:12.874 So Dad's an engineer and he's
NOTE Confidence: 0.800198402083333

00:22:12.874 --> 00:22:15.108 super data-driven and he wants to
NOTE Confidence: 0.800198402083333

00:22:15.108 --> 00:22:16.908 know exactly what we're treating
NOTE Confidence: 0.800198402083333

00:22:16.977 --> 00:22:18.538 and why and how bad it is.
NOTE Confidence: 0.800198402083333

00:22:18.540 --> 00:22:21.610 And Mom is like this kid can't get up and
NOTE Confidence: 0.800198402083333

00:22:21.693 --> 00:22:24.762 to for school in the morning and you are,
NOTE Confidence: 0.800198402083333

00:22:24.770 --> 00:22:25.126 you know,
NOTE Confidence: 0.800198402083333

00:22:25.126 --> 00:22:26.057 asleep on the couch, dad.
NOTE Confidence: 0.800198402083333

00:22:26.057 --> 00:22:27.793 But I'm watching them obstruct all the time.

NOTE Confidence: 0.800198402083333
00:22:27.800 --> 00:22:28.880 I don't need a sleep study,
NOTE Confidence: 0.800198402083333
00:22:28.880 --> 00:22:31.099 like let's just make this go away.
NOTE Confidence: 0.800198402083333
00:22:31.100 --> 00:22:34.132 The wait time for sleep study and then
NOTE Confidence: 0.800198402083333
00:22:34.132 --> 00:22:36.458 surgery as opposed to surgery alone
NOTE Confidence: 0.800198402083333
00:22:36.458 --> 00:22:39.700 is a on average four to five months.
NOTE Confidence: 0.800198402083333
00:22:39.700 --> 00:22:42.045 So it's a significant delay and that.
NOTE Confidence: 0.800198402083333
00:22:42.050 --> 00:22:45.210 Matter to some families.
NOTE Confidence: 0.800198402083333
00:22:45.210 --> 00:22:45.531 So.
NOTE Confidence: 0.800198402083333
00:22:45.531 --> 00:22:48.099 Why we get sleep studies is to determine
NOTE Confidence: 0.800198402083333
00:22:48.099 --> 00:22:50.657 and risk stratify who has to get
NOTE Confidence: 0.800198402083333
00:22:50.657 --> 00:22:52.910 admitted to our hospitals afterwards.
NOTE Confidence: 0.800198402083333
00:22:52.910 --> 00:22:54.458 And so the three hard recommendations
NOTE Confidence: 0.800198402083333
00:22:54.458 --> 00:22:56.731 for kids who must get admitted after
NOTE Confidence: 0.800198402083333
00:22:56.731 --> 00:22:57.925 tonsillectomy and adenoidectomy,
NOTE Confidence: 0.800198402083333
00:22:57.930 --> 00:22:59.196 this is not for adenoids alone.
NOTE Confidence: 0.800198402083333

00:22:59.200 --> 00:23:02.140 This for tonsils and adenoids is age
NOTE Confidence: 0.800198402083333

00:23:02.140 --> 00:23:05.081 under three years and HI above 10 and
NOTE Confidence: 0.800198402083333

00:23:05.081 --> 00:23:08.529 assassinator that's 80 or below or below 80.
NOTE Confidence: 0.800198402083333

00:23:08.530 --> 00:23:10.816 And so the ones I showed you are are
NOTE Confidence: 0.800198402083333

00:23:10.816 --> 00:23:12.987 that we say must get a sleep study.
NOTE Confidence: 0.800198402083333

00:23:12.990 --> 00:23:15.433 They're the ones that the highest likelihood
NOTE Confidence: 0.800198402083333

00:23:15.433 --> 00:23:18.097 of having a high HIV and a saturator.
NOTE Confidence: 0.800198402083333

00:23:18.100 --> 00:23:19.873 And so that's sort of how we determine that.
NOTE Confidence: 0.827658395454545

00:23:22.160 --> 00:23:23.016 Treatment options.
NOTE Confidence: 0.827658395454545

00:23:23.016 --> 00:23:25.156 Cpap is probably the first
NOTE Confidence: 0.827658395454545

00:23:25.156 --> 00:23:26.990 line treatment in adults.
NOTE Confidence: 0.827658395454545

00:23:26.990 --> 00:23:29.358 I mean, I think that's fair to say
NOTE Confidence: 0.827658395454545

00:23:29.358 --> 00:23:31.609 that PAP therapy is is is there.
NOTE Confidence: 0.827658395454545

00:23:31.610 --> 00:23:32.926 We don't commonly use it in kids,
NOTE Confidence: 0.827658395454545

00:23:32.930 --> 00:23:34.652 but you can. I have multiple
NOTE Confidence: 0.827658395454545

00:23:34.652 --> 00:23:36.629 children on CPAP and they love it.

NOTE Confidence: 0.827658395454545
00:23:36.630 --> 00:23:40.122 I have a couple of like morbidly obese kids,
NOTE Confidence: 0.827658395454545
00:23:40.130 --> 00:23:42.130 one of them who was on bypass and
NOTE Confidence: 0.827658395454545
00:23:42.130 --> 00:23:44.155 she used to come home and put her
NOTE Confidence: 0.827658395454545
00:23:44.155 --> 00:23:46.164 Bipap mask on to do homework because
NOTE Confidence: 0.827658395454545
00:23:46.164 --> 00:23:48.108 she just felt so much better.
NOTE Confidence: 0.827658395454545
00:23:48.110 --> 00:23:51.316 The poor thing was so pickwickian that
NOTE Confidence: 0.827658395454545
00:23:51.316 --> 00:23:54.595 when she had her PAP on, she just felt.
NOTE Confidence: 0.827658395454545
00:23:54.595 --> 00:23:56.520 Better breathe better and she would just
NOTE Confidence: 0.827658395454545
00:23:56.570 --> 00:23:58.466 do her homework with her PAP on awake,
NOTE Confidence: 0.827658395454545
00:23:58.470 --> 00:24:00.486 so many of them feel like it really,
NOTE Confidence: 0.827658395454545
00:24:00.490 --> 00:24:01.734 really helps.
NOTE Confidence: 0.827658395454545
00:24:01.734 --> 00:24:04.844 She had big tonsils too,
NOTE Confidence: 0.827658395454545
00:24:04.850 --> 00:24:07.690 but she was so large that it enters.
NOTE Confidence: 0.827658395454545
00:24:07.690 --> 00:24:09.202 HI was so high that if she
NOTE Confidence: 0.827658395454545
00:24:09.202 --> 00:24:10.829 did make it through surgery,
NOTE Confidence: 0.827658395454545

00:24:10.830 --> 00:24:11.971 she was still going to end up
NOTE Confidence: 0.827658395454545

00:24:11.971 --> 00:24:13.068 needing to be on PAP therapy,
NOTE Confidence: 0.827658395454545

00:24:13.070 --> 00:24:15.506 and so it isn't really worth the
NOTE Confidence: 0.827658395454545

00:24:15.506 --> 00:24:18.696 risk of putting a kid with multiple
NOTE Confidence: 0.827658395454545

00:24:18.696 --> 00:24:20.250 comorbidities through surgery.
NOTE Confidence: 0.827658395454545

00:24:20.250 --> 00:24:20.790 In fact,
NOTE Confidence: 0.827658395454545

00:24:20.790 --> 00:24:23.328 the way I got to meet her was that
NOTE Confidence: 0.827658395454545

00:24:23.328 --> 00:24:25.463 some other doctor tried to do a
NOTE Confidence: 0.827658395454545

00:24:25.463 --> 00:24:28.386 T&A on her and she had horrible
NOTE Confidence: 0.827658395454545

00:24:28.386 --> 00:24:30.174 post obstructive pulmonary edema
NOTE Confidence: 0.827658395454545

00:24:30.174 --> 00:24:32.040 right as they were intubating her
NOTE Confidence: 0.827658395454545

00:24:32.040 --> 00:24:33.450 before they even did surgery.
NOTE Confidence: 0.827658395454545

00:24:33.450 --> 00:24:34.968 And so in that setting they
NOTE Confidence: 0.827658395454545

00:24:34.968 --> 00:24:36.440 never even touched her tonsils,
NOTE Confidence: 0.827658395454545

00:24:36.440 --> 00:24:37.960 they never did surgery and
NOTE Confidence: 0.827658395454545

00:24:37.960 --> 00:24:39.912 they transported her to our ICU

NOTE Confidence: 0.827658395454545
00:24:39.912 --> 00:24:41.400 in fulminant pulmonary edema.
NOTE Confidence: 0.827658395454545
00:24:41.400 --> 00:24:44.352 And by the time we checked our A1C
NOTE Confidence: 0.827658395454545
00:24:44.352 --> 00:24:47.544 and saw the degree of of right sided
NOTE Confidence: 0.827658395454545
00:24:47.544 --> 00:24:50.406 hypertrophy and whatnot all you know.
NOTE Confidence: 0.827658395454545
00:24:50.410 --> 00:24:51.586 Downstream secondary effects of
NOTE Confidence: 0.827658395454545
00:24:51.586 --> 00:24:53.056 her sort of metabolic syndrome.
NOTE Confidence: 0.827658395454545
00:24:53.060 --> 00:24:54.263 It was tapped.
NOTE Confidence: 0.827658395454545
00:24:54.263 --> 00:24:56.669 Therapy's been the best for her.
NOTE Confidence: 0.827658395454545
00:24:56.670 --> 00:24:58.890 And so those are who we decide to do that.
NOTE Confidence: 0.827658395454545
00:24:58.890 --> 00:25:00.780 If you do have to desensitize this
NOTE Confidence: 0.827658395454545
00:25:00.780 --> 00:25:02.748 child as CPAP, for lack of a better term,
NOTE Confidence: 0.827658395454545
00:25:02.750 --> 00:25:03.540 this is how it works.
NOTE Confidence: 0.827658395454545
00:25:03.540 --> 00:25:04.926 You've met them to the hospital.
NOTE Confidence: 0.827658395454545
00:25:04.930 --> 00:25:06.218 You put the PAP mask on them,
NOTE Confidence: 0.827658395454545
00:25:06.220 --> 00:25:07.020 the kid takes it off,
NOTE Confidence: 0.827658395454545

00:25:07.020 --> 00:25:08.116 you put it on, they take it off,
NOTE Confidence: 0.827658395454545

00:25:08.120 --> 00:25:09.424 you put it on, they take it off.
NOTE Confidence: 0.827658395454545

00:25:09.430 --> 00:25:11.311 And you do this for like 2-3 nights in
NOTE Confidence: 0.827658395454545

00:25:11.311 --> 00:25:13.567 a row until you finally break the child.
NOTE Confidence: 0.827658395454545

00:25:13.570 --> 00:25:15.028 And then they wear their CPAP.
NOTE Confidence: 0.827658395454545

00:25:15.030 --> 00:25:16.962 And so that's what an admission
NOTE Confidence: 0.827658395454545

00:25:16.962 --> 00:25:18.250 for CPAP looks like.
NOTE Confidence: 0.827658395454545

00:25:18.250 --> 00:25:20.686 These are the surgeries that we do.
NOTE Confidence: 0.827658395454545

00:25:20.690 --> 00:25:23.658 And so these are tonsils and adenoids
NOTE Confidence: 0.827658395454545

00:25:23.658 --> 00:25:26.968 and then the other sleep procedures.
NOTE Confidence: 0.827658395454545

00:25:26.970 --> 00:25:30.150 TNA cures 65% of pediatric OSA,
NOTE Confidence: 0.827658395454545

00:25:30.150 --> 00:25:33.588 higher rate of improvement and curing,
NOTE Confidence: 0.827658395454545

00:25:33.590 --> 00:25:33.949 snoring.
NOTE Confidence: 0.827658395454545

00:25:33.949 --> 00:25:36.821 But if you really stick them back in
NOTE Confidence: 0.827658395454545

00:25:36.821 --> 00:25:39.049 your sleep center and really look
NOTE Confidence: 0.827658395454545

00:25:39.049 --> 00:25:41.727 to get their HI below one is 65%.

NOTE Confidence: 0.827658395454545
00:25:41.727 --> 00:25:45.120 The others go from an HIV of 14 to
NOTE Confidence: 0.827658395454545
00:25:45.217 --> 00:25:47.486 an HIV 1.6, but that's not cure.
NOTE Confidence: 0.827658395454545
00:25:47.490 --> 00:25:49.150 So technically if you're really
NOTE Confidence: 0.827658395454545
00:25:49.150 --> 00:25:50.765 looking for that it's 65%.
NOTE Confidence: 0.827658395454545
00:25:50.765 --> 00:25:52.760 But in terms of responding to for
NOTE Confidence: 0.827658395454545
00:25:52.760 --> 00:25:54.489 all intensive purposes being much,
NOTE Confidence: 0.827658395454545
00:25:54.490 --> 00:25:56.200 much better that's that's higher
NOTE Confidence: 0.827658395454545
00:25:56.200 --> 00:25:58.351 that's probably. Close to 90%.
NOTE Confidence: 0.827658395454545
00:25:58.351 --> 00:26:01.273 The recovery is rough from tonsillectomy.
NOTE Confidence: 0.827658395454545
00:26:01.280 --> 00:26:03.254 A lot of my colleagues undersell it,
NOTE Confidence: 0.901838695
00:26:03.260 --> 00:26:04.430 but it's brutal.
NOTE Confidence: 0.901838695
00:26:04.430 --> 00:26:06.380 It's especially for a teenager.
NOTE Confidence: 0.901838695
00:26:06.380 --> 00:26:08.480 It's two weeks of eating glass.
NOTE Confidence: 0.901838695
00:26:08.480 --> 00:26:12.770 The bleeding rate for a teenager is 10 to to.
NOTE Confidence: 0.901838695
00:26:12.770 --> 00:26:15.250 Is probably close to 10%.
NOTE Confidence: 0.901838695

00:26:15.250 --> 00:26:17.746 For a younger child who's three to six,
NOTE Confidence: 0.901838695

00:26:17.750 --> 00:26:21.040 it's probably closer to 3%.
NOTE Confidence: 0.901838695

00:26:21.040 --> 00:26:22.352 But children die every
NOTE Confidence: 0.901838695

00:26:22.352 --> 00:26:23.336 year from tonsillectomy.
NOTE Confidence: 0.901838695

00:26:23.340 --> 00:26:25.300 So you got to be sure you really need to
NOTE Confidence: 0.901838695

00:26:25.358 --> 00:26:27.176 do it and it's the right thing to do.
NOTE Confidence: 0.901838695

00:26:27.180 --> 00:26:28.797 There are other surgeries you can do
NOTE Confidence: 0.901838695

00:26:28.797 --> 00:26:30.558 for those that fail and that's what the
NOTE Confidence: 0.901838695

00:26:30.558 --> 00:26:32.440 rest of this talk is going to be about.
NOTE Confidence: 0.901838695

00:26:32.440 --> 00:26:34.564 And those run the gamut from
NOTE Confidence: 0.901838695

00:26:34.564 --> 00:26:35.626 just nasal stuff.
NOTE Confidence: 0.901838695

00:26:35.630 --> 00:26:37.232 Sometimes we do that just to
NOTE Confidence: 0.901838695

00:26:37.232 --> 00:26:38.585 improve nasal resistance to CPAP
NOTE Confidence: 0.901838695

00:26:38.585 --> 00:26:39.989 therapy so people can come down
NOTE Confidence: 0.901838695

00:26:39.989 --> 00:26:41.596 on their PAP settings and that
NOTE Confidence: 0.901838695

00:26:41.596 --> 00:26:43.026 may be the difference between,

NOTE Confidence: 0.901838695

00:26:43.030 --> 00:26:44.805 you know belching and feeling

NOTE Confidence: 0.901838695

00:26:44.805 --> 00:26:45.870 like you're you're,

NOTE Confidence: 0.901838695

00:26:45.870 --> 00:26:47.568 you're feeling your stomach with air

NOTE Confidence: 0.901838695

00:26:47.568 --> 00:26:49.320 because your PAP levels are so high,

NOTE Confidence: 0.901838695

00:26:49.320 --> 00:26:51.080 but then when you fix the septum and.

NOTE Confidence: 0.901838695

00:26:51.080 --> 00:26:51.815 Leave the terminates.

NOTE Confidence: 0.901838695

00:26:51.815 --> 00:26:53.285 You don't clear their sleep apnea,

NOTE Confidence: 0.901838695

00:26:53.290 --> 00:26:55.194 but now they can come down to maybe

NOTE Confidence: 0.901838695

00:26:55.194 --> 00:26:57.197 like 6 or 8 centimeters of water,

NOTE Confidence: 0.901838695

00:26:57.200 --> 00:26:59.066 and then they don't get all

NOTE Confidence: 0.901838695

00:26:59.066 --> 00:27:00.323 of that swallowing of air.

NOTE Confidence: 0.901838695

00:27:00.323 --> 00:27:00.956 And they're not,

NOTE Confidence: 0.901838695

00:27:00.960 --> 00:27:02.936 they're not opening their

NOTE Confidence: 0.901838695

00:27:02.936 --> 00:27:04.418 upper esophageal sphincter.

NOTE Confidence: 0.901838695

00:27:04.420 --> 00:27:06.340 So for a preop assessment,

NOTE Confidence: 0.901838695

00:27:06.340 --> 00:27:07.640 we look at their comorbidities,
NOTE Confidence: 0.901838695

00:27:07.640 --> 00:27:08.815 decide if they need inpatient
NOTE Confidence: 0.901838695

00:27:08.815 --> 00:27:09.990 or outpatient based on age,
NOTE Confidence: 0.901838695

00:27:09.990 --> 00:27:11.634 whether they need a sleep study
NOTE Confidence: 0.901838695

00:27:11.634 --> 00:27:13.339 and then based on that whether
NOTE Confidence: 0.901838695

00:27:13.339 --> 00:27:15.191 they need to pick your bed and
NOTE Confidence: 0.901838695

00:27:15.191 --> 00:27:16.457 you run the risk of bleeding.
NOTE Confidence: 0.901838695

00:27:16.460 --> 00:27:17.740 You ask about, you know,
NOTE Confidence: 0.901838695

00:27:17.740 --> 00:27:18.980 risk factors in the family,
NOTE Confidence: 0.901838695

00:27:18.980 --> 00:27:20.780 people who have bleeding after surgery.
NOTE Confidence: 0.901838695

00:27:20.780 --> 00:27:23.024 And then you counsel people on, you know,
NOTE Confidence: 0.901838695

00:27:23.024 --> 00:27:24.578 how the recovery is going to be.
NOTE Confidence: 0.901838695

00:27:24.580 --> 00:27:25.770 So here's your typical case,
NOTE Confidence: 0.901838695

00:27:25.770 --> 00:27:27.194 3 year old girl,
NOTE Confidence: 0.901838695

00:27:27.194 --> 00:27:28.974 she's got a pectus excavatum
NOTE Confidence: 0.901838695

00:27:28.980 --> 00:27:30.200 and she's got some asthma,

NOTE Confidence: 0.901838695

00:27:30.200 --> 00:27:31.680 but otherwise she's pretty healthy.

NOTE Confidence: 0.901838695

00:27:31.680 --> 00:27:33.168 She gets her TNA,

NOTE Confidence: 0.901838695

00:27:33.168 --> 00:27:35.400 she stays overnight for airway observation.

NOTE Confidence: 0.901838695

00:27:35.400 --> 00:27:37.015 Because she's just over three

NOTE Confidence: 0.901838695

00:27:37.015 --> 00:27:38.630 and she had bad asthma.

NOTE Confidence: 0.901838695

00:27:38.630 --> 00:27:40.670 She does great, goes home the next day.

NOTE Confidence: 0.901838695

00:27:40.670 --> 00:27:42.230 She's seen four weeks post-op.

NOTE Confidence: 0.901838695

00:27:42.230 --> 00:27:44.334 She's was back to herself at seven days.

NOTE Confidence: 0.901838695

00:27:44.340 --> 00:27:45.372 They're snoring completely gone,

NOTE Confidence: 0.901838695

00:27:45.372 --> 00:27:47.178 and now the parents have to go

NOTE Confidence: 0.901838695

00:27:47.178 --> 00:27:48.627 into a room and make sure she's

NOTE Confidence: 0.901838695

00:27:48.627 --> 00:27:49.996 alive because they can't hear her

NOTE Confidence: 0.901838695

00:27:49.996 --> 00:27:51.364 from outside of her room anymore.

NOTE Confidence: 0.901838695

00:27:51.370 --> 00:27:53.116 She never gets a sleep study

NOTE Confidence: 0.901838695

00:27:53.116 --> 00:27:53.989 before the surgery,

NOTE Confidence: 0.901838695

00:27:53.990 --> 00:27:55.184 and she never gets a sleep
NOTE Confidence: 0.901838695

00:27:55.184 --> 00:27:55.980 study after the surgery.
NOTE Confidence: 0.901838695

00:27:55.980 --> 00:27:58.244 And that's how most of these things go.
NOTE Confidence: 0.901838695

00:27:58.250 --> 00:28:00.306 But what do we do if that kid
NOTE Confidence: 0.901838695

00:28:00.306 --> 00:28:02.119 comes back a few years later
NOTE Confidence: 0.901838695

00:28:02.119 --> 00:28:03.654 and the TNA doesn't help?
NOTE Confidence: 0.901838695

00:28:03.660 --> 00:28:05.802 So then we need to do a thorough exam
NOTE Confidence: 0.901838695

00:28:05.802 --> 00:28:08.055 and we scope them in clinic with
NOTE Confidence: 0.901838695

00:28:08.055 --> 00:28:10.090 laryngoscopy or we consider doing a
NOTE Confidence: 0.901838695

00:28:10.090 --> 00:28:12.094 sleep endoscopy in the operating room.
NOTE Confidence: 0.901838695

00:28:12.100 --> 00:28:14.060 And this is very important to localize
NOTE Confidence: 0.901838695

00:28:14.060 --> 00:28:15.919 the site of obstruction and make
NOTE Confidence: 0.901838695

00:28:15.919 --> 00:28:18.152 sure that we know what is happening.
NOTE Confidence: 0.901838695

00:28:18.160 --> 00:28:19.987 You do not have to do this for a
NOTE Confidence: 0.901838695

00:28:19.987 --> 00:28:21.559 child prior to TNA because almost
NOTE Confidence: 0.901838695

00:28:21.559 --> 00:28:23.570 all the time it's the tonsils and

NOTE Confidence: 0.901838695

00:28:23.570 --> 00:28:25.496 adenoids that are causing the issue.

NOTE Confidence: 0.901838695

00:28:25.500 --> 00:28:27.275 And so it's just unnecessary

NOTE Confidence: 0.901838695

00:28:27.275 --> 00:28:29.050 prolonging of anesthesia and everything

NOTE Confidence: 0.838859459411765

00:28:29.111 --> 00:28:31.099 to do this from a resource standpoint.

NOTE Confidence: 0.838859459411765

00:28:31.100 --> 00:28:32.676 But if I see a kid with OSA

NOTE Confidence: 0.838859459411765

00:28:32.676 --> 00:28:34.138 who's got teeny tiny tonsils.

NOTE Confidence: 0.838859459411765

00:28:34.140 --> 00:28:36.690 And they're sleep studies positive.

NOTE Confidence: 0.838859459411765

00:28:36.690 --> 00:28:38.370 I will book them for a T&A,

NOTE Confidence: 0.838859459411765

00:28:38.370 --> 00:28:39.775 but a sleep endoscopy prior

NOTE Confidence: 0.838859459411765

00:28:39.775 --> 00:28:41.543 and sometimes make a game time

NOTE Confidence: 0.838859459411765

00:28:41.543 --> 00:28:43.088 decision and switch things up.

NOTE Confidence: 0.838859459411765

00:28:43.090 --> 00:28:45.570 So what are the frequent culprits for this?

NOTE Confidence: 0.838859459411765

00:28:45.570 --> 00:28:47.054 So severe septal deviation

NOTE Confidence: 0.838859459411765

00:28:47.054 --> 00:28:48.167 or enlarged turbinates?

NOTE Confidence: 0.838859459411765

00:28:48.170 --> 00:28:50.606 That's usually snoring more than sleep apnea.

NOTE Confidence: 0.838859459411765

00:28:50.610 --> 00:28:52.130 The other one is something
NOTE Confidence: 0.838859459411765

00:28:52.130 --> 00:28:53.346 called tubal tonsil hypertrophy,
NOTE Confidence: 0.838859459411765

00:28:53.350 --> 00:28:56.638 which is when if you remove the adenoids.
NOTE Confidence: 0.838859459411765

00:28:56.640 --> 00:28:59.520 And umm, you are you,
NOTE Confidence: 0.838859459411765

00:28:59.520 --> 00:29:01.760 you finished taking those out.
NOTE Confidence: 0.838859459411765

00:29:01.760 --> 00:29:04.336 The adenoids will not grow back necessarily,
NOTE Confidence: 0.838859459411765

00:29:04.340 --> 00:29:06.374 but the lateral pharyngeal wall here
NOTE Confidence: 0.838859459411765

00:29:06.374 --> 00:29:08.445 where this you station tube Warface
NOTE Confidence: 0.838859459411765

00:29:08.445 --> 00:29:10.080 says we'll grow lymphoid tissue
NOTE Confidence: 0.838859459411765

00:29:10.080 --> 00:29:12.219 and that can become obstructive.
NOTE Confidence: 0.838859459411765

00:29:12.220 --> 00:29:13.494 And so they come back for ohh,
NOTE Confidence: 0.838859459411765

00:29:13.500 --> 00:29:14.428 my adenoids grew back.
NOTE Confidence: 0.838859459411765

00:29:14.428 --> 00:29:15.820 And you're like really my adenoids
NOTE Confidence: 0.838859459411765

00:29:15.867 --> 00:29:17.532 usually go back but OK and then you look,
NOTE Confidence: 0.838859459411765

00:29:17.540 --> 00:29:19.118 and that's what the problem is,
NOTE Confidence: 0.838859459411765

00:29:19.120 --> 00:29:20.345 we give them nasal steroids

NOTE Confidence: 0.838859459411765
00:29:20.345 --> 00:29:21.960 and makes them a little better.
NOTE Confidence: 0.838859459411765
00:29:21.960 --> 00:29:23.488 It often doesn't completely
NOTE Confidence: 0.838859459411765
00:29:23.488 --> 00:29:24.634 solve the problem.
NOTE Confidence: 0.838859459411765
00:29:24.640 --> 00:29:26.176 You can then take them back to the
NOTE Confidence: 0.838859459411765
00:29:26.176 --> 00:29:27.708 operating room and cauterize and resurface.
NOTE Confidence: 0.838859459411765
00:29:27.710 --> 00:29:29.336 That area with something called the
NOTE Confidence: 0.838859459411765
00:29:29.336 --> 00:29:31.224 collator and then when you put them
NOTE Confidence: 0.838859459411765
00:29:31.224 --> 00:29:32.736 on nasal steroids to prevent the
NOTE Confidence: 0.838859459411765
00:29:32.736 --> 00:29:34.158 lymphoid tissue from coming back,
NOTE Confidence: 0.838859459411765
00:29:34.160 --> 00:29:36.040 that usually does the trick.
NOTE Confidence: 0.838859459411765
00:29:36.040 --> 00:29:37.765 Then you could have lingual
NOTE Confidence: 0.838859459411765
00:29:37.765 --> 00:29:38.455 tonsil hypertrophy.
NOTE Confidence: 0.838859459411765
00:29:38.460 --> 00:29:40.548 So these are the tonsils at the base
NOTE Confidence: 0.838859459411765
00:29:40.548 --> 00:29:42.658 of the tongue that are now huge.
NOTE Confidence: 0.838859459411765
00:29:42.660 --> 00:29:43.632 Because we've removed the
NOTE Confidence: 0.838859459411765

00:29:43.632 --> 00:29:44.604 tonsils and the adenoids.
NOTE Confidence: 0.838859459411765

00:29:44.610 --> 00:29:46.752 The body is determined to grow lymphoid
NOTE Confidence: 0.838859459411765

00:29:46.752 --> 00:29:48.621 tissue somewhere so it grows it in
NOTE Confidence: 0.838859459411765

00:29:48.621 --> 00:29:50.380 the back of the tongue where it can.
NOTE Confidence: 0.838859459411765

00:29:50.380 --> 00:29:52.116 Then the bottom here is a child
NOTE Confidence: 0.838859459411765

00:29:52.116 --> 00:29:53.520 with tongue based obstruction.
NOTE Confidence: 0.838859459411765

00:29:53.520 --> 00:29:55.515 So the lingual tonsils are not large.
NOTE Confidence: 0.838859459411765

00:29:55.520 --> 00:29:57.172 But you can see the epiglottis is
NOTE Confidence: 0.838859459411765

00:29:57.172 --> 00:29:59.158 plastered to the posterior pharyngeal wall,
NOTE Confidence: 0.838859459411765

00:29:59.160 --> 00:30:00.408 not from lymphoid tissue,
NOTE Confidence: 0.838859459411765

00:30:00.408 --> 00:30:02.280 just from the tongue falling backwards.
NOTE Confidence: 0.838859459411765

00:30:02.280 --> 00:30:04.527 And then that's causing some degree of
NOTE Confidence: 0.838859459411765

00:30:04.527 --> 00:30:06.331 airway obstruction if you jaw thrust
NOTE Confidence: 0.838859459411765

00:30:06.331 --> 00:30:08.165 them or got them an oral appliance
NOTE Confidence: 0.838859459411765

00:30:08.221 --> 00:30:09.876 that would pull things forward.
NOTE Confidence: 0.838859459411765

00:30:09.880 --> 00:30:11.570 But oral appliances are tricking

NOTE Confidence: 0.838859459411765

00:30:11.570 --> 00:30:12.922 kids because they're constantly

NOTE Confidence: 0.838859459411765

00:30:12.922 --> 00:30:14.417 growing and they're losing teeth

NOTE Confidence: 0.838859459411765

00:30:14.417 --> 00:30:16.079 and it's not covered by insurance.

NOTE Confidence: 0.838859459411765

00:30:16.080 --> 00:30:19.940 And so that is a tricky thing for a kid,

NOTE Confidence: 0.838859459411765

00:30:19.940 --> 00:30:21.718 but sometimes I have had one or

NOTE Confidence: 0.838859459411765

00:30:21.718 --> 00:30:23.747 two over my career pay for and

NOTE Confidence: 0.838859459411765

00:30:23.747 --> 00:30:24.955 get an oral appliance,

NOTE Confidence: 0.838859459411765

00:30:24.960 --> 00:30:26.510 have it adjusted and it

NOTE Confidence: 0.838859459411765

00:30:26.510 --> 00:30:28.060 helps them a little bit.

NOTE Confidence: 0.838859459411765

00:30:28.060 --> 00:30:29.760 And then finally, Laryngo Malaysia,

NOTE Confidence: 0.838859459411765

00:30:29.760 --> 00:30:30.360 tracheal Malaysia.

NOTE Confidence: 0.838859459411765

00:30:30.360 --> 00:30:32.760 And so this is a sleep endoscopy of

NOTE Confidence: 0.838859459411765

00:30:32.824 --> 00:30:34.847 a child who's storing like crazy but

NOTE Confidence: 0.838859459411765

00:30:34.847 --> 00:30:36.889 didn't have any tonsils or adenoids.

NOTE Confidence: 0.838859459411765

00:30:36.890 --> 00:30:38.090 They've got some lymphoid tissue

NOTE Confidence: 0.838859459411765

00:30:38.090 --> 00:30:39.460 with the tonsils used to be,
NOTE Confidence: 0.838859459411765

00:30:39.460 --> 00:30:41.868 but now you can see there are retinoids
NOTE Confidence: 0.838859459411765

00:30:41.868 --> 00:30:44.025 or prolapsing in every time they're
NOTE Confidence: 0.838859459411765

00:30:44.025 --> 00:30:45.890 breathing and that's sleep dependent.
NOTE Confidence: 0.838859459411765

00:30:45.890 --> 00:30:46.698 Laryngo Malaysia.
NOTE Confidence: 0.838859459411765

00:30:46.698 --> 00:30:49.122 So or state dependent depending on
NOTE Confidence: 0.838859459411765

00:30:49.122 --> 00:30:51.591 on how you say it, where you're from.
NOTE Confidence: 0.838859459411765

00:30:51.591 --> 00:30:54.159 And so if we do what's called a super
NOTE Confidence: 0.838859459411765

00:30:54.159 --> 00:30:56.133 glodo plasty and open up the larynx,
NOTE Confidence: 0.838859459411765

00:30:56.140 --> 00:30:58.709 that will take care of that problem.
NOTE Confidence: 0.838859459411765

00:30:58.710 --> 00:31:02.220 All right. So let's look at some other cases.
NOTE Confidence: 0.85742679

00:31:02.220 --> 00:31:03.484 So this is an 8 year old boy
NOTE Confidence: 0.85742679

00:31:03.484 --> 00:31:04.856 who had a T&A when he was five.
NOTE Confidence: 0.85742679

00:31:04.860 --> 00:31:06.644 He did great and now he's back in
NOTE Confidence: 0.85742679

00:31:06.644 --> 00:31:08.350 your clinic. Three years later,
NOTE Confidence: 0.85742679

00:31:08.350 --> 00:31:09.610 symptoms have returned.

NOTE Confidence: 0.85742679

00:31:09.610 --> 00:31:10.950 We scope them in clinic.

NOTE Confidence: 0.85742679

00:31:10.950 --> 00:31:12.010 This is the scope view.

NOTE Confidence: 0.85742679

00:31:12.010 --> 00:31:14.570 In clinic, it's upside down from the sleep

NOTE Confidence: 0.85742679

00:31:14.570 --> 00:31:16.730 endoscopy videos that I've been showing you.

NOTE Confidence: 0.85742679

00:31:16.730 --> 00:31:18.482 So in general, when an otolaryngologist

NOTE Confidence: 0.85742679

00:31:18.482 --> 00:31:20.869 talks to you about airway and you're like,

NOTE Confidence: 0.85742679

00:31:20.870 --> 00:31:22.694 why are you showing me a

NOTE Confidence: 0.85742679

00:31:22.694 --> 00:31:23.910 disorientation and this orientation,

NOTE Confidence: 0.85742679

00:31:23.910 --> 00:31:26.598 we're hardwired to think of our clinic

NOTE Confidence: 0.85742679

00:31:26.598 --> 00:31:28.896 exams this way, where the posterior.

NOTE Confidence: 0.85742679

00:31:28.896 --> 00:31:31.570 Andrew Wall is at 12:00 o'clock and

NOTE Confidence: 0.85742679

00:31:31.640 --> 00:31:33.492 the tongue is at. 6:00 o'clock.

NOTE Confidence: 0.85742679

00:31:33.492 --> 00:31:35.568 But in the operating room we

NOTE Confidence: 0.85742679

00:31:35.568 --> 00:31:37.218 switch it around 180 degrees.

NOTE Confidence: 0.85742679

00:31:37.218 --> 00:31:38.438 We'll show you these videos

NOTE Confidence: 0.85742679

00:31:38.438 --> 00:31:39.600 and nothing twice about it.
NOTE Confidence: 0.85742679

00:31:39.600 --> 00:31:40.720 We don't even see it.
NOTE Confidence: 0.85742679

00:31:40.720 --> 00:31:42.682 But I try to as I was putting the
NOTE Confidence: 0.85742679

00:31:42.682 --> 00:31:44.102 stock together, I'm like, Oh yeah,
NOTE Confidence: 0.85742679

00:31:44.102 --> 00:31:45.420 I should try to keep that straight.
NOTE Confidence: 0.85742679

00:31:45.420 --> 00:31:47.740 So that's why you will sometimes see this.
NOTE Confidence: 0.85742679

00:31:47.740 --> 00:31:49.580 So he's a little overweight and not obese.
NOTE Confidence: 0.85742679

00:31:49.580 --> 00:31:50.960 He has no adenoids, no tonsils.
NOTE Confidence: 0.85742679

00:31:50.960 --> 00:31:52.742 And then he's got this tongue
NOTE Confidence: 0.85742679

00:31:52.742 --> 00:31:53.336 based obstruction.
NOTE Confidence: 0.85742679

00:31:53.340 --> 00:31:54.884 And so now in the OR when you
NOTE Confidence: 0.85742679

00:31:54.884 --> 00:31:56.488 do your sleep endoscopy again
NOTE Confidence: 0.85742679

00:31:56.488 --> 00:31:58.040 the orientation switched here.
NOTE Confidence: 0.85742679

00:31:58.040 --> 00:31:59.648 Now you can see like it looks even
NOTE Confidence: 0.85742679

00:31:59.648 --> 00:32:01.282 worse and this is that epiglottis
NOTE Confidence: 0.85742679

00:32:01.282 --> 00:32:02.757 getting pushed backwards by those.

NOTE Confidence: 0.85742679

00:32:02.760 --> 00:32:05.580 Big, heavy, lingual tonsils.

NOTE Confidence: 0.85742679

00:32:05.580 --> 00:32:08.874 This is a video from my friend Vikash Modi.

NOTE Confidence: 0.85742679

00:32:08.880 --> 00:32:10.196 I do a bunch of these surgeries,

NOTE Confidence: 0.85742679

00:32:10.200 --> 00:32:11.118 but I'll be honest with you,

NOTE Confidence: 0.85742679

00:32:11.120 --> 00:32:12.740 I I don't always video them.

NOTE Confidence: 0.85742679

00:32:12.740 --> 00:32:15.740 But he's great about taking videos.

NOTE Confidence: 0.85742679

00:32:15.740 --> 00:32:17.620 And so I asked him to borrow this

NOTE Confidence: 0.85742679

00:32:17.620 --> 00:32:19.269 and he's he has great videos.

NOTE Confidence: 0.85742679

00:32:19.270 --> 00:32:20.938 So these are large lingual tonsils,

NOTE Confidence: 0.85742679

00:32:20.940 --> 00:32:22.718 and this is exactly what I do.

NOTE Confidence: 0.85742679

00:32:22.720 --> 00:32:25.024 So we take this thing called a poblador

NOTE Confidence: 0.85742679

00:32:25.024 --> 00:32:27.368 that kind of liquefies the lymphoid tissue.

NOTE Confidence: 0.85742679

00:32:27.368 --> 00:32:29.750 And sometimes you've got to readjust

NOTE Confidence: 0.85742679

00:32:29.811 --> 00:32:31.869 your laryngoscope to get all the

NOTE Confidence: 0.85742679

00:32:31.869 --> 00:32:34.079 different areas and nooks and crannies.

NOTE Confidence: 0.85742679

00:32:34.080 --> 00:32:36.096 And so here he's ablating all
NOTE Confidence: 0.85742679

00:32:36.096 --> 00:32:37.906 that lymphoid tissue down to
NOTE Confidence: 0.85742679

00:32:37.906 --> 00:32:39.518 the actual tongue musculature.
NOTE Confidence: 0.85742679

00:32:39.520 --> 00:32:42.886 And this is a lingual tonsillectomy.
NOTE Confidence: 0.85742679

00:32:42.890 --> 00:32:45.570 You can find a plane and dissect it all off,
NOTE Confidence: 0.85742679

00:32:45.570 --> 00:32:46.800 but it's challenging and you run
NOTE Confidence: 0.85742679

00:32:46.800 --> 00:32:48.610 the risk of a lingual artery bleed,
NOTE Confidence: 0.85742679

00:32:48.610 --> 00:32:50.248 which is a very bad problem.
NOTE Confidence: 0.85742679

00:32:50.250 --> 00:32:52.650 And so most of us just ablate it like this.
NOTE Confidence: 0.85742679

00:32:52.650 --> 00:32:54.974 And when you're done now all that
NOTE Confidence: 0.85742679

00:32:54.974 --> 00:32:56.849 lymphoid tissue has been released
NOTE Confidence: 0.85742679

00:32:56.850 --> 00:32:58.776 and now this is your epiglottis.
NOTE Confidence: 0.85742679

00:32:58.780 --> 00:33:00.808 And that lymphoid tissue is better
NOTE Confidence: 0.85742679

00:33:00.808 --> 00:33:03.277 in cases where the epiglottis is
NOTE Confidence: 0.85742679

00:33:03.277 --> 00:33:05.386 prolapsed backwards and you remove this
NOTE Confidence: 0.85742679

00:33:05.386 --> 00:33:06.970 lingual tonsil and it doesn't just

NOTE Confidence: 0.85742679

00:33:07.026 --> 00:33:08.786 spring back to where it needs to be.

NOTE Confidence: 0.85742679

00:33:08.790 --> 00:33:10.680 You can resuspend the epiglottis,

NOTE Confidence: 0.85742679

00:33:10.680 --> 00:33:13.326 and this is called an epiglottis apexing.

NOTE Confidence: 0.85742679

00:33:13.330 --> 00:33:15.499 And we take sutures and we grab the base

NOTE Confidence: 0.85742679

00:33:15.499 --> 00:33:17.491 of tongue and this is all operating

NOTE Confidence: 0.85742679

00:33:17.491 --> 00:33:19.630 down the shaft of the laryngoscope.

NOTE Confidence: 0.85742679

00:33:19.630 --> 00:33:21.049 So it's tricky.

NOTE Confidence: 0.85742679

00:33:21.049 --> 00:33:23.414 It's like operating through a

NOTE Confidence: 0.85742679

00:33:23.414 --> 00:33:26.654 toilet paper roll and then you grab

NOTE Confidence: 0.85742679

00:33:26.654 --> 00:33:28.859 the mucosa over the epiglottis.

NOTE Confidence: 0.85742679

00:33:28.860 --> 00:33:30.822 And you tighten these sutures down

NOTE Confidence: 0.85742679

00:33:30.822 --> 00:33:32.830 and it pulls that epiglottis up

NOTE Confidence: 0.85742679

00:33:32.830 --> 00:33:35.350 into the base of tongue and lifts it

NOTE Confidence: 0.779816631111111

00:33:35.414 --> 00:33:37.619 forward so it can open your airway.

NOTE Confidence: 0.779816631111111

00:33:37.620 --> 00:33:39.756 And so this is after you've cut your

NOTE Confidence: 0.779816631111111

00:33:39.756 --> 00:33:41.720 knots and that's sort of now what
NOTE Confidence: 0.7798166311111111

00:33:41.720 --> 00:33:43.730 your airway is going to look like.
NOTE Confidence: 0.7798166311111111

00:33:43.730 --> 00:33:44.920 And then this is in clinic again,
NOTE Confidence: 0.7798166311111111

00:33:44.920 --> 00:33:47.400 orientation switched and that epiglottis
NOTE Confidence: 0.7798166311111111

00:33:47.400 --> 00:33:50.698 is now pulled upwards and you can
NOTE Confidence: 0.7798166311111111

00:33:50.698 --> 00:33:52.900 now see the airway much better.
NOTE Confidence: 0.7798166311111111

00:33:52.900 --> 00:33:55.868 Um, here's another kid, 2 year old girl.
NOTE Confidence: 0.7798166311111111

00:33:55.870 --> 00:33:56.542 She's snoring.
NOTE Confidence: 0.7798166311111111

00:33:56.542 --> 00:33:58.364 Apneic pauses at night, occasional gagging.
NOTE Confidence: 0.7798166311111111

00:33:58.364 --> 00:33:59.786 You ready to do your tonsillectomy?
NOTE Confidence: 0.7798166311111111

00:33:59.790 --> 00:34:00.966 She's got no tonsils, no adenoids.
NOTE Confidence: 0.7798166311111111

00:34:00.970 --> 00:34:01.699 What's going on?
NOTE Confidence: 0.7798166311111111

00:34:01.699 --> 00:34:04.057 So you scope her and now she's got this
NOTE Confidence: 0.7798166311111111

00:34:04.057 --> 00:34:05.857 big cyst called the molecular cyst
NOTE Confidence: 0.7798166311111111

00:34:05.857 --> 00:34:07.857 that's sitting by the base of her tongue.
NOTE Confidence: 0.7798166311111111

00:34:07.860 --> 00:34:09.851 So we take her to the OR, we remove that.

NOTE Confidence: 0.7798166311111111
00:34:09.851 --> 00:34:11.573 It's going to solve all your
NOTE Confidence: 0.7798166311111111
00:34:11.573 --> 00:34:12.839 problems and she's better.
NOTE Confidence: 0.7798166311111111
00:34:12.840 --> 00:34:14.824 But she's still snoring a lot and now
NOTE Confidence: 0.7798166311111111
00:34:14.824 --> 00:34:17.246 this is what's happening to reply glottis.
NOTE Confidence: 0.7798166311111111
00:34:17.250 --> 00:34:18.410 Every time she breathes,
NOTE Confidence: 0.7798166311111111
00:34:18.410 --> 00:34:19.570 it gets pulled down.
NOTE Confidence: 0.7798166311111111
00:34:19.570 --> 00:34:22.986 And the reason it's prolapsing is because of.
NOTE Confidence: 0.7798166311111111
00:34:22.990 --> 00:34:25.390 That cyst has weakened the epiglottis.
NOTE Confidence: 0.7798166311111111
00:34:25.390 --> 00:34:26.926 It's not as strong as it normally is.
NOTE Confidence: 0.7798166311111111
00:34:26.930 --> 00:34:29.117 And so then this is a case when we
NOTE Confidence: 0.7798166311111111
00:34:29.117 --> 00:34:31.250 would do that epiglottic paxi again,
NOTE Confidence: 0.7798166311111111
00:34:31.250 --> 00:34:33.566 which I just showed you here.
NOTE Confidence: 0.7798166311111111
00:34:33.566 --> 00:34:34.990 There's no lingual tonsils,
NOTE Confidence: 0.7798166311111111
00:34:34.990 --> 00:34:37.356 so you don't have to do that
NOTE Confidence: 0.7798166311111111
00:34:37.356 --> 00:34:38.370 Co bladder removal.
NOTE Confidence: 0.7798166311111111

00:34:38.370 --> 00:34:40.820 Here you would just in the operating
NOTE Confidence: 0.7798166311111111

00:34:40.820 --> 00:34:43.115 room put this laryngoscope in and
NOTE Confidence: 0.7798166311111111

00:34:43.115 --> 00:34:46.043 then with a laser or cautery roughen
NOTE Confidence: 0.7798166311111111

00:34:46.043 --> 00:34:48.725 up the area of the vallecula,
NOTE Confidence: 0.7798166311111111

00:34:48.730 --> 00:34:50.506 which is what's right in there.
NOTE Confidence: 0.7798166311111111

00:34:50.510 --> 00:34:52.911 And then so this is where the
NOTE Confidence: 0.7798166311111111

00:34:52.911 --> 00:34:54.870 CO2 laser removing that mucosa,
NOTE Confidence: 0.7798166311111111

00:34:54.870 --> 00:34:56.710 making it raw and sticky.
NOTE Confidence: 0.7798166311111111

00:34:56.710 --> 00:34:58.551 And then now you place your sutures
NOTE Confidence: 0.7798166311111111

00:34:58.551 --> 00:35:00.339 and that will pull that epiglottis
NOTE Confidence: 0.7798166311111111

00:35:00.339 --> 00:35:02.211 up towards the tongue and remove
NOTE Confidence: 0.7798166311111111

00:35:02.211 --> 00:35:03.978 that retro lingual obstruction.
NOTE Confidence: 0.87201000125

00:35:06.000 --> 00:35:07.776 Then we can get into the syndromic kids,
NOTE Confidence: 0.87201000125

00:35:07.780 --> 00:35:08.840 and these are the population
NOTE Confidence: 0.87201000125

00:35:08.840 --> 00:35:10.480 that I take care of the most of.
NOTE Confidence: 0.87201000125

00:35:10.480 --> 00:35:11.922 And so this is a child with

NOTE Confidence: 0.87201000125
00:35:11.922 --> 00:35:12.540 Treacher Collins syndrome,
NOTE Confidence: 0.87201000125
00:35:12.540 --> 00:35:14.580 with he has mild Treacher Collins,
NOTE Confidence: 0.87201000125
00:35:14.580 --> 00:35:17.024 but still causing significant
NOTE Confidence: 0.87201000125
00:35:17.024 --> 00:35:18.857 obstructive sleep apnea.
NOTE Confidence: 0.87201000125
00:35:18.860 --> 00:35:19.655 A lot of times these
NOTE Confidence: 0.87201000125
00:35:19.655 --> 00:35:20.610 kids will have a high IQ,
NOTE Confidence: 0.87201000125
00:35:20.610 --> 00:35:21.894 but they're saturator is
NOTE Confidence: 0.87201000125
00:35:21.894 --> 00:35:23.178 really what scares you.
NOTE Confidence: 0.87201000125
00:35:23.180 --> 00:35:24.615 He's completely unable to tolerate
NOTE Confidence: 0.87201000125
00:35:24.615 --> 00:35:26.643 CPAP and he was supposed to have
NOTE Confidence: 0.87201000125
00:35:26.643 --> 00:35:27.998 a trick at another institution.
NOTE Confidence: 0.87201000125
00:35:28.000 --> 00:35:29.672 They came to see me the day before
NOTE Confidence: 0.87201000125
00:35:29.672 --> 00:35:31.361 the track as like a last ditch
NOTE Confidence: 0.87201000125
00:35:31.361 --> 00:35:32.576 effort from like some creature
NOTE Confidence: 0.87201000125
00:35:32.625 --> 00:35:33.653 Collins Facebook outreach because
NOTE Confidence: 0.87201000125

00:35:33.653 --> 00:35:35.968 I take care of a lot of kids with
NOTE Confidence: 0.87201000125

00:35:35.968 --> 00:35:37.760 TCS and I saw him and actually
NOTE Confidence: 0.87201000125

00:35:37.828 --> 00:35:39.676 he just had four plus adenoids.
NOTE Confidence: 0.87201000125

00:35:39.680 --> 00:35:40.820 That was his main problem.
NOTE Confidence: 0.87201000125

00:35:40.820 --> 00:35:42.368 He had basal tongue obstruction but
NOTE Confidence: 0.87201000125

00:35:42.368 --> 00:35:43.886 the adenoids were the real issue
NOTE Confidence: 0.87201000125

00:35:43.886 --> 00:35:45.405 so we removed his adenoids and now
NOTE Confidence: 0.87201000125

00:35:45.405 --> 00:35:47.008 he doesn't need to track it was
NOTE Confidence: 0.87201000125

00:35:47.008 --> 00:35:48.436 that simple but he's still snoring.
NOTE Confidence: 0.87201000125

00:35:48.436 --> 00:35:50.580 And so we repeat the SLEEP study and
NOTE Confidence: 0.87201000125

00:35:50.641 --> 00:35:52.376 the ADENOIDECTOMY has helped him.
NOTE Confidence: 0.87201000125

00:35:52.380 --> 00:35:55.390 Hi of 44 to 27 still severe.
NOTE Confidence: 0.87201000125

00:35:55.390 --> 00:35:57.034 Sat Nader is like nominally better
NOTE Confidence: 0.87201000125

00:35:57.034 --> 00:35:59.134 if not at the same and he's
NOTE Confidence: 0.87201000125

00:35:59.134 --> 00:36:01.018 hypoventilating and so he needs a
NOTE Confidence: 0.87201000125

00:36:01.018 --> 00:36:03.140 surgery and this is all tongue based

NOTE Confidence: 0.87201000125

00:36:03.140 --> 00:36:05.243 obstruction and he has a small jaw.

NOTE Confidence: 0.87201000125

00:36:05.243 --> 00:36:07.109 And so with a sleep endoscopy,

NOTE Confidence: 0.87201000125

00:36:07.110 --> 00:36:08.286 this is what things look like.

NOTE Confidence: 0.87201000125

00:36:08.290 --> 00:36:09.762 And if you jaw thrust him you can

NOTE Confidence: 0.87201000125

00:36:09.762 --> 00:36:11.387 see how this would open his airway.

NOTE Confidence: 0.87201000125

00:36:11.390 --> 00:36:13.262 So we need to do a surgical job thrust

NOTE Confidence: 0.87201000125

00:36:13.262 --> 00:36:15.016 and the way we do that is something

NOTE Confidence: 0.87201000125

00:36:15.016 --> 00:36:16.560 which is an orthognathic surgery

NOTE Confidence: 0.87201000125

00:36:16.560 --> 00:36:18.685 which is called mandibular distraction.

NOTE Confidence: 0.87201000125

00:36:18.690 --> 00:36:19.530 And so this is his.

NOTE Confidence: 0.87201000125

00:36:19.530 --> 00:36:22.082 CT scan and we will plan a osteotomy

NOTE Confidence: 0.87201000125

00:36:22.082 --> 00:36:24.247 through the mandible here and we

NOTE Confidence: 0.87201000125

00:36:24.247 --> 00:36:26.808 attach hardware on either side and we

NOTE Confidence: 0.87201000125

00:36:26.808 --> 00:36:28.901 then are done in the operating room

NOTE Confidence: 0.87201000125

00:36:28.901 --> 00:36:31.378 and we wait for two or three days.

NOTE Confidence: 0.87201000125

00:36:31.380 --> 00:36:33.186 And as the bone is starting to
NOTE Confidence: 0.87201000125

00:36:33.186 --> 00:36:34.800 heal but not fully healed,
NOTE Confidence: 0.87201000125

00:36:34.800 --> 00:36:36.912 we then start to slowly separate
NOTE Confidence: 0.87201000125

00:36:36.912 --> 00:36:39.150 the bone and the millimeter a day.
NOTE Confidence: 0.87201000125

00:36:39.150 --> 00:36:40.770 We extend that mandible forward and
NOTE Confidence: 0.87201000125

00:36:40.770 --> 00:36:42.988 as long as you do it slowly enough,
NOTE Confidence: 0.87201000125

00:36:42.990 --> 00:36:44.580 you stretch the nerve within here
NOTE Confidence: 0.87201000125

00:36:44.580 --> 00:36:46.660 and you let that bone keep growing,
NOTE Confidence: 0.87201000125

00:36:46.660 --> 00:36:46.908 growing,
NOTE Confidence: 0.87201000125

00:36:46.908 --> 00:36:48.396 growing and then you can basically
NOTE Confidence: 0.87201000125

00:36:48.396 --> 00:36:49.957 jaw thrust him and move that jaw.
NOTE Confidence: 0.87201000125

00:36:49.960 --> 00:36:51.595 Forward now we overcorrect him
NOTE Confidence: 0.87201000125

00:36:51.595 --> 00:36:54.047 and he will need a surgery on
NOTE Confidence: 0.87201000125

00:36:54.047 --> 00:36:55.907 his maxilla when he's older.
NOTE Confidence: 0.87201000125

00:36:55.910 --> 00:36:57.380 But remember these are all baby
NOTE Confidence: 0.87201000125

00:36:57.380 --> 00:36:59.048 teeth and so they fall out and

NOTE Confidence: 0.87201000125

00:36:59.048 --> 00:37:00.518 the new ones come in and they

NOTE Confidence: 0.87201000125

00:37:00.575 --> 00:37:02.225 often align in a better position.

NOTE Confidence: 0.87201000125

00:37:02.230 --> 00:37:05.014 And so here he is after 10.5 millimeters

NOTE Confidence: 0.87201000125

00:37:05.014 --> 00:37:06.624 of advancement of his mandible.

NOTE Confidence: 0.87201000125

00:37:06.630 --> 00:37:08.926 This is his scar on his jaws.

NOTE Confidence: 0.87201000125

00:37:08.930 --> 00:37:11.108 Now forward and we go back,

NOTE Confidence: 0.87201000125

00:37:11.110 --> 00:37:12.135 remove the hardware and this

NOTE Confidence: 0.87201000125

00:37:12.135 --> 00:37:13.450 is the bone that we've grown.

NOTE Confidence: 0.87201000125

00:37:13.450 --> 00:37:14.910 You can actually see it.

NOTE Confidence: 0.87201000125

00:37:14.910 --> 00:37:16.626 And that's brought his jaw forward

NOTE Confidence: 0.87201000125

00:37:16.626 --> 00:37:18.545 to centimeter and now it's really

NOTE Confidence: 0.87201000125

00:37:18.545 --> 00:37:19.977 just tongue based obstruction.

NOTE Confidence: 0.87201000125

00:37:19.980 --> 00:37:21.954 And then you repeat your sleep study

NOTE Confidence: 0.87201000125

00:37:21.954 --> 00:37:24.206 and you think it's going to be better,

NOTE Confidence: 0.87201000125

00:37:24.210 --> 00:37:24.837 probably not cured.

NOTE Confidence: 0.87201000125

00:37:24.837 --> 00:37:26.300 And you see this and you're like,
NOTE Confidence: 0.78561880125

00:37:26.300 --> 00:37:26.770 that's awesome.
NOTE Confidence: 0.78561880125

00:37:26.770 --> 00:37:28.180 Let's never get another sleep study.
NOTE Confidence: 0.78561880125

00:37:28.180 --> 00:37:31.280 So that's a kid who's gone from 27 to .9.
NOTE Confidence: 0.78561880125

00:37:31.280 --> 00:37:33.058 That's a mic drop as a surgeon.
NOTE Confidence: 0.78561880125

00:37:33.060 --> 00:37:36.228 And then, you know, 6872 to 91%.
NOTE Confidence: 0.78561880125

00:37:36.228 --> 00:37:38.196 And so he no longer snores
NOTE Confidence: 0.78561880125

00:37:38.196 --> 00:37:39.680 and he's doing great.
NOTE Confidence: 0.78561880125

00:37:39.680 --> 00:37:41.852 Now as he gets older and
NOTE Confidence: 0.78561880125

00:37:41.852 --> 00:37:43.700 starts to outgrow his jaw,
NOTE Confidence: 0.78561880125

00:37:43.700 --> 00:37:45.618 he will start to have some symptoms.
NOTE Confidence: 0.78561880125

00:37:45.620 --> 00:37:47.276 And then we follow him with sleep studies.
NOTE Confidence: 0.78561880125

00:37:47.280 --> 00:37:48.320 And if it's bad enough,
NOTE Confidence: 0.78561880125

00:37:48.320 --> 00:37:49.084 we do another surgery.
NOTE Confidence: 0.78561880125

00:37:49.084 --> 00:37:50.039 But this is a child.
NOTE Confidence: 0.78561880125

00:37:50.040 --> 00:37:52.035 It was supposed to have a tracheotomy

NOTE Confidence: 0.78561880125

00:37:52.035 --> 00:37:54.532 and now he has cured sleep apnea

NOTE Confidence: 0.78561880125

00:37:54.532 --> 00:37:56.108 with that orthognathic surgery.

NOTE Confidence: 0.78561880125

00:37:56.110 --> 00:37:58.990 And you can see now as time goes on,

NOTE Confidence: 0.78561880125

00:37:58.990 --> 00:38:01.370 his front teeth are on,

NOTE Confidence: 0.78561880125

00:38:01.370 --> 00:38:02.410 his upper teeth are in

NOTE Confidence: 0.78561880125

00:38:02.410 --> 00:38:03.450 front of his bottom teeth,

NOTE Confidence: 0.78561880125

00:38:03.450 --> 00:38:04.866 so he actually does not have

NOTE Confidence: 0.78561880125

00:38:04.866 --> 00:38:05.810 an underbite anymore here.

NOTE Confidence: 0.78561880125

00:38:05.810 --> 00:38:07.530 He does a little bit on the sides,

NOTE Confidence: 0.78561880125

00:38:07.530 --> 00:38:09.750 but he's able to eat normally.

NOTE Confidence: 0.78561880125

00:38:09.750 --> 00:38:11.752 This is a kid with Piero band

NOTE Confidence: 0.78561880125

00:38:11.752 --> 00:38:13.230 sequence and Down syndrome,

NOTE Confidence: 0.78561880125

00:38:13.230 --> 00:38:15.166 which is pretty remarkable.

NOTE Confidence: 0.78561880125

00:38:15.166 --> 00:38:18.070 He was trached but behaviorally difficult,

NOTE Confidence: 0.78561880125

00:38:18.070 --> 00:38:19.337 so he just pulled his tricked out

NOTE Confidence: 0.78561880125

00:38:19.337 --> 00:38:20.550 and threw it across the room.
NOTE Confidence: 0.78561880125

00:38:20.550 --> 00:38:21.920 And refuses to wear it.
NOTE Confidence: 0.78561880125

00:38:21.920 --> 00:38:24.536 And so now severe sleep apnea.
NOTE Confidence: 0.78561880125

00:38:24.540 --> 00:38:27.100 So we do this jaw distraction that will
NOTE Confidence: 0.78561880125

00:38:27.100 --> 00:38:29.079 lengthen both this part of the jaw,
NOTE Confidence: 0.78561880125

00:38:29.080 --> 00:38:30.680 the ramus and the body.
NOTE Confidence: 0.78561880125

00:38:30.680 --> 00:38:32.615 And this is how much we grew for him.
NOTE Confidence: 0.78561880125

00:38:32.620 --> 00:38:33.952 And he still has a small
NOTE Confidence: 0.78561880125

00:38:33.952 --> 00:38:35.180 jaw and a small shin,
NOTE Confidence: 0.78561880125

00:38:35.180 --> 00:38:37.166 but this was the difference between
NOTE Confidence: 0.78561880125

00:38:37.166 --> 00:38:38.776 severe obstructive sleep apnea and
NOTE Confidence: 0.78561880125

00:38:38.776 --> 00:38:40.358 getting him down to like an HIV.
NOTE Confidence: 0.78561880125

00:38:40.360 --> 00:38:44.120 And I think he was like 7 and he's 20.
NOTE Confidence: 0.78561880125

00:38:44.120 --> 00:38:46.280 And so for Down syndrome HIV,
NOTE Confidence: 0.78561880125

00:38:46.280 --> 00:38:49.562 7 satinath or if it was
NOTE Confidence: 0.78561880125

00:38:49.562 --> 00:38:51.750 88 will will tolerate.

NOTE Confidence: 0.78561880125

00:38:51.750 --> 00:38:53.094 And he's a candidate,

NOTE Confidence: 0.78561880125

00:38:53.094 --> 00:38:55.220 you know, later he could have a

NOTE Confidence: 0.78561880125

00:38:55.220 --> 00:38:56.090 hypoglossal nerve stimulator.

NOTE Confidence: 0.78561880125

00:38:56.090 --> 00:38:58.028 That could be a possibility, though.

NOTE Confidence: 0.78561880125

00:38:58.028 --> 00:38:59.668 He would take off his,

NOTE Confidence: 0.78561880125

00:38:59.670 --> 00:39:00.930 his, you know, magnet,

NOTE Confidence: 0.78561880125

00:39:00.930 --> 00:39:02.505 throw it across the room

NOTE Confidence: 0.78561880125

00:39:02.505 --> 00:39:04.057 and that would be that.

NOTE Confidence: 0.78561880125

00:39:04.060 --> 00:39:05.047 And then finally,

NOTE Confidence: 0.78561880125

00:39:05.047 --> 00:39:05.376 uh,

NOTE Confidence: 0.78561880125

00:39:05.376 --> 00:39:07.350 nonsyndromic 16 year old girl I've

NOTE Confidence: 0.78561880125

00:39:07.410 --> 00:39:09.066 been following since she was eight

NOTE Confidence: 0.78561880125

00:39:09.066 --> 00:39:11.698 when I did a tonsil and adenoidectomy.

NOTE Confidence: 0.78561880125

00:39:11.700 --> 00:39:14.284 She still was snoring so we did sleep

NOTE Confidence: 0.78561880125

00:39:14.284 --> 00:39:16.405 endoscopy and she had laryngomalacia

NOTE Confidence: 0.78561880125

00:39:16.405 --> 00:39:18.285 and tongue based obstruction.

NOTE Confidence: 0.78561880125

00:39:18.290 --> 00:39:18.660 Um,

NOTE Confidence: 0.78561880125

00:39:18.660 --> 00:39:21.990 and she got another sleep study at age 12,

NOTE Confidence: 0.78561880125

00:39:21.990 --> 00:39:22.959 mild sleep apnea,

NOTE Confidence: 0.78561880125

00:39:22.959 --> 00:39:25.930 and we just sort of limped along like that.

NOTE Confidence: 0.78561880125

00:39:25.930 --> 00:39:27.342 And she did OK.

NOTE Confidence: 0.78561880125

00:39:27.342 --> 00:39:29.870 But then she started to get worse,

NOTE Confidence: 0.78561880125

00:39:29.870 --> 00:39:30.902 tied daytime somnolence.

NOTE Confidence: 0.78561880125

00:39:30.902 --> 00:39:33.310 And so she was on CPAP not

NOTE Confidence: 0.78561880125

00:39:33.387 --> 00:39:35.007 tolerating it by age 16.

NOTE Confidence: 0.78561880125

00:39:35.010 --> 00:39:35.640 And then

NOTE Confidence: 0.909438118333333

00:39:35.650 --> 00:39:37.906 when we do our sleep endoscopy,

NOTE Confidence: 0.909438118333333

00:39:37.910 --> 00:39:39.340 she has bad airway obstruction

NOTE Confidence: 0.909438118333333

00:39:39.340 --> 00:39:41.317 to the point where I have to

NOTE Confidence: 0.909438118333333

00:39:41.317 --> 00:39:42.787 put a nasal trumpet in her.

NOTE Confidence: 0.909438118333333

00:39:42.790 --> 00:39:46.360 And here I'm feeling for the thyroid

NOTE Confidence: 0.909438118333333

00:39:46.360 --> 00:39:48.938 medical, so and the distance.

NOTE Confidence: 0.909438118333333

00:39:48.938 --> 00:39:51.675 On the thyroid. To the mandible.

NOTE Confidence: 0.909438118333333

00:39:51.675 --> 00:39:53.715 And you can see on your CT scan

NOTE Confidence: 0.909438118333333

00:39:53.715 --> 00:39:55.469 they're like right on top of each

NOTE Confidence: 0.909438118333333

00:39:55.469 --> 00:39:57.108 other and that's why she has

NOTE Confidence: 0.909438118333333

00:39:57.108 --> 00:39:58.610 this tongue based substance. And

NOTE Confidence: 0.884363365

00:39:58.620 --> 00:39:59.803 so in this case the best thing

NOTE Confidence: 0.884363365

00:39:59.803 --> 00:40:01.318 to do is bring her jaw forward.

NOTE Confidence: 0.884363365

00:40:01.320 --> 00:40:02.902 And you could do that with the

NOTE Confidence: 0.884363365

00:40:02.902 --> 00:40:04.139 distraction like I showed you,

NOTE Confidence: 0.884363365

00:40:04.140 --> 00:40:05.974 but in an older kid who's 16

NOTE Confidence: 0.884363365

00:40:05.974 --> 00:40:07.600 and pretty much done growing,

NOTE Confidence: 0.884363365

00:40:07.600 --> 00:40:10.862 you can just do an MMA mandibular

NOTE Confidence: 0.884363365

00:40:10.862 --> 00:40:11.794 maxillary advancement.

NOTE Confidence: 0.884363365

00:40:11.800 --> 00:40:13.844 And so there we bring both jaw

NOTE Confidence: 0.884363365

00:40:13.844 --> 00:40:15.553 and maxilla forward and this is
NOTE Confidence: 0.884363365

00:40:15.553 --> 00:40:17.352 one of the only surgeries in the
NOTE Confidence: 0.884363365

00:40:17.412 --> 00:40:18.968 sleep literature that's shown
NOTE Confidence: 0.884363365

00:40:18.968 --> 00:40:20.913 to be pretty high reliability.
NOTE Confidence: 0.884363365

00:40:20.920 --> 00:40:21.191 Success.
NOTE Confidence: 0.884363365

00:40:21.191 --> 00:40:23.630 And so we do that for her and then
NOTE Confidence: 0.884363365

00:40:23.702 --> 00:40:25.662 bring everything forward and played
NOTE Confidence: 0.884363365

00:40:25.662 --> 00:40:28.065 her maxilla or mandible to maintain
NOTE Confidence: 0.884363365

00:40:28.065 --> 00:40:31.097 her occlusion and that cured her sleep apnea.
NOTE Confidence: 0.884363365

00:40:31.100 --> 00:40:31.652 All right.
NOTE Confidence: 0.884363365

00:40:31.652 --> 00:40:32.756 We are almost done.
NOTE Confidence: 0.884363365

00:40:32.760 --> 00:40:35.070 I just want to say a couple
NOTE Confidence: 0.884363365

00:40:35.070 --> 00:40:36.060 things about infants.
NOTE Confidence: 0.884363365

00:40:36.060 --> 00:40:38.370 Because infant sleep apnea is different
NOTE Confidence: 0.884363365

00:40:38.370 --> 00:40:40.716 than older kids sleep apnea and
NOTE Confidence: 0.884363365

00:40:40.716 --> 00:40:43.313 very much different than adult sleep apnea.

NOTE Confidence: 0.884363365

00:40:43.320 --> 00:40:45.360 Infants are obligate nasal breathers.

NOTE Confidence: 0.884363365

00:40:45.360 --> 00:40:48.184 If you have an adult and you just.

NOTE Confidence: 0.884363365

00:40:48.190 --> 00:40:50.430 Clothes pin their nose shut at night.

NOTE Confidence: 0.884363365

00:40:50.430 --> 00:40:51.520 They will open their mouth.

NOTE Confidence: 0.884363365

00:40:51.520 --> 00:40:53.550 They'll be miserable and uncomfortable.

NOTE Confidence: 0.884363365

00:40:53.550 --> 00:40:55.142 They'll wish they had Afrin or something to

NOTE Confidence: 0.884363365

00:40:55.142 --> 00:40:56.778 open them up because it's a terrible cold.

NOTE Confidence: 0.884363365

00:40:56.780 --> 00:40:59.348 But they're fine in a baby.

NOTE Confidence: 0.884363365

00:40:59.350 --> 00:41:01.288 If you plug their nose completely,

NOTE Confidence: 0.884363365

00:41:01.290 --> 00:41:02.586 they will die.

NOTE Confidence: 0.884363365

00:41:02.586 --> 00:41:04.746 They are obligate nasal breathers.

NOTE Confidence: 0.884363365

00:41:04.750 --> 00:41:06.310 They absolutely must be able

NOTE Confidence: 0.884363365

00:41:06.310 --> 00:41:07.870 to breathe through their nose,

NOTE Confidence: 0.884363365

00:41:07.870 --> 00:41:09.250 at least a little bit.

NOTE Confidence: 0.884363365

00:41:09.250 --> 00:41:11.266 When we have babies born with a rinia,

NOTE Confidence: 0.884363365

00:41:11.270 --> 00:41:12.350 meaning no nose,
NOTE Confidence: 0.884363365

00:41:12.350 --> 00:41:14.510 they obstructed birth and they are.
NOTE Confidence: 0.884363365

00:41:14.510 --> 00:41:16.496 They can't eat and we have
NOTE Confidence: 0.884363365

00:41:16.496 --> 00:41:18.540 to do a tracheotomy for them.
NOTE Confidence: 0.884363365

00:41:18.540 --> 00:41:20.479 And so the nose is very important
NOTE Confidence: 0.884363365

00:41:20.479 --> 00:41:22.855 in the baby in a way that we don't
NOTE Confidence: 0.884363365

00:41:22.855 --> 00:41:25.019 think about it as mattering so much.
NOTE Confidence: 0.884363365

00:41:25.020 --> 00:41:27.640 In older kids and adults.
NOTE Confidence: 0.884363365

00:41:27.640 --> 00:41:29.932 When a baby has nasal obstruction
NOTE Confidence: 0.884363365

00:41:29.932 --> 00:41:31.940 and they often present to me,
NOTE Confidence: 0.884363365

00:41:31.940 --> 00:41:34.406 I see at least three a day with bad
NOTE Confidence: 0.884363365

00:41:34.406 --> 00:41:36.033 nasal obstruction, obstructing,
NOTE Confidence: 0.884363365

00:41:36.033 --> 00:41:36.979 stopping, eating.
NOTE Confidence: 0.884363365

00:41:36.979 --> 00:41:40.290 We usually just put them on some
NOTE Confidence: 0.884363365

00:41:40.370 --> 00:41:42.890 nasal saline or nasal steroids and
NOTE Confidence: 0.884363365

00:41:42.890 --> 00:41:45.957 infants will get this sort of progesterone,

NOTE Confidence: 0.884363365

00:41:45.957 --> 00:41:48.288 maternal estrogen withdrawal.

NOTE Confidence: 0.884363365

00:41:48.288 --> 00:41:51.072 Thing that happens where their

NOTE Confidence: 0.884363365

00:41:51.072 --> 00:41:51.976 noses will get very,

NOTE Confidence: 0.884363365

00:41:51.980 --> 00:41:54.080 very swollen and sometimes will,

NOTE Confidence: 0.884363365

00:41:54.080 --> 00:41:55.100 they'll have a lot of problems.

NOTE Confidence: 0.884363365

00:41:55.100 --> 00:41:56.480 We call it rhinitis of infancy.

NOTE Confidence: 0.884363365

00:41:56.480 --> 00:41:58.148 It usually wears off around three

NOTE Confidence: 0.884363365

00:41:58.148 --> 00:41:59.540 to six months of age,

NOTE Confidence: 0.884363365

00:41:59.540 --> 00:42:01.017 but if you can't wait that long,

NOTE Confidence: 0.884363365

00:42:01.020 --> 00:42:02.460 if you give them nasal steroids,

NOTE Confidence: 0.884363365

00:42:02.460 --> 00:42:02.836 fluticasone,

NOTE Confidence: 0.884363365

00:42:02.836 --> 00:42:04.716 it often just completely eliminates

NOTE Confidence: 0.884363365

00:42:04.716 --> 00:42:06.220 it within two weeks.

NOTE Confidence: 0.884363365

00:42:06.220 --> 00:42:08.324 And so that's a that's a nice move

NOTE Confidence: 0.884363365

00:42:08.324 --> 00:42:10.926 in your back pocket for infants with

NOTE Confidence: 0.884363365

00:42:10.926 --> 00:42:13.380 nasal obstruction that's related to edema.

NOTE Confidence: 0.884363365

00:42:13.380 --> 00:42:14.910 On those that can't breathe

NOTE Confidence: 0.884363365

00:42:14.910 --> 00:42:16.440 and eat and have Strider,

NOTE Confidence: 0.884363365

00:42:16.440 --> 00:42:18.095 we do a supraglottic plasty

NOTE Confidence: 0.884363365

00:42:18.095 --> 00:42:19.419 for those with narrowed.

NOTE Confidence: 0.884363365

00:42:19.420 --> 00:42:20.228 Interform apertures,

NOTE Confidence: 0.884363365

00:42:20.228 --> 00:42:22.248 the openings of the nose.

NOTE Confidence: 0.884363365

00:42:22.250 --> 00:42:24.178 Here we will do a drill out of

NOTE Confidence: 0.884363365

00:42:24.178 --> 00:42:25.928 that to open their nose up.

NOTE Confidence: 0.884363365

00:42:25.930 --> 00:42:26.950 If they've coined latricia,

NOTE Confidence: 0.884363365

00:42:26.950 --> 00:42:29.547 so a dead end in the back of their nose,

NOTE Confidence: 0.884363365

00:42:29.550 --> 00:42:32.352 then we will fix that and then

NOTE Confidence: 0.884363365

00:42:32.352 --> 00:42:34.207 you can expand their pallets.

NOTE Confidence: 0.884363365

00:42:34.210 --> 00:42:35.652 And I just told you how it

NOTE Confidence: 0.884363365

00:42:35.652 --> 00:42:36.270 helps with snoring.

NOTE Confidence: 0.884363365

00:42:36.270 --> 00:42:37.964 It's not going to make a big

NOTE Confidence: 0.884363365

00:42:37.964 --> 00:42:38.994 difference for sleep apnea

NOTE Confidence: 0.884363365

00:42:38.994 --> 00:42:40.269 in adults and older kids,

NOTE Confidence: 0.886869025263158

00:42:40.270 --> 00:42:42.534 but it helps in younger kids and it

NOTE Confidence: 0.886869025263158

00:42:42.534 --> 00:42:44.525 really helps in infants if that's

NOTE Confidence: 0.886869025263158

00:42:44.525 --> 00:42:46.230 actually what their problem is.

NOTE Confidence: 0.886869025263158

00:42:46.230 --> 00:42:48.366 And then there's baby jaw distraction.

NOTE Confidence: 0.886869025263158

00:42:48.370 --> 00:42:49.786 I showed you a 17 month.

NOTE Confidence: 0.886869025263158

00:42:49.790 --> 00:42:52.346 But we do it in newborns

NOTE Confidence: 0.886869025263158

00:42:52.346 --> 00:42:54.050 and of course tracheotomy,

NOTE Confidence: 0.886869025263158

00:42:54.050 --> 00:42:55.742 this is a newborn with Piero

NOTE Confidence: 0.886869025263158

00:42:55.742 --> 00:42:57.610 band sequence in Micronesia.

NOTE Confidence: 0.886869025263158

00:42:57.610 --> 00:43:00.914 And you can see the tongue is so far back,

NOTE Confidence: 0.886869025263158

00:43:00.914 --> 00:43:02.110 it's in the baby's nose,

NOTE Confidence: 0.886869025263158

00:43:02.110 --> 00:43:04.100 it's actually prolapse through a

NOTE Confidence: 0.886869025263158

00:43:04.100 --> 00:43:06.254 cleft palate and that's the nasal

NOTE Confidence: 0.886869025263158

00:43:06.254 --> 00:43:08.666 septum in the midline back there.
NOTE Confidence: 0.886869025263158

00:43:08.670 --> 00:43:11.770 And that tongue is touching the nasal
NOTE Confidence: 0.886869025263158

00:43:11.770 --> 00:43:13.532 septum through the powerful flap.
NOTE Confidence: 0.886869025263158

00:43:13.532 --> 00:43:15.893 And now the baby is 100% obstructed.
NOTE Confidence: 0.886869025263158

00:43:15.893 --> 00:43:19.000 That happened this year.
NOTE Confidence: 0.63744821

00:43:19.000 --> 00:43:19.609 Oh good, that's
NOTE Confidence: 0.472767338333333

00:43:19.620 --> 00:43:20.868 genuine apnea. Yeah,
NOTE Confidence: 0.472767338333333

00:43:20.868 --> 00:43:22.385 that's genuine happiness after
NOTE Confidence: 0.472767338333333

00:43:22.385 --> 00:43:23.910 we do our jaw distraction, this
NOTE Confidence: 0.835605448571429

00:43:23.920 --> 00:43:25.908 is the same baby four days later.
NOTE Confidence: 0.720312475

00:43:28.510 --> 00:43:30.518 6 millimeters of activation
NOTE Confidence: 0.731364313333334

00:43:30.730 --> 00:43:31.966 that we brought his jaw forward,
NOTE Confidence: 0.731364313333334

00:43:31.970 --> 00:43:34.063 6 millimeters at this point and
NOTE Confidence: 0.731364313333334

00:43:34.063 --> 00:43:36.128 now he's supine hanging out,
NOTE Confidence: 0.731364313333334

00:43:36.130 --> 00:43:38.450 giving me the side eye.
NOTE Confidence: 0.731364313333334

00:43:38.450 --> 00:43:40.274 So bringing that baby's jaw forward

NOTE Confidence: 0.731364313333334
00:43:40.274 --> 00:43:42.107 just 6 millimeters at that point
NOTE Confidence: 0.731364313333334
00:43:42.107 --> 00:43:44.060 will make that much of a difference.
NOTE Confidence: 0.731364313333334
00:43:44.060 --> 00:43:45.272 Piriform aperture stenosis.
NOTE Confidence: 0.731364313333334
00:43:45.272 --> 00:43:47.696 This is the normal pyriform aperture,
NOTE Confidence: 0.731364313333334
00:43:47.700 --> 00:43:50.038 pear shaped. That's why it's pure form.
NOTE Confidence: 0.731364313333334
00:43:50.040 --> 00:43:52.182 And then this looks like a box
NOTE Confidence: 0.731364313333334
00:43:52.182 --> 00:43:54.435 or a keyhole and that makes
NOTE Confidence: 0.731364313333334
00:43:54.435 --> 00:43:56.530 very very narrow nasal cavities.
NOTE Confidence: 0.731364313333334
00:43:56.530 --> 00:43:58.280 So we drill that out.
NOTE Confidence: 0.731364313333334
00:43:58.280 --> 00:44:01.400 Or you can actually make Bony cuts here,
NOTE Confidence: 0.731364313333334
00:44:01.400 --> 00:44:05.828 attach hardware and expand the palette.
NOTE Confidence: 0.731364313333334
00:44:05.830 --> 00:44:08.502 This is called a Sarpy or a surgically
NOTE Confidence: 0.731364313333334
00:44:08.502 --> 00:44:10.369 assisted rapid palatal expansion.
NOTE Confidence: 0.731364313333334
00:44:10.370 --> 00:44:12.474 So you make cuts here and here and
NOTE Confidence: 0.731364313333334
00:44:12.474 --> 00:44:14.585 right here in the midline attach a
NOTE Confidence: 0.731364313333334

00:44:14.585 --> 00:44:17.047 distractor and it will allow you to open it.

NOTE Confidence: 0.731364313333334

00:44:17.050 --> 00:44:19.066 I'm showing you a larger patient and this

NOTE Confidence: 0.731364313333334

00:44:19.066 --> 00:44:21.390 is a 10 year old with Apert syndrome,

NOTE Confidence: 0.731364313333334

00:44:21.390 --> 00:44:23.342 which is craniosynostosis with

NOTE Confidence: 0.731364313333334

00:44:23.342 --> 00:44:26.270 premature fusion of the skull sutures.

NOTE Confidence: 0.731364313333334

00:44:26.270 --> 00:44:26.888 The suture,

NOTE Confidence: 0.731364313333334

00:44:26.888 --> 00:44:28.433 as orthodontist will tell you

NOTE Confidence: 0.731364313333334

00:44:28.433 --> 00:44:30.609 in the mid palatal suture here,

NOTE Confidence: 0.731364313333334

00:44:30.610 --> 00:44:33.130 is open and stays open until

NOTE Confidence: 0.731364313333334

00:44:33.130 --> 00:44:34.696 you're like 1318 years old,

NOTE Confidence: 0.731364313333334

00:44:34.696 --> 00:44:36.820 which is why you can attach a paddle.

NOTE Confidence: 0.731364313333334

00:44:36.820 --> 00:44:37.824 Spander turned that key.

NOTE Confidence: 0.731364313333334

00:44:37.824 --> 00:44:38.828 It hurts like hell,

NOTE Confidence: 0.731364313333334

00:44:38.830 --> 00:44:40.730 but it expands your palate.

NOTE Confidence: 0.731364313333334

00:44:40.730 --> 00:44:42.956 That says the suture is open in

NOTE Confidence: 0.731364313333334

00:44:42.956 --> 00:44:44.348 syndromic children that have

NOTE Confidence: 0.731364313333334
00:44:44.348 --> 00:44:46.228 premature fusion of their sutures,
NOTE Confidence: 0.731364313333334
00:44:46.230 --> 00:44:48.106 such as this kid with Apert syndrome.
NOTE Confidence: 0.731364313333334
00:44:48.110 --> 00:44:50.114 The pallet can't grow or expand
NOTE Confidence: 0.731364313333334
00:44:50.114 --> 00:44:51.950 and look at her teeth.
NOTE Confidence: 0.731364313333334
00:44:51.950 --> 00:44:54.046 And so the only way to expand them,
NOTE Confidence: 0.731364313333334
00:44:54.050 --> 00:44:55.222 since it's completely fused,
NOTE Confidence: 0.731364313333334
00:44:55.222 --> 00:44:56.687 is to make these cuts,
NOTE Confidence: 0.731364313333334
00:44:56.690 --> 00:44:58.620 reopen that suture with an
NOTE Confidence: 0.731364313333334
00:44:58.620 --> 00:45:00.550 osteotomy and attach your hardware.
NOTE Confidence: 0.731364313333334
00:45:00.550 --> 00:45:02.856 And now we make that pallet longer, wider.
NOTE Confidence: 0.731364313333334
00:45:02.856 --> 00:45:05.464 And that helps a lot with their dentition,
NOTE Confidence: 0.731364313333334
00:45:05.470 --> 00:45:06.842 and it does have the side effect
NOTE Confidence: 0.731364313333334
00:45:06.842 --> 00:45:08.190 of improving the nasal obstruction.
NOTE Confidence: 0.731364313333334
00:45:08.190 --> 00:45:09.744 You can do this to an infant,
NOTE Confidence: 0.731364313333334
00:45:09.750 --> 00:45:11.410 but infants don't have teeth.
NOTE Confidence: 0.731364313333334

00:45:11.410 --> 00:45:12.190 And so here we are,
NOTE Confidence: 0.731364313333334

00:45:12.190 --> 00:45:13.500 having drilled out that pyriform
NOTE Confidence: 0.731364313333334

00:45:13.500 --> 00:45:14.548 aperture on this infant.
NOTE Confidence: 0.731364313333334

00:45:14.550 --> 00:45:17.085 Here's our this has prematurely
NOTE Confidence: 0.731364313333334

00:45:17.085 --> 00:45:19.690 fused in utero, so we reopen it.
NOTE Confidence: 0.731364313333334

00:45:19.690 --> 00:45:21.310 There's our cuts and the distractor
NOTE Confidence: 0.731364313333334

00:45:21.362 --> 00:45:22.397 that we put on them.
NOTE Confidence: 0.731364313333334

00:45:22.400 --> 00:45:23.625 Because they don't have teeth
NOTE Confidence: 0.731364313333334

00:45:23.625 --> 00:45:24.850 is a little acrylic plate.
NOTE Confidence: 0.731364313333334

00:45:24.850 --> 00:45:27.250 We screw it into the palette
NOTE Confidence: 0.731364313333334

00:45:27.250 --> 00:45:29.859 and then we can turn this.
NOTE Confidence: 0.731364313333334

00:45:29.860 --> 00:45:32.580 And that will open the palette and that
NOTE Confidence: 0.731364313333334

00:45:32.580 --> 00:45:34.898 will relieve their nasal obstruction.
NOTE Confidence: 0.731364313333334

00:45:34.900 --> 00:45:36.540 But it's very uncommon.
NOTE Confidence: 0.731364313333334

00:45:36.540 --> 00:45:39.000 I think I've done like 3,
NOTE Confidence: 0.731364313333334

00:45:39.000 --> 00:45:41.360 but but it, it, it can be used.

NOTE Confidence: 0.731364313333334
00:45:41.360 --> 00:45:43.944 And so those are like the most aggressive
NOTE Confidence: 0.731364313333334
00:45:43.944 --> 00:45:45.050 Bony orthognathic interventions
NOTE Confidence: 0.731364313333334
00:45:45.050 --> 00:45:47.060 in infants and young children.
NOTE Confidence: 0.731364313333334
00:45:47.060 --> 00:45:49.070 So we've reviewed the pediatric ENT
NOTE Confidence: 0.731364313333334
00:45:49.070 --> 00:45:50.747 perspective regarding the workup and
NOTE Confidence: 0.731364313333334
00:45:50.747 --> 00:45:52.177 management of sleep disorder breathing
NOTE Confidence: 0.731364313333334
00:45:52.177 --> 00:45:54.060 and if you have a sleep study,
NOTE Confidence: 0.731364313333334
00:45:54.060 --> 00:45:55.323 obstructive sleep apnea,
NOTE Confidence: 0.731364313333334
00:45:55.323 --> 00:45:57.428 we talked about surgical strategies
NOTE Confidence: 0.731364313333334
00:45:57.428 --> 00:45:59.562 for regressing for addressing both
NOTE Confidence: 0.731364313333334
00:45:59.562 --> 00:46:01.202 recurrent and persistent airway
NOTE Confidence: 0.731364313333334
00:46:01.202 --> 00:46:03.640 obstruction after T&A and we talked
NOTE Confidence: 0.731364313333334
00:46:03.640 --> 00:46:05.600 about some orthognathic procedures.
NOTE Confidence: 0.731364313333334
00:46:05.600 --> 00:46:06.508 And at that point,
NOTE Confidence: 0.731364313333334
00:46:06.508 --> 00:46:08.160 I'm going to stop and open it
NOTE Confidence: 0.731364313333334

00:46:08.160 --> 00:46:08.877 up to questions.
NOTE Confidence: 0.731364313333334

00:46:08.880 --> 00:46:10.848 Please feel free to unmute yourselves.
NOTE Confidence: 0.879260931818182

00:46:15.280 --> 00:46:16.342 Thank you, Andrew.
NOTE Confidence: 0.879260931818182

00:46:16.342 --> 00:46:19.100 I just had a quick question since uh,
NOTE Confidence: 0.879260931818182

00:46:19.100 --> 00:46:20.640 we do see some of these kids,
NOTE Confidence: 0.879260931818182

00:46:20.640 --> 00:46:23.258 uh with you, uh, what you know,
NOTE Confidence: 0.879260931818182

00:46:23.260 --> 00:46:26.725 we parents typically ask us about the
NOTE Confidence: 0.879260931818182

00:46:26.725 --> 00:46:30.179 regrowth of the tonsils opposed TNA.
NOTE Confidence: 0.879260931818182

00:46:30.180 --> 00:46:32.035 But the adenoids we always talk about,
NOTE Confidence: 0.879260931818182

00:46:32.040 --> 00:46:33.918 regrowth of adenoids can occur if
NOTE Confidence: 0.879260931818182

00:46:33.918 --> 00:46:36.080 they are allergic and have allergies.
NOTE Confidence: 0.879260931818182

00:46:36.080 --> 00:46:37.214 Seasonal allergies.
NOTE Confidence: 0.879260931818182

00:46:37.214 --> 00:46:39.482 What about the lingular
NOTE Confidence: 0.879260931818182

00:46:39.482 --> 00:46:40.616 tonsillar hypertrophy?
NOTE Confidence: 0.879260931818182

00:46:40.620 --> 00:46:43.164 How how often do you see big currents
NOTE Confidence: 0.879260931818182

00:46:43.164 --> 00:46:45.188 with these or adenoids in general?

NOTE Confidence: 0.688333935

00:46:45.280 --> 00:46:47.998 Yeah, those those are great questions.

NOTE Confidence: 0.688333935

00:46:48.000 --> 00:46:50.238 So First off, I think you want to

NOTE Confidence: 0.688333935

00:46:50.238 --> 00:46:52.000 think about the age of the child.

NOTE Confidence: 0.688333935

00:46:52.000 --> 00:46:54.376 So the chances of the adenoids growing back,

NOTE Confidence: 0.688333935

00:46:54.380 --> 00:46:56.988 regardless of the technique you use are much

NOTE Confidence: 0.688333935

00:46:56.988 --> 00:46:59.816 higher if you remove the adenoids underage 2.

NOTE Confidence: 0.688333935

00:46:59.820 --> 00:47:01.668 So kids who have adenoidectomy under

NOTE Confidence: 0.688333935

00:47:01.668 --> 00:47:03.782 two and it's sort of self selects

NOTE Confidence: 0.688333935

00:47:03.782 --> 00:47:06.059 for those that have some sort of bad

NOTE Confidence: 0.688333935

00:47:06.059 --> 00:47:07.865 disease or problem to begin with.

NOTE Confidence: 0.688333935

00:47:07.870 --> 00:47:09.370 Those are the ones who are

NOTE Confidence: 0.688333935

00:47:09.370 --> 00:47:10.920 more likely to have regrowth.

NOTE Confidence: 0.688333935

00:47:10.920 --> 00:47:11.874 It's still low,

NOTE Confidence: 0.688333935

00:47:11.874 --> 00:47:14.100 but it's more common if you're removing

NOTE Confidence: 0.688333935

00:47:14.160 --> 00:47:16.830 the adenoids than a kid over 2/3, even four.

NOTE Confidence: 0.688333935

00:47:16.830 --> 00:47:18.930 It would be very unlikely for
NOTE Confidence: 0.688333935

00:47:18.930 --> 00:47:20.858 those adenoids to come back.
NOTE Confidence: 0.688333935

00:47:20.860 --> 00:47:23.180 It's really the younger kids that do that.
NOTE Confidence: 0.688333935

00:47:23.180 --> 00:47:23.654 The tonsils.
NOTE Confidence: 0.688333935

00:47:23.654 --> 00:47:25.313 We have two ways of removing them.
NOTE Confidence: 0.688333935

00:47:25.320 --> 00:47:27.105 One is called an extra
NOTE Confidence: 0.688333935

00:47:27.105 --> 00:47:27.819 capsular tonsillectomy,
NOTE Confidence: 0.688333935

00:47:27.820 --> 00:47:29.890 which is their standard tonsillectomy.
NOTE Confidence: 0.688333935

00:47:29.890 --> 00:47:31.975 And then there's something called
NOTE Confidence: 0.688333935

00:47:31.975 --> 00:47:34.060 a tonsillectomy or an intracapsular
NOTE Confidence: 0.688333935

00:47:34.123 --> 00:47:34.970 tonsillectomy.
NOTE Confidence: 0.688333935

00:47:34.970 --> 00:47:37.035 And that's where we shave the tonsils
NOTE Confidence: 0.688333935

00:47:37.035 --> 00:47:39.908 down and we remove them from the inside out.
NOTE Confidence: 0.688333935

00:47:39.910 --> 00:47:42.592 So the tonsil is like an egg with a
NOTE Confidence: 0.688333935

00:47:42.592 --> 00:47:45.368 shell that sits in the tonsillar fossa.
NOTE Confidence: 0.688333935

00:47:45.370 --> 00:47:46.480 And when you do tonsillectomy,

NOTE Confidence: 0.688333935

00:47:46.480 --> 00:47:47.970 you remove the entire tonsil,

NOTE Confidence: 0.688333935

00:47:47.970 --> 00:47:49.866 including the shell like a hard boiled egg.

NOTE Confidence: 0.688333935

00:47:49.870 --> 00:47:52.936 It all comes out for tonsillectomy.

NOTE Confidence: 0.688333935

00:47:52.940 --> 00:47:54.326 You leave the shell and you take

NOTE Confidence: 0.688333935

00:47:54.326 --> 00:47:55.240 out the egg white,

NOTE Confidence: 0.688333935

00:47:55.240 --> 00:47:56.170 the egg yolk,

NOTE Confidence: 0.688333935

00:47:56.170 --> 00:47:57.720 everything and that shell stays,

NOTE Confidence: 0.688333935

00:47:57.720 --> 00:48:00.936 and then you cauterize the shell and

NOTE Confidence: 0.688333935

00:48:00.936 --> 00:48:04.104 that has a lower bleed rate and a

NOTE Confidence: 0.688333935

00:48:04.104 --> 00:48:07.018 little bit better pain afterwards.

NOTE Confidence: 0.688333935

00:48:07.020 --> 00:48:11.240 The downside of it is that it has a higher,

NOTE Confidence: 0.688333935

00:48:11.240 --> 00:48:13.850 though not high but higher chance

NOTE Confidence: 0.688333935

00:48:13.850 --> 00:48:14.720 of regrowth.

NOTE Confidence: 0.688333935

00:48:14.720 --> 00:48:17.690 And I have definitely like a few times a

NOTE Confidence: 0.688333935

00:48:17.690 --> 00:48:20.596 year I see regrowth from tonsillectomy.

NOTE Confidence: 0.688333935

00:48:20.600 --> 00:48:22.168 I don't do a lot of tonsillectomy
NOTE Confidence: 0.688333935

00:48:22.168 --> 00:48:22.840 in younger kids.
NOTE Confidence: 0.688333935

00:48:22.840 --> 00:48:25.000 Because I've seen so many regrowth and the
NOTE Confidence: 0.688333935

00:48:25.000 --> 00:48:27.240 parents are pretty unhappy when that happens,
NOTE Confidence: 0.688333935

00:48:27.240 --> 00:48:29.081 because now you got to go through
NOTE Confidence: 0.688333935

00:48:29.081 --> 00:48:30.729 the whole thing all over again.
NOTE Confidence: 0.688333935

00:48:30.730 --> 00:48:33.178 And so, but for those that don't regrow,
NOTE Confidence: 0.688333935

00:48:33.180 --> 00:48:34.944 you know you've you've got an
NOTE Confidence: 0.688333935

00:48:34.944 --> 00:48:36.740 easier recovery and and it worked.
NOTE Confidence: 0.688333935

00:48:36.740 --> 00:48:40.222 So plenty of places will do that but
NOTE Confidence: 0.688333935

00:48:40.222 --> 00:48:41.674 otherwise the tonsil shouldn't grow back.
NOTE Confidence: 0.688333935

00:48:41.680 --> 00:48:43.612 If you do an extra capsular tonsillectomy
NOTE Confidence: 0.688333935

00:48:43.612 --> 00:48:45.320 and then the lingual tonsils,
NOTE Confidence: 0.688333935

00:48:45.320 --> 00:48:47.287 we you know, ablate them down and
NOTE Confidence: 0.688333935

00:48:47.287 --> 00:48:48.999 they usually do not come back.
NOTE Confidence: 0.688333935

00:48:49.000 --> 00:48:50.560 I personally have never seen

NOTE Confidence: 0.688333935

00:48:50.560 --> 00:48:51.496 lingual tonsils return,

NOTE Confidence: 0.688333935

00:48:51.500 --> 00:48:52.996 but it can happen.

NOTE Confidence: 0.688333935

00:48:52.996 --> 00:48:55.240 You're more likely to grow lymphoid

NOTE Confidence: 0.688333935

00:48:55.312 --> 00:48:57.783 tissue in a weird place than to

NOTE Confidence: 0.688333935

00:48:57.783 --> 00:48:59.470 regrow your lingual tonsils.

NOTE Confidence: 0.688333935

00:48:59.470 --> 00:49:01.150 I'm going to get to another question.

NOTE Confidence: 0.688333935

00:49:01.150 --> 00:49:03.688 Somebody asked about ages of CPAP.

NOTE Confidence: 0.688333935

00:49:03.690 --> 00:49:07.426 I have started plenty of infants on CPAP.

NOTE Confidence: 0.688333935

00:49:07.430 --> 00:49:08.936 You will do a super glottic

NOTE Confidence: 0.688333935

00:49:08.936 --> 00:49:10.350 plasty and they'll get better,

NOTE Confidence: 0.688333935

00:49:10.350 --> 00:49:11.434 but not good enough.

NOTE Confidence: 0.688333935

00:49:11.434 --> 00:49:13.845 You put them on CPAP and we can wean

NOTE Confidence: 0.688333935

00:49:13.845 --> 00:49:15.958 them off cpap by 910 months of age.

NOTE Confidence: 0.688333935

00:49:15.958 --> 00:49:17.680 And then their sleep studies fine

NOTE Confidence: 0.688333935

00:49:17.739 --> 00:49:19.009 and they're good to go.

NOTE Confidence: 0.688333935

00:49:19.010 --> 00:49:20.900 But it really helps them for
NOTE Confidence: 0.688333935

00:49:20.900 --> 00:49:22.879 gaining weight because if you have
NOTE Confidence: 0.688333935

00:49:22.879 --> 00:49:24.841 a kid with such bad laryngomalacia
NOTE Confidence: 0.688333935

00:49:24.841 --> 00:49:26.608 that they're weak and hypotonic
NOTE Confidence: 0.688333935

00:49:26.610 --> 00:49:28.165 from their failure to thrive
NOTE Confidence: 0.688333935

00:49:28.165 --> 00:49:29.720 and you do your intervention.
NOTE Confidence: 0.882781101428571

00:49:29.720 --> 00:49:31.449 And they still can't quite catch up.
NOTE Confidence: 0.882781101428571

00:49:31.450 --> 00:49:33.005 You're catching up to weakness
NOTE Confidence: 0.882781101428571

00:49:33.005 --> 00:49:34.871 and hypotonia and that that CPAP
NOTE Confidence: 0.882781101428571

00:49:34.871 --> 00:49:36.389 sort of allows them to rest.
NOTE Confidence: 0.882781101428571

00:49:36.390 --> 00:49:38.105 And so that's just a few months.
NOTE Confidence: 0.882781101428571

00:49:38.110 --> 00:49:40.742 I've had other kids with cerebral palsy
NOTE Confidence: 0.882781101428571

00:49:40.742 --> 00:49:43.929 who have been on CPAP for years and years.
NOTE Confidence: 0.882781101428571

00:49:43.930 --> 00:49:45.736 The downside of that is that it
NOTE Confidence: 0.882781101428571

00:49:45.736 --> 00:49:47.612 can cause mid face retribution if
NOTE Confidence: 0.882781101428571

00:49:47.612 --> 00:49:49.682 those straps are tightened up and

NOTE Confidence: 0.882781101428571
00:49:49.682 --> 00:49:51.407 you're yanking it back enough.
NOTE Confidence: 0.882781101428571
00:49:51.410 --> 00:49:53.710 And that may require an
NOTE Confidence: 0.882781101428571
00:49:53.710 --> 00:49:54.630 orthodontic intervention,
NOTE Confidence: 0.882781101428571
00:49:54.630 --> 00:49:56.446 but you can do it for a while.
NOTE Confidence: 0.882781101428571
00:49:56.450 --> 00:49:58.818 You just want to be able to readjust
NOTE Confidence: 0.882781101428571
00:49:58.818 --> 00:49:59.768 your settings, right?
NOTE Confidence: 0.882781101428571
00:49:59.768 --> 00:50:01.200 Because like your pressure
NOTE Confidence: 0.882781101428571
00:50:01.200 --> 00:50:03.326 settings will change as the child
NOTE Confidence: 0.882781101428571
00:50:03.326 --> 00:50:05.223 grows and and and time goes on.
NOTE Confidence: 0.882781101428571
00:50:05.230 --> 00:50:06.960 Another question was really we
NOTE Confidence: 0.882781101428571
00:50:06.960 --> 00:50:09.035 see patients with an increase in
NOTE Confidence: 0.882781101428571
00:50:09.035 --> 00:50:10.715 HIV after TNA in Down syndrome.
NOTE Confidence: 0.882781101428571
00:50:10.720 --> 00:50:12.146 Yep, absolutely.
NOTE Confidence: 0.882781101428571
00:50:12.146 --> 00:50:17.137 That can happen and is a bummer.
NOTE Confidence: 0.882781101428571
00:50:17.140 --> 00:50:19.948 And that's a lot of sort of hypotonia
NOTE Confidence: 0.882781101428571

00:50:19.948 --> 00:50:22.918 at play and interval growth at play.
NOTE Confidence: 0.882781101428571

00:50:22.920 --> 00:50:25.496 It's less likely that a Down syndrome,
NOTE Confidence: 0.882781101428571

00:50:25.500 --> 00:50:27.618 OK with Down syndrome who's done
NOTE Confidence: 0.882781101428571

00:50:27.618 --> 00:50:29.988 growing will have a TNA and then.
NOTE Confidence: 0.882781101428571

00:50:29.990 --> 00:50:30.614 Be worse.
NOTE Confidence: 0.882781101428571

00:50:30.614 --> 00:50:32.174 I suppose it could happen,
NOTE Confidence: 0.882781101428571

00:50:32.180 --> 00:50:33.998 but there's also the test retest
NOTE Confidence: 0.882781101428571

00:50:33.998 --> 00:50:35.580 reliability of your sleep study.
NOTE Confidence: 0.882781101428571

00:50:35.580 --> 00:50:37.852 But often you will see a child who's
NOTE Confidence: 0.882781101428571

00:50:37.852 --> 00:50:39.661 younger with downs and then you
NOTE Confidence: 0.882781101428571

00:50:39.661 --> 00:50:41.431 do their T&A and they're better.
NOTE Confidence: 0.882781101428571

00:50:41.440 --> 00:50:43.528 And then as they grow their
NOTE Confidence: 0.882781101428571

00:50:43.528 --> 00:50:44.572 mid face deficiency,
NOTE Confidence: 0.882781101428571

00:50:44.580 --> 00:50:46.100 their retro paddle obstruction,
NOTE Confidence: 0.882781101428571

00:50:46.100 --> 00:50:47.620 their relative macroglossia because
NOTE Confidence: 0.882781101428571

00:50:47.620 --> 00:50:49.880 the rest of their mouth isn't growing,

NOTE Confidence: 0.882781101428571

00:50:49.880 --> 00:50:51.497 but their tongue still growing with them.

NOTE Confidence: 0.882781101428571

00:50:51.500 --> 00:50:53.252 That contributes more than that's going

NOTE Confidence: 0.882781101428571

00:50:53.252 --> 00:50:55.419 to give you more of the severe OSA.

NOTE Confidence: 0.882781101428571

00:50:55.420 --> 00:50:57.401 That is a population that needs to

NOTE Confidence: 0.882781101428571

00:50:57.401 --> 00:50:59.419 be followed closely and it's also a

NOTE Confidence: 0.882781101428571

00:50:59.419 --> 00:51:01.510 population that sometimes you need to decide.

NOTE Confidence: 0.882781101428571

00:51:01.510 --> 00:51:02.668 Like how closely do you want

NOTE Confidence: 0.882781101428571

00:51:02.668 --> 00:51:03.440 to be doing this?

NOTE Confidence: 0.882781101428571

00:51:03.440 --> 00:51:04.835 Because each time you follow

NOTE Confidence: 0.882781101428571

00:51:04.835 --> 00:51:06.620 and you get that sleep study,

NOTE Confidence: 0.882781101428571

00:51:06.620 --> 00:51:08.205 like you feel obligated to

NOTE Confidence: 0.882781101428571

00:51:08.205 --> 00:51:09.473 do something about it.

NOTE Confidence: 0.882781101428571

00:51:09.480 --> 00:51:10.938 And for some kids, like wow,

NOTE Confidence: 0.882781101428571

00:51:10.940 --> 00:51:12.160 this is really important for

NOTE Confidence: 0.882781101428571

00:51:12.160 --> 00:51:13.136 heart strain and whatnot.

NOTE Confidence: 0.882781101428571

00:51:13.140 --> 00:51:14.796 But for other kids,
NOTE Confidence: 0.882781101428571

00:51:14.796 --> 00:51:16.866 depending on how highly functioning
NOTE Confidence: 0.882781101428571

00:51:16.866 --> 00:51:19.596 Down syndrome they are, you know,
NOTE Confidence: 0.882781101428571

00:51:19.596 --> 00:51:21.588 the, the, the mild.
NOTE Confidence: 0.882781101428571

00:51:21.590 --> 00:51:22.658 Let's admit it.
NOTE Confidence: 0.882781101428571

00:51:22.658 --> 00:51:24.438 The mild neurocognitive effects on
NOTE Confidence: 0.882781101428571

00:51:24.438 --> 00:51:26.210 the nonverbal Down syndrome kid.
NOTE Confidence: 0.882781101428571

00:51:26.210 --> 00:51:29.082 That may not be worth the struggle of
NOTE Confidence: 0.882781101428571

00:51:29.082 --> 00:51:31.456 putting that mask on every 10 minutes
NOTE Confidence: 0.882781101428571

00:51:31.456 --> 00:51:34.260 all night long on a combative child.
NOTE Confidence: 0.882781101428571

00:51:34.260 --> 00:51:38.544 And so one has to think about about that.
NOTE Confidence: 0.882781101428571

00:51:38.550 --> 00:51:41.558 That's a broader discussion.
NOTE Confidence: 0.882781101428571

00:51:41.560 --> 00:51:42.820 All right, keep them coming.
NOTE Confidence: 0.882781101428571

00:51:42.820 --> 00:51:43.508 What else you got?
NOTE Confidence: 0.85978071

00:51:46.520 --> 00:51:48.700 Hey, Andrew, very nice talk.
NOTE Confidence: 0.85978071

00:51:48.700 --> 00:51:52.138 Really fun to see the other side of sleep

NOTE Confidence: 0.85978071

00:51:52.138 --> 00:51:55.380 apnea management when we oftentimes are.

NOTE Confidence: 0.85978071

00:51:55.380 --> 00:51:57.222 That's not involved in these more

NOTE Confidence: 0.85978071

00:51:57.222 --> 00:51:58.450 invasive procedures and obviously

NOTE Confidence: 0.85978071

00:51:58.496 --> 00:51:59.870 they work in the right person.

NOTE Confidence: 0.85978071

00:51:59.870 --> 00:52:01.245 So one question I have

NOTE Confidence: 0.85978071

00:52:01.245 --> 00:52:03.020 for you is that you know,

NOTE Confidence: 0.85978071

00:52:03.020 --> 00:52:05.246 there's in the sleep apnea literature,

NOTE Confidence: 0.85978071

00:52:05.250 --> 00:52:07.170 there's some data coming up for us to,

NOTE Confidence: 0.85978071

00:52:07.170 --> 00:52:08.526 you mentioned epiglottic

NOTE Confidence: 0.85978071

00:52:08.526 --> 00:52:10.786 prolapse or collapse and kids.

NOTE Confidence: 0.85978071

00:52:10.790 --> 00:52:12.757 And so it's starting to get some

NOTE Confidence: 0.85978071

00:52:12.757 --> 00:52:14.579 literature showing that you can sort of

NOTE Confidence: 0.85978071

00:52:14.579 --> 00:52:16.519 pick out who has that collapse in adults.

NOTE Confidence: 0.85978071

00:52:16.520 --> 00:52:18.146 And we know that those individuals

NOTE Confidence: 0.85978071

00:52:18.146 --> 00:52:19.820 tend to do worse with CPAP,

NOTE Confidence: 0.85978071

00:52:19.820 --> 00:52:21.345 you know, makes the collapse

NOTE Confidence: 0.85978071

00:52:21.345 --> 00:52:23.090 worse and they can't tolerate it.

NOTE Confidence: 0.85978071

00:52:23.090 --> 00:52:25.378 And so I was trying to think of

NOTE Confidence: 0.85978071

00:52:25.378 --> 00:52:27.529 what are the surgical options?

NOTE Confidence: 0.85978071

00:52:27.530 --> 00:52:28.686 You know, for adults,

NOTE Confidence: 0.85978071

00:52:28.686 --> 00:52:30.420 if you're aware of them and

NOTE Confidence: 0.85978071

00:52:30.487 --> 00:52:31.607 you know and if so,

NOTE Confidence: 0.85978071

00:52:31.610 --> 00:52:33.171 do you have a sense of success

NOTE Confidence: 0.85978071

00:52:33.171 --> 00:52:34.355 of these procedures because at

NOTE Confidence: 0.85978071

00:52:34.355 --> 00:52:35.979 least personally I have at least a

NOTE Confidence: 0.85978071

00:52:35.979 --> 00:52:37.622 couple of patients that have that

NOTE Confidence: 0.85978071

00:52:37.622 --> 00:52:38.982 pattern of epiglottic prolapse and

NOTE Confidence: 0.85978071

00:52:38.990 --> 00:52:40.733 have a really tough time with CPAP

NOTE Confidence: 0.85978071

00:52:40.733 --> 00:52:42.110 and maybe they're like better,

NOTE Confidence: 0.85978071

00:52:42.110 --> 00:52:43.678 a little bit better with oral appliance,

NOTE Confidence: 0.85978071

00:52:43.680 --> 00:52:45.889 but and So what?

NOTE Confidence: 0.777532223

00:52:47.440 --> 00:52:48.861 Perhaps is occurring how low it is

NOTE Confidence: 0.777532223

00:52:48.861 --> 00:52:50.314 that you really have to Jack the

NOTE Confidence: 0.777532223

00:52:50.314 --> 00:52:51.508 pressure up and then they're the

NOTE Confidence: 0.777532223

00:52:51.554 --> 00:52:53.066 ones that it's going through their

NOTE Confidence: 0.777532223

00:52:53.066 --> 00:52:54.444 upper softgel sphincter and they

NOTE Confidence: 0.777532223

00:52:54.444 --> 00:52:56.628 can't tolerate and they hate it.

NOTE Confidence: 0.777532223

00:52:56.630 --> 00:52:59.870 So our field is interesting.

NOTE Confidence: 0.777532223

00:52:59.870 --> 00:53:02.950 So like we all do adult and pediatric

NOTE Confidence: 0.777532223

00:53:02.950 --> 00:53:05.929 training as our general core residency.

NOTE Confidence: 0.777532223

00:53:05.930 --> 00:53:08.522 But then if you do a sleep fellowship

NOTE Confidence: 0.777532223

00:53:08.522 --> 00:53:11.399 that's all adults and if you do Pediatrics,

NOTE Confidence: 0.777532223

00:53:11.400 --> 00:53:13.472 you don't do any sleep other than

NOTE Confidence: 0.777532223

00:53:13.472 --> 00:53:15.488 just whatever we just talked about.

NOTE Confidence: 0.777532223

00:53:15.490 --> 00:53:17.860 Now there is some important overlap.

NOTE Confidence: 0.777532223

00:53:17.860 --> 00:53:20.188 And I definitely do much more

NOTE Confidence: 0.777532223

00:53:20.188 --> 00:53:21.740 adult flavored sleep surgeries
NOTE Confidence: 0.777532223

00:53:21.812 --> 00:53:23.820 than most pediatric allergists.
NOTE Confidence: 0.777532223

00:53:23.820 --> 00:53:26.694 But there are some pediatric allergology
NOTE Confidence: 0.777532223

00:53:26.694 --> 00:53:29.061 sleep interventions that are pretty
NOTE Confidence: 0.777532223

00:53:29.061 --> 00:53:31.728 Mickey Mouse basic to us that sleep
NOTE Confidence: 0.777532223

00:53:31.728 --> 00:53:33.920 adults sleep otolaryngology trained people
NOTE Confidence: 0.777532223

00:53:33.920 --> 00:53:37.307 will have never seen and never done and
NOTE Confidence: 0.777532223

00:53:37.307 --> 00:53:38.896 have no idea what you're talking about.
NOTE Confidence: 0.777532223

00:53:38.900 --> 00:53:42.176 So if I showed you know Tucker Woodson like
NOTE Confidence: 0.777532223

00:53:42.176 --> 00:53:45.730 the the lingual tonsillectomy with epilepsy,
NOTE Confidence: 0.777532223

00:53:45.730 --> 00:53:46.662 he would be like,
NOTE Confidence: 0.777532223

00:53:46.662 --> 00:53:48.270 I don't even know what that is.
NOTE Confidence: 0.777532223

00:53:48.270 --> 00:53:49.649 So they don't do that in adults.
NOTE Confidence: 0.777532223

00:53:49.650 --> 00:53:51.658 They'll do hyoid suspension.
NOTE Confidence: 0.777532223

00:53:51.658 --> 00:53:55.585 They'll suspend the hyoid to the mandible or
NOTE Confidence: 0.777532223

00:53:55.585 --> 00:53:59.220 or try to Pepsi the epiglottis up that way.

NOTE Confidence: 0.777532223

00:53:59.220 --> 00:54:01.845 But the data shows that doesn't work.

NOTE Confidence: 0.777532223

00:54:01.850 --> 00:54:04.550 If you do you triple P

NOTE Confidence: 0.777532223

00:54:04.550 --> 00:54:06.350 and a hyoid suspension,

NOTE Confidence: 0.777532223

00:54:06.350 --> 00:54:08.107 you will lower your HIV more than

NOTE Confidence: 0.777532223

00:54:08.107 --> 00:54:10.009 any one of those individually,

NOTE Confidence: 0.777532223

00:54:10.010 --> 00:54:11.288 but you still don't lower it

NOTE Confidence: 0.777532223

00:54:11.288 --> 00:54:12.730 enough to cure the sleep apnea.

NOTE Confidence: 0.777532223

00:54:12.730 --> 00:54:15.621 And those with higher BMI and those

NOTE Confidence: 0.777532223

00:54:15.621 --> 00:54:18.269 with higher HI are predictably.

NOTE Confidence: 0.777532223

00:54:18.270 --> 00:54:19.144 Gonna fail.

NOTE Confidence: 0.777532223

00:54:19.144 --> 00:54:21.329 And so those procedures though

NOTE Confidence: 0.777532223

00:54:21.329 --> 00:54:22.640 still have use.

NOTE Confidence: 0.777532223

00:54:22.640 --> 00:54:24.516 So you could do them and then

NOTE Confidence: 0.777532223

00:54:24.516 --> 00:54:26.054 maybe tolerate CPAP more because

NOTE Confidence: 0.777532223

00:54:26.054 --> 00:54:27.734 your pressures aren't as high.

NOTE Confidence: 0.777532223

00:54:27.740 --> 00:54:30.484 And so that's where I think that sleep

NOTE Confidence: 0.777532223

00:54:30.484 --> 00:54:32.700 surgeries are not always a cure all,

NOTE Confidence: 0.777532223

00:54:32.700 --> 00:54:35.150 but they can be a really helpful

NOTE Confidence: 0.777532223

00:54:35.150 --> 00:54:36.860 adjuvant to PAP therapy.

NOTE Confidence: 0.777532223

00:54:36.860 --> 00:54:39.799 And this is where I think like as the

NOTE Confidence: 0.777532223

00:54:39.799 --> 00:54:41.290 surgeons we want to be the Cowboys

NOTE Confidence: 0.777532223

00:54:41.345 --> 00:54:42.738 that come in and save the day.

NOTE Confidence: 0.777532223

00:54:42.740 --> 00:54:45.134 But it isn't always going to be like that.

NOTE Confidence: 0.777532223

00:54:45.140 --> 00:54:46.840 But there's still an important

NOTE Confidence: 0.777532223

00:54:46.840 --> 00:54:48.540 use of of helping someone.

NOTE Confidence: 0.777532223

00:54:48.540 --> 00:54:50.466 Going down on their pressures that

NOTE Confidence: 0.777532223

00:54:50.466 --> 00:54:51.750 might improve their compliance.

NOTE Confidence: 0.777532223

00:54:51.750 --> 00:54:54.210 And then in doing that you,

NOTE Confidence: 0.777532223

00:54:54.210 --> 00:54:56.135 you do this intervention and

NOTE Confidence: 0.777532223

00:54:56.135 --> 00:54:57.290 it's still useful.

NOTE Confidence: 0.777532223

00:54:57.290 --> 00:54:58.940 And if it's the difference

NOTE Confidence: 0.777532223

00:54:58.940 --> 00:55:00.260 between tolerating PAP therapy,

NOTE Confidence: 0.777532223

00:55:00.260 --> 00:55:01.350 you're not talking about therapy,

NOTE Confidence: 0.777532223

00:55:01.350 --> 00:55:03.750 then that is a successful surgery.

NOTE Confidence: 0.777532223

00:55:03.750 --> 00:55:06.360 It's just the definition of success

NOTE Confidence: 0.777532223

00:55:06.360 --> 00:55:09.170 in surgery is meeting expectations.

NOTE Confidence: 0.777532223

00:55:09.170 --> 00:55:10.950 That's the definition of success.

NOTE Confidence: 0.777532223

00:55:10.950 --> 00:55:12.217 So you just got to be honest

NOTE Confidence: 0.777532223

00:55:12.217 --> 00:55:13.527 about what you can and can't do.

NOTE Confidence: 0.777532223

00:55:13.530 --> 00:55:15.273 I think that some of these kids

NOTE Confidence: 0.777532223

00:55:15.273 --> 00:55:16.538 surgeries where you're wrapping up

NOTE Confidence: 0.777532223

00:55:16.538 --> 00:55:18.183 the base of tongue and your Pepsi,

NOTE Confidence: 0.777532223

00:55:18.190 --> 00:55:19.586 that epiglottis up, umm,

NOTE Confidence: 0.777532223

00:55:19.586 --> 00:55:22.166 I think that could be very helpful

NOTE Confidence: 0.777532223

00:55:22.166 --> 00:55:23.399 for some adults.

NOTE Confidence: 0.777532223

00:55:23.400 --> 00:55:25.542 But adults are very good at communicating

NOTE Confidence: 0.777532223

00:55:25.542 --> 00:55:27.577 when they are not happy with you.
NOTE Confidence: 0.777532223

00:55:27.580 --> 00:55:29.686 So that kid is much tougher.
NOTE Confidence: 0.777532223

00:55:29.690 --> 00:55:32.920 So the the TNA in a grown man is like
NOTE Confidence: 0.777532223

00:55:33.010 --> 00:55:36.673 gets a bell and rings it for their spouse.
NOTE Confidence: 0.777532223

00:55:36.680 --> 00:55:38.660 Bring me I can't talk,
NOTE Confidence: 0.777532223

00:55:38.660 --> 00:55:40.288 I can't eat too.
NOTE Confidence: 0.777532223

00:55:40.288 --> 00:55:41.916 Two weeks of agony,
NOTE Confidence: 0.851427461666667

00:55:41.920 --> 00:55:43.838 a month of medical leave and the
NOTE Confidence: 0.851427461666667

00:55:43.838 --> 00:55:45.520 three-year olds on the playground.
NOTE Confidence: 0.851427461666667

00:55:45.520 --> 00:55:47.242 You know, the next day running around
NOTE Confidence: 0.851427461666667

00:55:47.242 --> 00:55:48.400 like nothing happened with you.
NOTE Confidence: 0.851427461666667

00:55:48.400 --> 00:55:50.860 Saw that epiglottis up on a 40 year old man.
NOTE Confidence: 0.851427461666667

00:55:50.860 --> 00:55:52.410 They're going to be like, I'm choking,
NOTE Confidence: 0.851427461666667

00:55:52.410 --> 00:55:54.405 I'm dying. I know I would be.
NOTE Confidence: 0.851427461666667

00:55:54.410 --> 00:55:57.320 And whereas the child maybe can't
NOTE Confidence: 0.851427461666667

00:55:57.320 --> 00:55:59.470 talk yet or is nonverbal and they

NOTE Confidence: 0.851427461666667
00:55:59.470 --> 00:56:01.369 just take it and then they're fine.
NOTE Confidence: 0.851427461666667
00:56:01.370 --> 00:56:02.418 So I think it,
NOTE Confidence: 0.851427461666667
00:56:02.418 --> 00:56:05.229 it could be a leap to do those things.
NOTE Confidence: 0.851427461666667
00:56:05.230 --> 00:56:07.057 But I think there are things Pediatrics
NOTE Confidence: 0.851427461666667
00:56:07.057 --> 00:56:08.834 could help adults and there's definitely
NOTE Confidence: 0.851427461666667
00:56:08.834 --> 00:56:10.409 the adult stuff helps pediatric,
NOTE Confidence: 0.851427461666667
00:56:10.410 --> 00:56:12.750 but there's not enough cross pollenization
NOTE Confidence: 0.851427461666667
00:56:12.750 --> 00:56:15.310 within our own field in that regard.
NOTE Confidence: 0.851427461666667
00:56:15.310 --> 00:56:16.900 So long answer to your question, sorry.
NOTE Confidence: 0.96372044
00:56:18.260 --> 00:56:18.950 OK. Thank you.
NOTE Confidence: 0.860046171428571
00:56:21.960 --> 00:56:23.339 And if anyone else has a question,
NOTE Confidence: 0.860046171428571
00:56:23.340 --> 00:56:24.635 please feel free to let us know.
NOTE Confidence: 0.860046171428571
00:56:24.640 --> 00:56:27.588 We can unmute you or. You could post one.
NOTE Confidence: 0.890029163333333
00:56:30.320 --> 00:56:32.273 I don't see any more questions in the chat.
NOTE Confidence: 0.843426911875
00:56:34.380 --> 00:56:36.138 I'm imagine you guys have had
NOTE Confidence: 0.843426911875

00:56:36.138 --> 00:56:37.679 a lecture on hypoglossal nerve
NOTE Confidence: 0.843426911875

00:56:37.679 --> 00:56:39.219 stimulation and all of that.
NOTE Confidence: 0.843426911875

00:56:39.220 --> 00:56:41.518 You know, that's our latest pancia.
NOTE Confidence: 0.843426911875

00:56:41.520 --> 00:56:44.439 As they expand the indications of that,
NOTE Confidence: 0.843426911875

00:56:44.440 --> 00:56:46.130 you're going to see all
NOTE Confidence: 0.843426911875

00:56:46.130 --> 00:56:47.482 the failures rolling in.
NOTE Confidence: 0.843426911875

00:56:47.490 --> 00:56:50.202 If you haven't already, that's OK.
NOTE Confidence: 0.843426911875

00:56:50.202 --> 00:56:52.176 Just know it's coming.
NOTE Confidence: 0.843426911875

00:56:52.176 --> 00:56:55.340 When you make the criteria so strict,
NOTE Confidence: 0.843426911875

00:56:55.340 --> 00:56:58.180 which you know they inspire does on purpose,
NOTE Confidence: 0.843426911875

00:56:58.180 --> 00:57:00.376 then you know you're going to get your FDA.
NOTE Confidence: 0.843426911875

00:57:00.380 --> 00:57:01.080 It's going to be good.
NOTE Confidence: 0.843426911875

00:57:01.080 --> 00:57:02.184 And as soon as you start
NOTE Confidence: 0.843426911875

00:57:02.184 --> 00:57:02.961 expanding and saying, oh,
NOTE Confidence: 0.843426911875

00:57:02.961 --> 00:57:04.066 let's, let's bend the rules
NOTE Confidence: 0.843426911875

00:57:04.066 --> 00:57:05.419 a little bit on this one,

NOTE Confidence: 0.843426911875

00:57:05.420 --> 00:57:06.776 that's when those start popping up.

NOTE Confidence: 0.843426911875

00:57:06.780 --> 00:57:07.968 So don't be discouraged

NOTE Confidence: 0.843426911875

00:57:07.968 --> 00:57:09.156 when that starts happening.

NOTE Confidence: 0.843426911875

00:57:09.160 --> 00:57:10.070 If you know what's coming,

NOTE Confidence: 0.843426911875

00:57:10.070 --> 00:57:12.630 you will feel better about it.

NOTE Confidence: 0.92014558

00:57:12.630 --> 00:57:14.888 And so do you do inspire in

NOTE Confidence: 0.92014558

00:57:14.888 --> 00:57:17.036 adults and kids or just adults.

NOTE Confidence: 0.830499992941176

00:57:17.110 --> 00:57:19.954 So I have trained to do it and but

NOTE Confidence: 0.830499992941176

00:57:19.954 --> 00:57:23.087 I in practice I have not done it.

NOTE Confidence: 0.830499992941176

00:57:23.090 --> 00:57:26.946 My colleague who does PEDs has done

NOTE Confidence: 0.830499992941176

00:57:26.946 --> 00:57:29.522 been doing them in adults as well.

NOTE Confidence: 0.830499992941176

00:57:29.530 --> 00:57:32.060 So but I in the end was like I don't

NOTE Confidence: 0.830499992941176

00:57:32.136 --> 00:57:34.796 want to start seeing adults and filling

NOTE Confidence: 0.830499992941176

00:57:34.796 --> 00:57:37.630 my clinic with adult inspire patients,

NOTE Confidence: 0.830499992941176

00:57:37.630 --> 00:57:40.780 but I think it could be really helpful in

NOTE Confidence: 0.830499992941176

00:57:40.780 --> 00:57:43.198 pediatric cerebral palsy in particular.
NOTE Confidence: 0.830499992941176

00:57:43.200 --> 00:57:44.652 We've been doing it in downs
NOTE Confidence: 0.830499992941176

00:57:44.652 --> 00:57:45.620 and it's been helpful,
NOTE Confidence: 0.830499992941176

00:57:45.620 --> 00:57:47.868 but there are plenty who have failed and
NOTE Confidence: 0.830499992941176

00:57:47.868 --> 00:57:50.178 it's it's a good thing to try and downs,
NOTE Confidence: 0.830499992941176

00:57:50.180 --> 00:57:51.980 but it's really going to
NOTE Confidence: 0.830499992941176

00:57:51.980 --> 00:57:53.780 be the best in hypotonia,
NOTE Confidence: 0.830499992941176

00:57:53.780 --> 00:57:56.200 not just there's too much
NOTE Confidence: 0.830499992941176

00:57:56.200 --> 00:57:58.136 anatomic issues for downs.
NOTE Confidence: 0.830499992941176

00:57:58.140 --> 00:57:59.280 So it will be helpful,
NOTE Confidence: 0.830499992941176

00:57:59.280 --> 00:58:00.870 but where it will really
NOTE Confidence: 0.830499992941176

00:58:00.870 --> 00:58:03.300 crush it is in CP or people,
NOTE Confidence: 0.830499992941176

00:58:03.300 --> 00:58:04.384 hypotonic kids that it's
NOTE Confidence: 0.830499992941176

00:58:04.384 --> 00:58:05.468 going to be unbelievable.
NOTE Confidence: 0.57595706

00:58:09.340 --> 00:58:10.088 Yeah, we get an
NOTE Confidence: 0.722240277

00:58:10.100 --> 00:58:12.686 IRB in that population and and

NOTE Confidence: 0.722240277

00:58:12.686 --> 00:58:14.410 compassionate exemption is tricky.

NOTE Confidence: 0.719293731111111

00:58:15.140 --> 00:58:17.084 We've been sending our downs kits

NOTE Confidence: 0.719293731111111

00:58:17.084 --> 00:58:20.550 to doctor Hartnick and now last

NOTE Confidence: 0.719293731111111

00:58:20.550 --> 00:58:23.580 pioneer, yeah. We do it here. So

NOTE Confidence: 0.807518444

00:58:23.590 --> 00:58:25.670 he's. Yeah. So, you know,

NOTE Confidence: 0.807518444

00:58:25.670 --> 00:58:26.890 he's done, uh, several.

NOTE Confidence: 0.807518444

00:58:26.890 --> 00:58:29.082 But in reality when you look at

NOTE Confidence: 0.807518444

00:58:29.082 --> 00:58:31.222 the numbers, it's not that many.

NOTE Confidence: 0.807518444

00:58:31.222 --> 00:58:34.229 And he now is getting paid for it,

NOTE Confidence: 0.807518444

00:58:34.230 --> 00:58:36.000 but for the first, you know,

NOTE Confidence: 0.807518444

00:58:36.000 --> 00:58:37.020 eight years mass linear,

NOTE Confidence: 0.807518444

00:58:37.020 --> 00:58:38.550 just ate the cost of every

NOTE Confidence: 0.807518444

00:58:38.600 --> 00:58:39.800 device in every surgery.

NOTE Confidence: 0.71329595

00:58:42.870 --> 00:58:45.920 So tricky. OK.

NOTE Confidence: 0.755791588333333

00:58:45.920 --> 00:58:46.538 Good to know.

NOTE Confidence: 0.755791588333333

00:58:46.538 --> 00:58:47.608 Well, all right, very good.

NOTE Confidence: 0.755791588333333

00:58:47.608 --> 00:58:48.832 Well, thank you, Andrew.

NOTE Confidence: 0.755791588333333

00:58:48.832 --> 00:58:51.888 I think already and very nice,

NOTE Confidence: 0.755791588333333

00:58:51.888 --> 00:58:53.160 very nice session.

NOTE Confidence: 0.755791588333333

00:58:53.160 --> 00:58:55.284 Look forward to hearing from you

NOTE Confidence: 0.755791588333333

00:58:55.284 --> 00:58:57.306 sometime in the future and I

NOTE Confidence: 0.755791588333333

00:58:57.306 --> 00:58:59.427 will see you guys in one month.

NOTE Confidence: 0.671519041666667

00:59:00.540 --> 00:59:02.070 Thank you again for the everybody.

NOTE Confidence: 0.671519041666667

00:59:02.070 --> 00:59:03.550 Thank you. Great day everyone.

NOTE Confidence: 0.964399925

00:59:05.120 --> 00:59:07.000 Thank you.