## WEBVTT

NOTE duration: "01:03:20.3500000"

NOTE recognizability:0.853

NOTE language:en-us

NOTE Confidence: 0.890202599

00:00:00.000 --> 00:00:02.850 Today I have the pleasure of

NOTE Confidence: 0.890202599

 $00:00:02.850 \longrightarrow 00:00:05.152$  introducing Doctor John Winkleman. Dr.

NOTE Confidence: 0.890202599

 $00:00:05.152 \longrightarrow 00:00:07.564$  Winkleman received his PhD in psychobiology

NOTE Confidence: 0.890202599

00:00:07.564 --> 00:00:09.919 from Harvard University and his medical

NOTE Confidence: 0.890202599

 $00:00:09.919 \longrightarrow 00:00:11.724$  degree from Harvard Medical School.

NOTE Confidence: 0.890202599

 $00{:}00{:}11.730 \dashrightarrow 00{:}00{:}13.809$  He then completed both a residency in

NOTE Confidence: 0.890202599

 $00:00:13.809 \longrightarrow 00:00:15.871$  psychiatry and a fellowship in Sleep

NOTE Confidence: 0.890202599

 $00{:}00{:}15.871 \dashrightarrow 00{:}00{:}17.726$  Medicine at Mass General Hospital.

NOTE Confidence: 0.890202599

 $00:00:17.730 \longrightarrow 00:00:19.786$  He was a medical director of the Sleep

NOTE Confidence: 0.890202599

 $00:00:19.786 \longrightarrow 00:00:21.653$  program at McLean Hospital and subsequently

NOTE Confidence: 0.890202599

 $00{:}00{:}21.653 \dashrightarrow 00{:}00{:}24.259$  did was a medical director of the Sleep

NOTE Confidence: 0.890202599

 $00{:}00{:}24.259 \dashrightarrow 00{:}00{:}26.065$  Lab at Brigham and Women's Hospital.

NOTE Confidence: 0.890202599

 $00:00:26.070 \longrightarrow 00:00:27.905$  He's currently a professor of

00:00:27.905 --> 00:00:29.373 psychiatry at Harvard Medical

NOTE Confidence: 0.890202599

00:00:29.373 --> 00:00:31.080 School and Chief of the Sleep.

NOTE Confidence: 0.890202599

 $00:00:31.080 \longrightarrow 00:00:32.340$  Disorders clinical research

NOTE Confidence: 0.890202599

 $00:00:32.340 \longrightarrow 00:00:34.440$  program in the Department of

NOTE Confidence: 0.890202599

 $00:00:34.440 \longrightarrow 00:00:36.668$  Psychiatry at Mass General Hospital.

NOTE Confidence: 0.890202599

00:00:36.670 --> 00:00:38.222 Doctor Winkelmann's research is

NOTE Confidence: 0.890202599

 $00:00:38.222 \longrightarrow 00:00:40.162$  primarily focused in two areas,

NOTE Confidence: 0.890202599

00:00:40.170 --> 00:00:41.206 epidemiology, Physiology,

NOTE Confidence: 0.890202599

 $00:00:41.206 \longrightarrow 00:00:42.760$  cardiovascular consequences and

NOTE Confidence: 0.890202599

00:00:42.760 --> 00:00:45.350 treatment of restless leg syndrome,

NOTE Confidence: 0.890202599

 $00:00:45.350 \longrightarrow 00:00:48.350$  and neurobiology and treatment of insomnia.

NOTE Confidence: 0.890202599

 $00:00:48.350 \longrightarrow 00:00:51.262$  He has lectured in and directed postgraduate

NOTE Confidence: 0.890202599

 $00{:}00{:}51.262 \dashrightarrow 00{:}00{:}53.579$  medical education courses and sleep

NOTE Confidence: 0.890202599

 $00:00:53.579 \longrightarrow 00:00:55.599$  disorders nationally and internationally.

NOTE Confidence: 0.890202599 00:00:55.600 --> 00:00:55.931 Dr. NOTE Confidence: 0.890202599

 $00:00:55.931 \longrightarrow 00:00:57.586$  Winkelman serves on the editorial

 $00{:}00{:}57.586 \dashrightarrow 00{:}00{:}58.910$  boards of Sleep Medicine.

NOTE Confidence: 0.890202599

 $00{:}00{:}58.910 \dashrightarrow 00{:}01{:}01.328$  He's also received many awards published.

NOTE Confidence: 0.890202599

 $00:01:01.330 \longrightarrow 00:01:03.178$  More than 150 articles,

NOTE Confidence: 0.890202599

 $00:01:03.178 \longrightarrow 00:01:03.640$  reviews,

NOTE Confidence: 0.890202599

 $00{:}01{:}03.640 \dashrightarrow 00{:}01{:}06.259$  book chapters and is also the editor of the

NOTE Confidence: 0.890202599

00:01:06.259 --> 00:01:08.618 Textbook Foundations of Psychiatric Medicine.

NOTE Confidence: 0.890202599

00:01:08.620 --> 00:01:10.828 Is also the current President of

NOTE Confidence: 0.890202599

 $00:01:10.828 \longrightarrow 00:01:12.678$  International Restless Leg Syndrome study

NOTE Confidence: 0.890202599

 $00{:}01{:}12.678 \dashrightarrow 00{:}01{:}14.592$  Group and has also helped leadership

NOTE Confidence: 0.890202599

 $00:01:14.592 \longrightarrow 00:01:16.640$  position in many national societies.

NOTE Confidence: 0.890202599

00:01:16.640 --> 00:01:18.575 Thank you for so much for being with us

NOTE Confidence: 0.890202599

00:01:18.575 --> 00:01:20.517 Doctor Winkelman and without further delay,

NOTE Confidence: 0.890202599

 $00{:}01{:}20.520 \dashrightarrow 00{:}01{:}22.272$  I would like like to hand it over

NOTE Confidence: 0.890202599

 $00:01:22.272 \longrightarrow 00:01:24.142$  to you to share your expertise on

NOTE Confidence: 0.890202599

00:01:24.142 --> 00:01:25.994 putting out the fire of refractory

00:01:25.994 --> 00:01:28.099 or augmented restless leg syndrome.

NOTE Confidence: 0.890202599

 $00:01:28.100 \longrightarrow 00:01:28.620$  Thank you.

NOTE Confidence: 0.86808313125

00:01:29.450 --> 00:01:32.160 Thank you. I appreciate that

NOTE Confidence: 0.86808313125

 $00:01:32.160 \longrightarrow 00:01:33.786$  that kind introduction.

NOTE Confidence: 0.832845808333333

00:01:37.190 --> 00:01:39.938 So I think without further ado,

NOTE Confidence: 0.832845808333333

00:01:39.940 --> 00:01:40.603 I'll get going.

NOTE Confidence: 0.832845808333333

 $00:01:40.603 \longrightarrow 00:01:41.708$  As you can see here,

NOTE Confidence: 0.832845808333333

 $00:01:41.710 \longrightarrow 00:01:43.208$  this is going to be the theme,

NOTE Confidence: 0.832845808333333

 $00:01:43.210 \longrightarrow 00:01:45.390$  or at least one of the thing I'm stuck on.

NOTE Confidence: 0.832845808333333

 $00:01:45.390 \longrightarrow 00:01:47.181$  Kind of analogies.

NOTE Confidence: 0.832845808333333

00:01:47.181 --> 00:01:51.820 Oftentimes really stretched analogies, but.

NOTE Confidence: 0.832845808333333

00:01:51.820 --> 00:01:54.676 They provide some value I think,

NOTE Confidence: 0.832845808333333

00:01:54.680 --> 00:01:57.200 and this is restless leg syndrome,

NOTE Confidence: 0.832845808333333

 $00:01:57.200 \longrightarrow 00:02:00.200$  the fire and this gasoline

NOTE Confidence: 0.832845808333333

 $00:02:00.200 \longrightarrow 00:02:02.000$  is dopamine agonists.

NOTE Confidence: 0.860608665454545

 $00:02:04.240 \longrightarrow 00:02:07.397$  Here's a slide that I was asked

 $00:02:07.397 \longrightarrow 00:02:10.583$  to put up by. Whatever it says,

NOTE Confidence: 0.860608665454545

00:02:10.583 --> 00:02:13.349 I of course completely agree with.

NOTE Confidence: 0.860608665454545

00:02:13.350 --> 00:02:17.117 Here my conflicts of interest specifically,

NOTE Confidence: 0.860608665454545

 $00:02:17.117 \longrightarrow 00:02:22.066$  and some of them have to do.

NOTE Confidence: 0.860608665454545

 $00:02:22.070 \longrightarrow 00:02:24.268$  None of them have to do with

NOTE Confidence: 0.860608665454545

 $00:02:24.270 \longrightarrow 00:02:26.518$  commercialized products for RLS.

NOTE Confidence: 0.895515408888889

00:02:29.180 --> 00:02:31.475 So two things I want you to take home,

NOTE Confidence: 0.895515408888889

 $00:02:31.480 \longrightarrow 00:02:33.850$  if nothing else.

NOTE Confidence: 0.895515408888889

 $00:02:33.850 \longrightarrow 00:02:36.090$  One, dopamine agonists are

NOTE Confidence: 0.895515408888889

 $00:02:36.090 \longrightarrow 00:02:38.890$  no longer first line therapy.

NOTE Confidence: 0.895515408888889

00:02:38.890 --> 00:02:40.630 That should say first line,

NOTE Confidence: 0.895515408888889

 $00:02:40.630 \longrightarrow 00:02:42.343$  not first therapy,

NOTE Confidence: 0.895515408888889

00:02:42.343 --> 00:02:45.198 first line therapy for RLS.

NOTE Confidence: 0.895515408888889

 $00{:}02{:}45.200 \dashrightarrow 00{:}02{:}47.522$  So if you're seeing patients with

NOTE Confidence: 0.895515408888889

 $00:02:47.522 \longrightarrow 00:02:50.531$  RLS and you're turning to one of the

 $00:02:50.531 \longrightarrow 00:02:52.607$  dopamine agonists as the first line.

NOTE Confidence: 0.895515408888889

 $00:02:52.610 \longrightarrow 00:02:55.190$  Stop doing it.

NOTE Confidence: 0.895515408888889

 $00:02:55.190 \longrightarrow 00:02:57.716$  As we as there's already one

NOTE Confidence: 0.895515408888889

 $00:02:57.716 \longrightarrow 00:02:59.952$  guideline that's published in Mayo

NOTE Confidence: 0.895515408888889

 $00:02:59.952 \longrightarrow 00:03:02.347$  Clinic proceedings and the American

NOTE Confidence: 0.895515408888889

00:03:02.347 --> 00:03:05.020 Academy of Sleep Medicine is going

NOTE Confidence: 0.895515408888889

 $00:03:05.020 \longrightarrow 00:03:07.407$  to be coming out with another one

NOTE Confidence: 0.895515408888889

 $00{:}03{:}07.407 \dashrightarrow 00{:}03{:}10.822$  that Brian and I are are both on the

NOTE Confidence: 0.895515408888889

 $00{:}03{:}10.822 \dashrightarrow 00{:}03{:}12.811$  clinical practice guidelines of the

NOTE Confidence: 0.895515408888889

00:03:12.811 --> 00:03:15.734 ASM for RLS and dopamine agonists are

NOTE Confidence: 0.895515408888889

 $00{:}03{:}15.734 \dashrightarrow 00{:}03{:}19.590$  no longer going to be first line the rapy.

NOTE Confidence: 0.895515408888889

 $00:03:19.590 \longrightarrow 00:03:21.424$  So if you want to be current,

NOTE Confidence: 0.895515408888889

 $00:03:21.430 \longrightarrow 00:03:25.558$  if you want to be practicing

NOTE Confidence: 0.895515408888889

 $00:03:25.558 \longrightarrow 00:03:26.934$  standard treatment.

NOTE Confidence: 0.895515408888889

00:03:26.940 --> 00:03:29.244 Don't start with a dopamine agonist

NOTE Confidence: 0.895515408888889

 $00:03:29.244 \longrightarrow 00:03:31.884$  unless you're going to be giving some

 $00:03:31.884 \longrightarrow 00:03:34.292$  justification in your in your Note 2.

NOTE Confidence: 0.895515408888889

 $00:03:34.300 \longrightarrow 00:03:37.270$  Opioids are a safe and generally

NOTE Confidence: 0.895515408888889

 $00:03:37.270 \longrightarrow 00:03:39.250$  well tolerated treatment treatment

NOTE Confidence: 0.895515408888889

 $00:03:39.330 \longrightarrow 00:03:41.290$  for patients with severe

NOTE Confidence: 0.895515408888889

00:03:41.290 --> 00:03:43.250 refractory or augmented RLS.

NOTE Confidence: 0.895515408888889

 $00:03:43.250 \longrightarrow 00:03:46.855$  Those will be the two main things.

NOTE Confidence: 0.895515408888889

00:03:46.860 --> 00:03:48.415 You'll hear those kinds of

NOTE Confidence: 0.895515408888889

 $00{:}03{:}48.415 \dashrightarrow 00{:}03{:}49.659$  messages throughout my talk.

NOTE Confidence: 0.864641274615385

 $00:03:51.740 \longrightarrow 00:03:54.012$  For this group, I do not have to

NOTE Confidence: 0.864641274615385

 $00{:}03{:}54.012 \dashrightarrow 00{:}03{:}55.698$  describe what RLS symptoms are,

NOTE Confidence: 0.864641274615385

 $00:03:55.700 \longrightarrow 00:03:57.390$  but there's this nice acronym

NOTE Confidence: 0.864641274615385

 $00:03:57.390 \longrightarrow 00:03:59.080$  that you can tell patients.

NOTE Confidence: 0.864641274615385

 $00{:}03{:}59.080 \to 00{:}04{:}01.536$  And when you're giving talks to other docs,

NOTE Confidence: 0.864641274615385

00:04:01.540 --> 00:04:04.738 you can use this urged acronym,

NOTE Confidence: 0.864641274615385

 $00:04:04.740 \longrightarrow 00:04:07.956$  which I think is pretty nice.

 $00:04:07.960 \longrightarrow 00:04:10.088$  RLS is not uncommon.

NOTE Confidence: 0.864641274615385

00:04:10.088 --> 00:04:12.216 And certainly every patient

NOTE Confidence: 0.864641274615385

00:04:12.216 --> 00:04:14.489 with insomnia that you see,

NOTE Confidence: 0.864641274615385

 $00:04:14.490 \longrightarrow 00:04:16.140$  you should ask them as

NOTE Confidence: 0.864641274615385

 $00:04:16.140 \longrightarrow 00:04:17.130$  simple screening question,

NOTE Confidence: 0.864641274615385

00:04:17.130 --> 00:04:19.030 something like do your legs

NOTE Confidence: 0.864641274615385

 $00:04:19.030 \longrightarrow 00:04:20.855$  bother you at night whether

NOTE Confidence: 0.864641274615385

 $00:04:20.855 \longrightarrow 00:04:22.685$  they're coming in for sleep apnea.

NOTE Confidence: 0.864641274615385

 $00{:}04{:}22.690 \dashrightarrow 00{:}04{:}24.825$  Certainly, if they're coming in for insomnia,

NOTE Confidence: 0.864641274615385

00:04:24.830 --> 00:04:26.606 if they're coming in for narcolepsy,

NOTE Confidence: 0.864641274615385

 $00{:}04{:}26.610 \dashrightarrow 00{:}04{:}28.350$  abnormal behaviors at night,

NOTE Confidence: 0.864641274615385

00:04:28.350 --> 00:04:30.114 circadian rhythms, single questions,

NOTE Confidence: 0.864641274615385

 $00:04:30.114 \longrightarrow 00:04:32.349$  all you have to do.

NOTE Confidence: 0.864641274615385

 $00:04:32.350 \longrightarrow 00:04:34.150$  If they say no, move on.

NOTE Confidence: 0.864641274615385

 $00:04:34.150 \longrightarrow 00:04:35.330$  If they say yes,

NOTE Confidence: 0.864641274615385

 $00:04:35.330 \longrightarrow 00:04:37.899$  then you need to ask a few more

 $00:04:37.899 \longrightarrow 00:04:40.053$  questions to see if it's RLS.

NOTE Confidence: 0.864641274615385

 $00{:}04{:}40.060 \to 00{:}04{:}44.384$  If it's not ternal my clonus, I'm sorry.

NOTE Confidence: 0.864641274615385

00:04:44.384 --> 00:04:49.055 Nocturnal leg cramps or something else,

NOTE Confidence: 0.864641274615385

00:04:49.055 --> 00:04:51.470 but always ask.

NOTE Confidence: 0.864641274615385

 $00:04:51.470 \longrightarrow 00:04:53.806$  Not going to spend a lot of time

NOTE Confidence: 0.864641274615385

 $00:04:53.806 \longrightarrow 00:04:55.942$  on this nosological description of

NOTE Confidence: 0.864641274615385

00:04:55.942 --> 00:04:58.392 primary and reversible RLS other

NOTE Confidence: 0.864641274615385

 $00:04:58.392 \longrightarrow 00:05:00.988$  than to say these are things,

NOTE Confidence: 0.864641274615385

 $00:05:00.990 \longrightarrow 00:05:04.847$  many of them that can be fixed

NOTE Confidence: 0.864641274615385

 $00{:}05{:}04.850 \dashrightarrow 00{:}05{:}07.538$  and therefore we don't have to

NOTE Confidence: 0.864641274615385

 $00:05:07.538 \longrightarrow 00:05:09.980$  do a big therapeutic evaluation

NOTE Confidence: 0.864641274615385

 $00:05:09.980 \longrightarrow 00:05:12.705$  because if they're iron deficient,

NOTE Confidence: 0.864641274615385

 $00{:}05{:}12.710 \dashrightarrow 00{:}05{:}14.126$  we're going to give them iron.

NOTE Confidence: 0.864641274615385

 $00{:}05{:}14.130 \dashrightarrow 00{:}05{:}16.092$  If they have renal failure and

NOTE Confidence: 0.864641274615385

 $00:05:16.092 \longrightarrow 00:05:18.041$  on dialysis and waiting for a

00:05:18.041 --> 00:05:19.769 kidney when they get the kidney,

NOTE Confidence: 0.864641274615385

 $00{:}05{:}19.770 \dashrightarrow 00{:}05{:}20.930$  things are going to improve

NOTE Confidence: 0.864641274615385

 $00:05:20.930 \longrightarrow 00:05:21.626$  when they deliver.

NOTE Confidence: 0.864641274615385 00:05:21.630 --> 00:05:21.920 Generally, NOTE Confidence: 0.864641274615385

00:05:21.920 --> 00:05:23.950 things are going to improve if they're

NOTE Confidence: 0.864641274615385

 $00:05:23.950 \longrightarrow 00:05:26.100$  on a serotonergic antidepressant.

NOTE Confidence: 0.864641274615385

 $00:05:26.100 \longrightarrow 00:05:28.018$  You're going to talk to whomever is

NOTE Confidence: 0.864641274615385

 $00:05:28.018 \longrightarrow 00:05:29.645$  prescribing it and to the patient

NOTE Confidence: 0.864641274615385

 $00:05:29.645 \longrightarrow 00:05:31.388$  to see whether it can be modified.

NOTE Confidence: 0.845248703181818

 $00:05:34.210 \longrightarrow 00:05:37.243$  One of the cool things about RLS that I

NOTE Confidence: 0.845248703181818

 $00:05:37.243 \longrightarrow 00:05:40.080$  think attracted me initially to it is

NOTE Confidence: 0.845248703181818

 $00:05:40.080 \longrightarrow 00:05:43.050$  that unlike almost all medical problems,

NOTE Confidence: 0.845248703181818

 $00:05:43.050 \longrightarrow 00:05:46.648$  it has a time of day dependence,

NOTE Confidence: 0.845248703181818

 $00:05:46.650 \longrightarrow 00:05:49.428$  almost all the things we treat.

NOTE Confidence: 0.845248703181818

 $00:05:49.430 \longrightarrow 00:05:52.769$  Are present throughout the day and night.

NOTE Confidence: 0.845248703181818

00:05:52.770 --> 00:05:56.410 But RLS has this clear circadian rhythm,

 $00:05:56.410 \longrightarrow 00:05:59.730$  at least prior to us screwing things up

NOTE Confidence: 0.845248703181818

 $00:05:59.730 \longrightarrow 00:06:03.710$  with our dopamine agonists such that it's

NOTE Confidence: 0.845248703181818

 $00:06:03.710 \longrightarrow 00:06:08.170$  mostly present in the evening or at night.

NOTE Confidence: 0.845248703181818

 $00:06:08.170 \dashrightarrow 00:06:11.322$  The first time I meet with patients and

NOTE Confidence: 0.845248703181818

00:06:11.322 --> 00:06:14.049 pretty much every visit there after,

NOTE Confidence: 0.845248703181818

 $00:06:14.050 \longrightarrow 00:06:17.980$  I get the following information.

NOTE Confidence: 0.845248703181818

 $00:06:17.980 \longrightarrow 00:06:18.950$  Somebody's trying to get in.

NOTE Confidence: 0.845248703181818

 $00:06:18.950 \longrightarrow 00:06:21.758$  I'll admit them up. They did.

NOTE Confidence: 0.845248703181818

 $00{:}06{:}21.760 \dashrightarrow 00{:}06{:}26.208$  I divide the day into 4 equal parts.

NOTE Confidence: 0.845248703181818

00:06:26.210 --> 00:06:27.470 I'm gonna, I say to the patients,

NOTE Confidence: 0.845248703181818

00:06:27.470 --> 00:06:29.324 I'm going to divide it into 4 equal parts.

NOTE Confidence: 0.845248703181818

 $00{:}06{:}29.330 \dashrightarrow 00{:}06{:}31.904$ I can ask you how often do you have

NOTE Confidence: 0.845248703181818

 $00{:}06{:}31.904 \dashrightarrow 00{:}06{:}33.490$  RLS during that particular time

NOTE Confidence: 0.845248703181818

 $00:06:33.490 \longrightarrow 00:06:35.710$  of day and how bad is it?

NOTE Confidence: 0.845248703181818

00:06:35.710 --> 00:06:38.130 Mild, moderate, severe, very severe.

00:06:38.130 --> 00:06:40.530 So I'll say from 7:00 AM to noon,

NOTE Confidence: 0.845248703181818

00:06:40.530 --> 00:06:42.609 how many days a week do you get RLS?

NOTE Confidence: 0.845248703181818

00:06:42.610 --> 00:06:44.930 They'll say 2 mild, moderate,

NOTE Confidence: 0.845248703181818

 $00:06:44.930 \longrightarrow 00:06:46.950$  severe or very severe. Mild.

NOTE Confidence: 0.845248703181818

 $00:06:46.950 \longrightarrow 00:06:48.730$  OK, noon to 6:00 o'clock.

NOTE Confidence: 0.845248703181818

00:06:48.730 --> 00:06:49.627 How many quickly?

NOTE Confidence: 0.845248703181818

00:06:49.627 --> 00:06:51.421 Just takes a minute or two

NOTE Confidence: 0.845248703181818

 $00:06:51.421 \longrightarrow 00:06:52.810$  to go through this.

NOTE Confidence: 0.845248703181818

 $00:06:52.810 \longrightarrow 00:06:56.530$  And then you have a snapshot almost even.

NOTE Confidence: 0.845248703181818

 $00:06:56.530 \longrightarrow 00:07:00.098$  Video maybe of the course of the RLS

NOTE Confidence: 0.845248703181818

 $00:07:00.098 \dashrightarrow 00:07:03.396$  treatments over the day and their severity,

NOTE Confidence: 0.845248703181818

 $00:07:03.400 \longrightarrow 00:07:06.080$  and this is key because.

NOTE Confidence: 0.845248703181818

 $00:07:06.080 \longrightarrow 00:07:08.453$  We're going to focus our treatments on

NOTE Confidence: 0.845248703181818

 $00:07:08.453 \longrightarrow 00:07:11.440$  the time of day that they have symptoms.

NOTE Confidence: 0.845248703181818

00:07:11.440 --> 00:07:14.832 I can't tell you how often I see

NOTE Confidence: 0.845248703181818

 $00:07:14.832 \longrightarrow 00:07:17.379$  patients who had RLS symptoms.

 $00:07:17.380 \longrightarrow 00:07:20.628$  I said they they come to me on

NOTE Confidence: 0.845248703181818

 $00{:}07{:}20.628 \dashrightarrow 00{:}07{:}22.075$  pramipexole .25 milligrams TID.

NOTE Confidence: 0.845248703181818

00:07:22.075 --> 00:07:24.940 I say you're taking it three times a day.

NOTE Confidence: 0.845248703181818

 $00:07:24.940 \longrightarrow 00:07:26.648$  Do you have symptoms in the morning? No.

NOTE Confidence: 0.845248703181818

00:07:26.648 --> 00:07:28.792 Did you ever have symptoms in the morning?

NOTE Confidence: 0.845248703181818

 $00:07:28.800 \longrightarrow 00:07:29.178$  No.

NOTE Confidence: 0.845248703181818

 $00:07:29.178 \longrightarrow 00:07:32.202$  Why are you taking this medicine three times?

NOTE Confidence: 0.845248703181818

00:07:32.210 --> 00:07:33.530 Why are you taking it in the morning?

NOTE Confidence: 0.845248703181818

 $00:07:33.530 \longrightarrow 00:07:35.106$  Why are you taking it again at noon?

NOTE Confidence: 0.845248703181818

00:07:35.110 --> 00:07:35.986 I don't know.

NOTE Confidence: 0.845248703181818

 $00:07:35.986 \longrightarrow 00:07:38.030$  That's my doctor told me to do.

NOTE Confidence: 0.845248703181818

00:07:38.030 --> 00:07:39.576 Why, why,

NOTE Confidence: 0.845248703181818

 $00:07:39.576 \longrightarrow 00:07:42.668$  why is that happening?

NOTE Confidence: 0.845248703181818

 $00:07:42.670 \longrightarrow 00:07:44.420$  I think it's because that's kind of

NOTE Confidence: 0.845248703181818

 $00:07:44.420 \longrightarrow 00:07:46.159$  the treatment for Parkinson's disease.

 $00:07:46.160 \longrightarrow 00:07:48.668$  Pramipexole is used for Parkinson's disease.

NOTE Confidence: 0.845248703181818

 $00{:}07{:}48.670 \dashrightarrow 00{:}07{:}52.597$  Therefore we're going to follow the same.

NOTE Confidence: 0.845248703181818

 $00:07:52.600 \longrightarrow 00:07:56.080$  Menu the same description there to treat RLS,

NOTE Confidence: 0.845248703181818

 $00:07:56.080 \longrightarrow 00:07:57.440$  which doesn't make sense.

NOTE Confidence: 0.845248703181818

 $00:07:57.440 \longrightarrow 00:08:00.000$  We treat the symptoms when they're present.

NOTE Confidence: 0.845248703181818

 $00:08:00.000 \longrightarrow 00:08:02.165$  Don't waste medications at times

NOTE Confidence: 0.845248703181818

00:08:02.165 --> 00:08:04.330 that that people don't have.

NOTE Confidence: 0.83612668666667

00:08:06.690 --> 00:08:12.108 Don't have symptoms. So the workup is.

NOTE Confidence: 0.83612668666667

 $00{:}08{:}12.110 \dashrightarrow 00{:}08{:}16.478$  Is not particularly one rous.

NOTE Confidence: 0.83612668666667

00:08:16.480 --> 00:08:19.804 Certainly nobody leaves the office without

NOTE Confidence: 0.83612668666667

 $00{:}08{:}19.804 \dashrightarrow 00{:}08{:}25.216$  having lab rec position for iron indices.

NOTE Confidence: 0.836126686666667

 $00:08:25.216 \longrightarrow 00:08:28.432$  And the key here is don't

NOTE Confidence: 0.83612668666667

 $00:08:28.432 \longrightarrow 00:08:30.040$  just check ferritin.

NOTE Confidence: 0.83612668666667

 $00:08:30.040 \longrightarrow 00:08:34.060$  Ferritin's unreliable in so many instances.

NOTE Confidence: 0.83612668666667

00:08:34.060 --> 00:08:38.980 You've got to check ferritin iron TIBC.

NOTE Confidence: 0.836126686666667

 $00{:}08{:}38.980 \dashrightarrow 00{:}08{:}42.998$  Iron and TIBC are also are unreliable.

 $00:08:43.000 \longrightarrow 00:08:45.020$  So This is why we have both sides of it.

NOTE Confidence: 0.83612668666667

 $00{:}08{:}45.020 \dashrightarrow 00{:}08{:}48.449$  And as you I'm sure are aware iron divided

NOTE Confidence: 0.83612668666667

 $00{:}08{:}48.449 \dashrightarrow 00{:}08{:}51.639$  by TI BC is transferrin saturation,

NOTE Confidence: 0.836126686666667 00:08:51.640 --> 00:08:52.678 T said here.

NOTE Confidence: 0.83612668666667

 $00{:}08{:}52.678 \longrightarrow 00{:}08{:}55.710$  So we want to keep ferritin over 75,

NOTE Confidence: 0.83612668666667

00:08:55.710 --> 00:08:58.760 transferrin saturation over about 20%.

NOTE Confidence: 0.83612668666667

 $00:08:58.760 \longrightarrow 00:09:01.136$  These are not carved in stone,

NOTE Confidence: 0.83612668666667

 $00:09:01.140 \longrightarrow 00:09:03.420$  these are just rough guidelines.

NOTE Confidence: 0.83612668666667

 $00:09:03.420 \longrightarrow 00:09:05.250$  Think about medications,

NOTE Confidence: 0.83612668666667

00:09:05.250 --> 00:09:07.080 particularly serotonergic antidepressants,

NOTE Confidence: 0.836126686666667

 $00:09:07.080 \longrightarrow 00:09:08.292$  dopamine antagonists.

NOTE Confidence: 0.83612668666667

 $00:09:08.292 \longrightarrow 00:09:11.322$  Think about whether people just

NOTE Confidence: 0.83612668666667

 $00{:}09{:}11.322 \dashrightarrow 00{:}09{:}14.340$  stopped an opioid post surgery.

NOTE Confidence: 0.83612668666667

00:09:14.340 --> 00:09:15.399 Nowadays, of course,

NOTE Confidence: 0.83612668666667

 $00:09:15.399 \longrightarrow 00:09:17.517$  no one gets opioids post surgery.

 $00:09:17.520 \longrightarrow 00:09:19.200$  People just go home and are

NOTE Confidence: 0.83612668666667

 $00{:}09{:}19.200 \dashrightarrow 00{:}09{:}20.320$  supposed to take Tylenol.

NOTE Confidence: 0.83612668666667

 $00:09:20.320 \longrightarrow 00:09:23.302$  But for those people who do

NOTE Confidence: 0.83612668666667

00:09:23.302 --> 00:09:24.979 take opioids post surgery,

NOTE Confidence: 0.83612668666667

 $00:09:24.979 \longrightarrow 00:09:26.944$  think about whether they've just

NOTE Confidence: 0.83612668666667

 $00:09:26.944 \longrightarrow 00:09:29.195$  stopped them in the last week or two.

NOTE Confidence: 0.83612668666667

00:09:29.200 --> 00:09:31.400 Physical examination has some value,

NOTE Confidence: 0.83612668666667

 $00:09:31.400 \longrightarrow 00:09:33.960$  particularly to assess obstructive

NOTE Confidence: 0.83612668666667

 $00{:}09{:}33.960 {\:{\mbox{--}}}{>}\ 00{:}09{:}35.240$ sleep apnea.

NOTE Confidence: 0.83612668666667

 $00:09:35.240 \longrightarrow 00:09:37.420$  Think about comorbid sleep disorders.

NOTE Confidence: 0.83612668666667

 $00:09:37.420 \longrightarrow 00:09:39.910$  Generally, we don't do sleep

NOTE Confidence: 0.83612668666667

 $00:09:39.910 \longrightarrow 00:09:42.400$  studies for people with RLS.

NOTE Confidence: 0.83612668666667

 $00:09:42.400 \longrightarrow 00:09:44.668$  Unless we of course suspect obstructive

NOTE Confidence: 0.836126686666667

 $00:09:44.668 \longrightarrow 00:09:46.979$  sleep apnea or central sleep apnea.

NOTE Confidence: 0.843170254

 $00:09:49.040 \longrightarrow 00:09:50.170$  I do this a lot.

NOTE Confidence: 0.843170254

00:09:50.170 --> 00:09:51.840 See the four fingers there.

00:09:51.840 --> 00:09:53.093 I do this a lot. Patience,

NOTE Confidence: 0.843170254

 $00:09:53.093 \longrightarrow 00:09:55.258$  I'm sure, are totally secured.

NOTE Confidence: 0.843170254

 $00:09:55.260 \longrightarrow 00:09:58.292$  And I say to them,

NOTE Confidence: 0.843170254

 $00:09:58.292 \longrightarrow 00:10:00.346$  there are four classes of medicines that

NOTE Confidence: 0.843170254

 $00:10:00.346 \longrightarrow 00:10:02.442$  work for our list that we know work.

NOTE Confidence: 0.843170254

00:10:02.450 --> 00:10:03.914 Dopaminergic medications,

NOTE Confidence: 0.843170254

00:10:03.914 --> 00:10:07.206 the calcium channel, A2D ligands,

NOTE Confidence: 0.843170254

00:10:07.206 --> 00:10:08.850 gabapentin and pregabalin,

NOTE Confidence: 0.843170254

 $00:10:08.850 \longrightarrow 00:10:10.455$  opioids and iron.

NOTE Confidence: 0.843170254

00:10:10.455 --> 00:10:14.741 Usually I say iron and opioids and I say,

NOTE Confidence: 0.843170254

00:10:14.741 --> 00:10:16.883 so we don't have unlimited choices.

NOTE Confidence: 0.843170254

00:10:16.890 --> 00:10:18.906 We certainly have a number of them,

NOTE Confidence: 0.843170254

 $00{:}10{:}18.910 \dashrightarrow 00{:}10{:}21.902$  but we need to make sure that we

NOTE Confidence: 0.843170254

 $00:10:21.902 \longrightarrow 00:10:25.719$  take the fact that we don't have

NOTE Confidence: 0.843170254

00:10:25.719 --> 00:10:28.095 unlimited choices seriously and

00:10:28.095 --> 00:10:30.725 therefore before we give up on

NOTE Confidence: 0.843170254

 $00{:}10{:}30.725 \dashrightarrow 00{:}10{:}32.688$  the medication we make sure that.

NOTE Confidence: 0.843170254

00:10:32.688 --> 00:10:34.710 You've given it a good college try,

NOTE Confidence: 0.843170254

00:10:34.710 --> 00:10:36.982 a Yale College try,

NOTE Confidence: 0.843170254

00:10:36.982 --> 00:10:38.686 if you will,

NOTE Confidence: 0.843170254

 $00:10:38.690 \longrightarrow 00:10:41.210$  to make sure that it's not going

NOTE Confidence: 0.843170254

 $00:10:41.210 \longrightarrow 00:10:43.268$  to be effective or tolerated

NOTE Confidence: 0.843170254

 $00:10:43.268 \longrightarrow 00:10:45.068$  or or poorly tolerated.

NOTE Confidence: 0.843170254

 $00{:}10{:}45.070 \dashrightarrow 00{:}10{:}46.848$  And maybe we went up too fast

NOTE Confidence: 0.843170254

 $00:10:46.848 \longrightarrow 00:10:47.610$  on the pregablin.

NOTE Confidence: 0.843170254

 $00{:}10{:}47.610 \dashrightarrow 00{:}10{:}49.234$  Maybe we need to slow it down.

NOTE Confidence: 0.870068357

 $00:10:53.650 \longrightarrow 00:10:55.610$  So here are some guidelines that were

NOTE Confidence: 0.870068357

00:10:55.610 --> 00:10:58.550 published by the AN 2016 that was

NOTE Confidence: 0.870068357

 $00:10:58.550 \longrightarrow 00:11:01.058$  quite involved with these guidelines

NOTE Confidence: 0.870068357

00:11:01.058 --> 00:11:04.306 really just had to do with efficacy.

NOTE Confidence: 0.870068357

 $00{:}11{:}04.310 \dashrightarrow 00{:}11{:}06.962$  They didn't talk about a balance

 $00:11:06.962 \longrightarrow 00:11:09.490$  of efficacy and side effects.

NOTE Confidence: 0.870068357

 $00:11:09.490 \longrightarrow 00:11:12.395$  So there's it's a weakness of the

NOTE Confidence: 0.870068357

 $00:11:12.395 \longrightarrow 00:11:14.992$  A and guidelines at that point

NOTE Confidence: 0.870068357

 $00:11:14.992 \longrightarrow 00:11:17.530$  in time just talking about what

NOTE Confidence: 0.870068357

 $00{:}11{:}17.530 \dashrightarrow 00{:}11{:}20.030$  works for various symptoms so.

NOTE Confidence: 0.870068357

 $00:11:20.030 \longrightarrow 00:11:22.249$  I have more faith in those guidelines

NOTE Confidence: 0.870068357

00:11:22.249 --> 00:11:24.299 that the American Academy of Sleep

NOTE Confidence: 0.870068357

 $00{:}11{:}24.299 \dashrightarrow 00{:}11{:}26.029$  Medicine that we're working on,

NOTE Confidence: 0.870068357

00:11:26.030 --> 00:11:30.246 that Brian and I are working on and in the

NOTE Confidence: 0.870068357

 $00:11:30.246 \longrightarrow 00:11:34.038$  recommendations that will be coming out.

NOTE Confidence: 0.870068357

 $00:11:34.040 \longrightarrow 00:11:35.580$  Probably later this year.

NOTE Confidence: 0.905409325714286

 $00:11:37.650 \longrightarrow 00:11:40.010$  So here you see the timeline of various

NOTE Confidence: 0.905409325714286

 $00{:}11{:}40.010 \dashrightarrow 00{:}11{:}41.948$  medications and when they were approved.

NOTE Confidence: 0.905409325714286

 $00{:}11{:}41.950 \dashrightarrow 00{:}11{:}44.872$  It's been more than 15 years

NOTE Confidence: 0.905409325714286

00:11:44.872 --> 00:11:46.820 since Requip was approved.

00:11:46.820 --> 00:11:50.796 16 plus years since Mirapex was approved,

NOTE Confidence: 0.905409325714286

 $00{:}11{:}50.800 \dashrightarrow 00{:}11{:}53.500$  more than 10 years since gabapent in,

NOTE Confidence: 0.905409325714286

00:11:53.500 --> 00:11:55.648 HORIZANT, gabapentin and Congress

NOTE Confidence: 0.905409325714286

 $00{:}11{:}55.648 \dashrightarrow 00{:}11{:}57.796$  Carnival horizon was approved,

NOTE Confidence: 0.905409325714286

 $00:11:57.800 \longrightarrow 00:11:59.595$  and about 10 years since

NOTE Confidence: 0.905409325714286

00:11:59.595 --> 00:12:01.390 Reticulating knew Pro was approved.

NOTE Confidence: 0.905409325714286

 $00:12:01.390 \longrightarrow 00:12:03.949$  Nothing since then.

NOTE Confidence: 0.905409325714286

 $00:12:03.949 \longrightarrow 00:12:08.214$  Ten years with nothing new.

NOTE Confidence: 0.905409325714286

 $00:12:08.220 \longrightarrow 00:12:10.887$  And this is something that we in

NOTE Confidence: 0.905409325714286

00:12:10.887 --> 00:12:12.459 the international restless Leg

NOTE Confidence: 0.905409325714286

00:12:12.459 --> 00:12:14.264 Syndrome study group have convened

NOTE Confidence: 0.905409325714286

 $00{:}12{:}14.264 \dashrightarrow 00{:}12{:}16.652$  a bunch of people to get together

NOTE Confidence: 0.905409325714286

00:12:16.652 --> 00:12:18.682 to try to figure out why this

NOTE Confidence: 0.905409325714286

 $00:12:18.690 \longrightarrow 00:12:22.490$  is and what we can do about it.

NOTE Confidence: 0.90540932571428600:12:22.490 --> 00:12:24.299 So here's a.

NOTE Confidence: 0.82419051725

 $00:12:27.170 \longrightarrow 00:12:29.954$  Little picture of the pivotal trial

 $00{:}12{:}29.954 \dashrightarrow 00{:}12{:}32.956$  that was published for the FDA

NOTE Confidence: 0.82419051725

00:12:32.956 --> 00:12:35.088 approval of Pramipexole mirapex,

NOTE Confidence: 0.82419051725

 $00:12:35.090 \longrightarrow 00:12:37.295$  you see it came out in 2006.

NOTE Confidence: 0.82419051725

00:12:37.295 --> 00:12:39.710 And I was just a young man.

NOTE Confidence: 0.82419051725

 $00:12:39.710 \longrightarrow 00:12:41.774$  I was basically just out of high school

NOTE Confidence: 0.82419051725

 $00:12:41.774 \longrightarrow 00:12:45.790$  at the time, 15 years ago, and naive.

NOTE Confidence: 0.82419051725

 $00:12:45.790 \longrightarrow 00:12:49.182$  And that's going to be my defense is

NOTE Confidence: 0.82419051725

 $00:12:49.182 \longrightarrow 00:12:52.966$  all I can say is that I was naive.

NOTE Confidence: 0.82419051725

 $00:12:52.970 \longrightarrow 00:12:57.011$  This was a pivotal trial for an FDA approved

NOTE Confidence: 0.82419051725

00:12:57.011 --> 00:13:00.299 drug that was 12 weeks in duration.

NOTE Confidence: 0.82419051725

 $00:13:00.300 \longrightarrow 00:13:04.300$  For a lifetime disorder.

NOTE Confidence: 0.82419051725

 $00:13:04.300 \longrightarrow 00:13:06.925$  What I was thinking or what anyone

NOTE Confidence: 0.82419051725

 $00{:}13{:}06.925 \dashrightarrow 00{:}13{:}08.920$  else was thinking is unclear.

NOTE Confidence: 0.82419051725

 $00:13:08.920 \longrightarrow 00:13:09.706$  Lifetime disorder.

NOTE Confidence: 0.82419051725

 $00:13:09.706 \longrightarrow 00:13:12.850$  We're going to make a decision about its

 $00:13:12.920 \longrightarrow 00:13:15.520$  approval in for in a three month trial.

NOTE Confidence: 0.82419051725

00:13:15.520 --> 00:13:17.070 That clearly, at this point,

NOTE Confidence: 0.82419051725

 $00:13:17.070 \longrightarrow 00:13:21.046$  has been demonstrated to be a mistake.

NOTE Confidence: 0.82419051725

 $00:13:21.050 \longrightarrow 00:13:24.431$  And I apologize whenever I can to

NOTE Confidence: 0.82419051725

 $00:13:24.431 \longrightarrow 00:13:27.930$  patients that for any responsibility that

NOTE Confidence: 0.82419051725

 $00{:}13{:}27.930 \dashrightarrow 00{:}13{:}31.696$  I played in having them use a dopamine

NOTE Confidence: 0.82419051725

 $00:13:31.696 \longrightarrow 00:13:33.400$  agonist without adequate warning.

NOTE Confidence: 0.857945604166667

 $00:13:35.500 \longrightarrow 00:13:37.524$  And what's the warning?

NOTE Confidence: 0.857945604166667

00:13:37.524 --> 00:13:40.054 Here you see somebody taking

NOTE Confidence: 0.857945604166667

 $00:13:40.054 \longrightarrow 00:13:41.750$  another analogy here,

NOTE Confidence: 0.857945604166667

 $00{:}13{:}41.750 \dashrightarrow 00{:}13{:}44.368$  taking a pill that's got this fuse.

NOTE Confidence: 0.857945604166667

 $00{:}13{:}44.370 \dashrightarrow 00{:}13{:}47.304$  Again, I don't know how long the fuse is,

NOTE Confidence: 0.857945604166667

00:13:47.310 --> 00:13:49.921 but at some point for most people

NOTE Confidence: 0.857945604166667

 $00:13:49.921 \longrightarrow 00:13:52.639$  this is going to blow up on them.

NOTE Confidence: 0.857945604166667

 $00:13:52.640 \longrightarrow 00:13:55.560$  And it's going to blow up with respect

NOTE Confidence: 0.857945604166667

 $00:13:55.560 \longrightarrow 00:13:58.832$  to the fact that augmentation develops.

00:13:58.832 --> 00:14:02.192 Augmentation is a worsening of

NOTE Confidence: 0.857945604166667

 $00:14:02.192 \longrightarrow 00:14:04.714$  the underlying RLS disease.

NOTE Confidence: 0.857945604166667

 $00:14:04.714 \longrightarrow 00:14:08.236$  Symptoms appear earlier in the day.

NOTE Confidence: 0.857945604166667

00:14:08.240 --> 00:14:09.748 There have increased severity,

NOTE Confidence: 0.857945604166667

 $00:14:09.748 \longrightarrow 00:14:13.158$  they go from the legs to the arms and

NOTE Confidence: 0.857945604166667

00:14:13.158 --> 00:14:15.657 they have a shortened latency to onset.

NOTE Confidence: 0.857945604166667

00:14:15.660 --> 00:14:17.145 Instead of happening after you've

NOTE Confidence: 0.857945604166667

 $00:14:17.145 \longrightarrow 00:14:19.299$  been sitting for an hour watching TV,

NOTE Confidence: 0.857945604166667

 $00:14:19.300 \longrightarrow 00:14:21.130$  now it's after 10 minutes.

NOTE Confidence: 0.861879236666667

 $00{:}14{:}24.650 \dashrightarrow 00{:}14{:}27.086$  So even before I published that

NOTE Confidence: 0.861879236666667

00:14:27.086 --> 00:14:29.734 pivotal trial in 2006, it was clear

NOTE Confidence: 0.861879236666667

 $00:14:29.734 \longrightarrow 00:14:34.050$  that there were problems in 2004.

NOTE Confidence: 0.861879236666667

 $00{:}14{:}34.050 \dashrightarrow 00{:}14{:}36.500$  I recognized that this augmentation

NOTE Confidence: 0.861879236666667

 $00:14:36.500 \longrightarrow 00:14:37.970$  process was occurring.

NOTE Confidence: 0.861879236666667

 $00{:}14{:}37.970 \dashrightarrow 00{:}14{:}40.004$  Richard Allen had already published a

00:14:40.004 --> 00:14:43.060 paper a couple of years beforehand with

NOTE Confidence: 0.861879236666667

 $00{:}14{:}43.060 \dashrightarrow 00{:}14{:}44.649$ levodopa demonstrating augmentation

NOTE Confidence: 0.861879236666667

 $00:14:44.649 \longrightarrow 00:14:48.142$  levodopa and I looked at about 60

NOTE Confidence: 0.861879236666667

 $00:14:48.142 \longrightarrow 00:14:51.044$  patients that I was prescribing

NOTE Confidence: 0.861879236666667

 $00:14:51.044 \longrightarrow 00:14:53.468$  pramipexole for and demonstrated.

NOTE Confidence: 0.861879236666667

 $00:14:53.470 \longrightarrow 00:14:57.150$  That there was about 1/3 of the people.

NOTE Confidence: 0.861879236666667

 $00:14:57.150 \longrightarrow 00:15:02.134$  Over just even two years had developed.

NOTE Confidence: 0.861879236666667

 $00:15:02.140 \longrightarrow 00:15:02.742$  Augmentation.

NOTE Confidence: 0.861879236666667

 $00:15:02.742 \longrightarrow 00:15:03.946$  Again, apologies.

NOTE Confidence: 0.861879236666667

 $00:15:03.946 \longrightarrow 00:15:06.956$  Augmentation and tolerance are more

NOTE Confidence: 0.861879236666667

 $00{:}15{:}06.956 \dashrightarrow 00{:}15{:}10.530$  common than have been previously reported.

NOTE Confidence: 0.861879236666667

 $00:15:10.530 \longrightarrow 00:15:12.794$  However, these complications are

NOTE Confidence: 0.861879236666667

 $00:15:12.794 \longrightarrow 00:15:15.624$  generally manageable by earlier dosing

NOTE Confidence: 0.861879236666667

00:15:15.624 --> 00:15:18.947 or small dose increases of this agent,

NOTE Confidence: 0.861879236666667

 $00:15:18.950 \longrightarrow 00:15:21.922$  and only rarely require

NOTE Confidence: 0.861879236666667

 $00:15:21.922 \longrightarrow 00:15:23.408$  medication discontinuation.

 $00:15:28.360 \longrightarrow 00:15:32.098$  Again, two years is too short.

NOTE Confidence: 0.89714851

 $00:15:32.100 \longrightarrow 00:15:34.540$  To make that conclusion,

NOTE Confidence: 0.89714851

 $00:15:34.540 \longrightarrow 00:15:38.200$  and again I apologize for the

NOTE Confidence: 0.89714851

 $00:15:38.312 \longrightarrow 00:15:42.036$  mistake that I made 20 years ago.

NOTE Confidence: 0.89714851

 $00:15:42.040 \longrightarrow 00:15:44.821$  By 2008, it was clear to me that we

NOTE Confidence: 0.89714851

 $00:15:44.821 \longrightarrow 00:15:48.267$  had problems and here's the NIH RLS

NOTE Confidence: 0.89714851

00:15:48.267 --> 00:15:51.020 scientific meeting that happened in 2008.

NOTE Confidence: 0.89714851

 $00:15:51.020 \longrightarrow 00:15:54.130$  And this is my slide.

NOTE Confidence: 0.89714851

 $00:15:54.130 \longrightarrow 00:15:55.312$  Clinicians have become

NOTE Confidence: 0.89714851

00:15:55.312 --> 00:15:56.888 addicted to the predictable,

NOTE Confidence: 0.89714851

 $00{:}15{:}56.890 \dashrightarrow 00{:}15{:}59.464$  rapid and nearly complete response seen

NOTE Confidence: 0.89714851

 $00:15:59.464 \longrightarrow 00:16:02.550$  in our patients with dopamine agonists.

NOTE Confidence: 0.89714851

 $00{:}16{:}02.550 \dashrightarrow 00{:}16{:}06.252$  Increasing concern in Rs community that

NOTE Confidence: 0.89714851

 $00:16:06.252 \longrightarrow 00:16:08.720$  dopaminergic agents are addictive.

NOTE Confidence: 0.89714851

00:16:08.720 --> 00:16:11.205 And I don't use that word lightly.

 $00:16:11.210 \longrightarrow 00:16:13.527$  It created a need for medication at

NOTE Confidence: 0.89714851

 $00{:}16{:}13.527 \dashrightarrow 00{:}16{:}16.020$  times that were unaffected beforehand.

NOTE Confidence: 0.89714851

00:16:16.020 --> 00:16:17.652 Increasing doses are required

NOTE Confidence: 0.89714851

00:16:17.652 --> 00:16:20.100 and symptoms are really bad when

NOTE Confidence: 0.89714851

 $00:16:20.169 \longrightarrow 00:16:21.749$  you stop the medication.

NOTE Confidence: 0.8694907488

00:16:23.760 --> 00:16:26.014 So last 15 years I've spent a

NOTE Confidence: 0.8694907488

00:16:26.014 --> 00:16:28.195 lot of time talking about this

NOTE Confidence: 0.8694907488

 $00:16:28.195 \longrightarrow 00:16:31.392$  and I'm glad that the ASM now and

NOTE Confidence: 0.8694907488

 $00{:}16{:}31.392 \dashrightarrow 00{:}16{:}34.084$  the guidelines are finally coming

NOTE Confidence: 0.8694907488

 $00:16:34.084 \longrightarrow 00:16:37.300$  to more appropriate conclusions.

NOTE Confidence: 0.8694907488

 $00:16:37.300 \longrightarrow 00:16:39.916$  Augmentation is not all or none.

NOTE Confidence: 0.8694907488

00:16:39.920 --> 00:16:43.316 It is a continuum of severity

NOTE Confidence: 0.8694907488

00:16:43.320 --> 00:16:45.700 starting with loss of efficacy,

NOTE Confidence: 0.8694907488

 $00{:}16{:}45.700 \dashrightarrow 00{:}16{:}47.725$  then going to somewhat earlier

NOTE Confidence: 0.8694907488

00:16:47.725 --> 00:16:49.750 appearance and then really early

NOTE Confidence: 0.8694907488

 $00:16:49.815 \longrightarrow 00:16:51.675$  appearance such that people have

 $00:16:51.675 \longrightarrow 00:16:53.930$  symptoms by the time they have.

NOTE Confidence: 0.8694907488

00:16:53.930 --> 00:16:56.906 Fear augmentation to about 12 hours a day.

NOTE Confidence: 0.896063758888889

00:16:59.440 --> 00:17:02.392 Last year I got I got a hold of

NOTE Confidence: 0.896063758888889

 $00:17:02.400 \longrightarrow 00:17:06.048$  prescription data from the United States.

NOTE Confidence: 0.896063758888889

 $00:17:06.050 \longrightarrow 00:17:09.375$  And basically all commercial providers

NOTE Confidence: 0.896063758888889

 $00:17:09.375 \longrightarrow 00:17:14.259$  as well as non commercial providers and.

NOTE Confidence: 0.896063758888889

 $00:17:14.260 \longrightarrow 00:17:19.875$  We found 670,000 people from about a

NOTE Confidence: 0.896063758888889

 $00{:}17{:}19.875 \dashrightarrow 00{:}17{:}23.125$  million prescribers who had medication

NOTE Confidence: 0.896063758888889

 $00:17:23.125 \longrightarrow 00:17:26.450$  treatment for restless leg syndrome.

NOTE Confidence: 0.896063758888889

 $00{:}17{:}26.450 \dashrightarrow 00{:}17{:}29.415$  Anybody with Parkinson's disease was

NOTE Confidence: 0.896063758888889

 $00:17:29.415 \longrightarrow 00:17:32.218$  excluded, about 2 thirds, 60% of the

NOTE Confidence: 0.896063758888889

00:17:32.218 --> 00:17:34.289 people getting any medication for RLS,

NOTE Confidence: 0.896063758888889

 $00{:}17{:}34.290 \dashrightarrow 00{:}17{:}36.680$  we're getting a dopamine agonist.

NOTE Confidence: 0.896063758888889

 $00:17:36.680 \longrightarrow 00:17:39.822$  And as you can see almost 20% of

NOTE Confidence: 0.896063758888889

00:17:39.822 --> 00:17:42.168 the people take getting a topamax,

 $00:17:42.170 \longrightarrow 00:17:43.466$  dopamine agonist.

NOTE Confidence: 0.896063758888889

 $00:17:43.466 \longrightarrow 00:17:48.280$  We're taking doses at above the FDA

NOTE Confidence: 0.896063758888889

 $00:17:48.280 \longrightarrow 00:17:51.240$  and guideline recommended maximum

NOTE Confidence: 0.896063758888889

 $00:17:51.240 \longrightarrow 00:17:56.200$  dose that's 4 milligrams for requip.

NOTE Confidence: 0.896063758888889

 $00:17:56.200 \longrightarrow 00:18:01.426$ .75 milligrams mirapex above those doses.

NOTE Confidence: 0.896063758888889

 $00:18:01.430 \longrightarrow 00:18:02.131 \ 10\%$ .

NOTE Confidence: 0.896063758888889

 $00:18:02.131 \longrightarrow 00:18:07.038$  We're getting more than 6 milligrams of

NOTE Confidence: 0.896063758888889

 $00{:}18{:}07.038 \dashrightarrow 00{:}18{:}11.588$  requip or 1.25 milligrams of mirapex.

NOTE Confidence: 0.896063758888889

00:18:11.590 --> 00:18:14.790 There's only one way you get to this.

NOTE Confidence: 0.896063758888889

 $00:18:14.790 \longrightarrow 00:18:16.598$  And that's through augmentation.

NOTE Confidence: 0.8822715775

 $00:18:19.050 \longrightarrow 00:18:20.978$  So as I said,

NOTE Confidence: 0.8822715775

 $00:18:20.978 \longrightarrow 00:18:22.906$  these medications are seductive.

NOTE Confidence: 0.8822715775

 $00:18:22.910 \longrightarrow 00:18:24.890$  But make no mistake about it,

NOTE Confidence: 0.8822715775

00:18:24.890 --> 00:18:27.854 dopaminergic agents are no longer first

NOTE Confidence: 0.8822715775

 $00{:}18{:}27.854 \dashrightarrow 00{:}18{:}31.602$  line treatment for RLS and the ASM will

NOTE Confidence: 0.8822715775

 $00:18:31.602 \longrightarrow 00:18:34.134$  be coming out with those guidelines.

 $00{:}18{:}34.140 \dashrightarrow 00{:}18{:}36.345$  Probably around the end of the year.

NOTE Confidence: 0.8822715775

 $00:18:36.350 \longrightarrow 00:18:37.970$  What are our alternatives?

NOTE Confidence: 0.43503124

00:18:40.940 --> 00:18:44.374 Forefingers. Dopamine agonists

NOTE Confidence: 0.43503124

00:18:44.374 --> 00:18:47.926 first alternative I think would be

NOTE Confidence: 0.43503124

 $00:18:47.930 \longrightarrow 00:18:49.715$  we'll talk about iron in a minute,

NOTE Confidence: 0.43503124

00:18:49.720 --> 00:18:53.188 but will be the A2D agents gabapentin,

NOTE Confidence: 0.43503124

00:18:53.188 --> 00:18:57.278 gabapentin, Anna Carbol and pregabalin.

NOTE Confidence: 0.43503124

 $00{:}18{:}57.280 \dashrightarrow 00{:}18{:}59.872$  These medicines and here you see

NOTE Confidence: 0.43503124

 $00{:}18{:}59.872 \dashrightarrow 00{:}19{:}02.549$  the range of effective doses here.

NOTE Confidence: 0.43503124

 $00:19:02.550 \longrightarrow 00:19:04.944$  These medicines are not without side effects.

NOTE Confidence: 0.43503124

 $00:19:04.950 \dashrightarrow 00:19:06.972$  Therefore in many people you're going

NOTE Confidence: 0.43503124

 $00:19:06.972 \longrightarrow 00:19:09.389$  to have to start low and go slow.

NOTE Confidence: 0.43503124

 $00{:}19{:}09.390 \dashrightarrow 00{:}19{:}12.249$  But that's fine.

NOTE Confidence: 0.43503124

00:19:12.250 --> 00:19:14.810 Sedation, dizziness, weight gain,

NOTE Confidence: 0.43503124

 $00:19:14.810 \longrightarrow 00:19:16.090$  gait instability,

 $00:19:16.090 \longrightarrow 00:19:18.952$  any of those things actually can

NOTE Confidence: 0.43503124

 $00:19:18.952 \longrightarrow 00:19:20.860$  interfere with people's tolerability

NOTE Confidence: 0.43503124

 $00:19:20.935 \longrightarrow 00:19:22.843$  and therefore you may have to

NOTE Confidence: 0.43503124

 $00:19:22.843 \longrightarrow 00:19:25.184$  pull the plug in some patients and

NOTE Confidence: 0.43503124

 $00:19:25.184 \longrightarrow 00:19:27.508$  go to one of the next options.

NOTE Confidence: 0.43503124

00:19:27.510 --> 00:19:29.410 But there's really no evidence,

NOTE Confidence: 0.43503124

 $00:19:29.410 \longrightarrow 00:19:31.410$  no published evidence in

NOTE Confidence: 0.43503124

 $00:19:31.410 \longrightarrow 00:19:32.910$  my clinical experience,

NOTE Confidence: 0.43503124

 $00{:}19{:}32.910 \dashrightarrow 00{:}19{:}34.598$  no evidence of augmentation

NOTE Confidence: 0.43503124

 $00:19:34.598 \longrightarrow 00:19:35.864$  with these agents.

NOTE Confidence: 0.905286722857143

00:19:39.490 --> 00:19:41.688 And when we think about comparative trials,

NOTE Confidence: 0.905286722857143

00:19:41.690 --> 00:19:44.786 which of course are rarely done in medicine,

NOTE Confidence: 0.905286722857143

 $00:19:44.790 \longrightarrow 00:19:47.576$  but thankfully we were able to do

NOTE Confidence: 0.905286722857143

00:19:47.576 --> 00:19:50.046 a comparative trial of pregabalin

NOTE Confidence: 0.905286722857143

00:19:50.046 --> 00:19:51.846 Lyrica versus Pramipexole,

NOTE Confidence: 0.905286722857143

 $00:19:51.850 \longrightarrow 00:19:55.496$  mirapex for restless leg syndrome 12

00:19:55.496 --> 00:19:59.920 week placebo-controlled. Section 1.

NOTE Confidence: 0.905286722857143

00:19:59.920 --> 00:20:02.040 Dose of pregabalin, 300 milligrams,

NOTE Confidence: 0.905286722857143

 $00:20:02.040 \longrightarrow 00:20:05.512$  2 doses of pramipexole .25 and .5

NOTE Confidence: 0.905286722857143

00:20:05.512 --> 00:20:09.140 versus placebo and you can see that

NOTE Confidence: 0.905286722857143

 $00:20:09.140 \longrightarrow 00:20:11.685$  pregabalin and the higher dose.

NOTE Confidence: 0.905286722857143

00:20:11.690 --> 00:20:13.235 Of primary pexel,

NOTE Confidence: 0.905286722857143

00:20:13.235 --> 00:20:16.840 the FDA maximum approved dose were roughly

NOTE Confidence: 0.905286722857143

 $00{:}20{:}16.933 \dashrightarrow 00{:}20{:}20{:}023$  equivalent and in fact pregabalin was

NOTE Confidence: 0.905286722857143

 $00:20:20.023 \longrightarrow 00:20:23.809$  somewhat better on the IRS severity scale.

NOTE Confidence: 0.905286722857143

 $00:20:23.810 \longrightarrow 00:20:26.384$  Then every body on placebo was re

NOTE Confidence: 0.905286722857143

 $00:20:26.384 \longrightarrow 00:20:29.347$  randomized to one of these three arms

NOTE Confidence: 0.905286722857143

 $00{:}20{:}29.347 \dashrightarrow 00{:}20{:}32.518$  and we followed them for a year and

NOTE Confidence: 0.905286722857143

 $00{:}20{:}32.518 \mathrel{--}{>} 00{:}20{:}35.206$  you can see augmentation rates at

NOTE Confidence: 0.905286722857143

 $00:20:35.206 \dashrightarrow 00:20:39.510$  about 8% for the higher pramip exole dose.

NOTE Confidence: 0.905286722857143

00:20:39.510 --> 00:20:43.054 You prima pixel dose and 2\% for pregabalin.

 $00:20:43.054 \longrightarrow 00:20:46.358$  I don't think that was actually augmentation.

NOTE Confidence: 0.905286722857143

 $00{:}20{:}46.360 \dashrightarrow 00{:}20{:}49.342$  I think that that was just

NOTE Confidence: 0.905286722857143

 $00:20:49.342 \longrightarrow 00:20:51.330$  variance in their scores.

NOTE Confidence: 0.905286722857143

00:20:51.330 --> 00:20:53.910 Even though we were pretty strict

NOTE Confidence: 0.905286722857143

 $00:20:53.910 \longrightarrow 00:20:56.151$  on our augmentation criteria or

NOTE Confidence: 0.905286722857143

00:20:56.151 --> 00:20:57.927 maybe progression of disease,

NOTE Confidence: 0.905286722857143

 $00:20:57.930 \longrightarrow 00:21:01.938$  I do think that these values are real.

NOTE Confidence: 0.905286722857143

 $00:21:01.940 \longrightarrow 00:21:04.727$  And that somewhere 5 to 10% of

NOTE Confidence: 0.905286722857143

 $00{:}21{:}04.727 \dashrightarrow 00{:}21{:}06.675$  patients on PRAMIPEXOLE will

NOTE Confidence: 0.905286722857143

 $00:21:06.675 \longrightarrow 00:21:08.623$  develop augmentation every year.

NOTE Confidence: 0.86886486666667

 $00:21:15.000 \longrightarrow 00:21:17.118$  The thing to remember about gabapentin,

NOTE Confidence: 0.868864866666667

00:21:17.120 --> 00:21:19.280 if you want to prescribe it for RLS,

NOTE Confidence: 0.86886486666667

 $00:21:19.280 \longrightarrow 00:21:23.120$  and I do frequently, is that it has

NOTE Confidence: 0.868864866666667

 $00{:}21{:}23.120 \dashrightarrow 00{:}21{:}24.721$  non-linear pharmacokinetics, something

NOTE Confidence: 0.86886486666667

 $00:21:24.721 \longrightarrow 00:21:28.567$  that the manufacturers never told us.

NOTE Confidence: 0.86886486666667

 $00:21:28.570 \longrightarrow 00:21:32.058$  And so here you would see what linear

00:21:32.058 --> 00:21:33.770 pharmacokinetics would look like,

NOTE Confidence: 0.86886486666667

 $00:21:33.770 \longrightarrow 00:21:35.174$  double the dose,

NOTE Confidence: 0.86886486666667

 $00{:}21{:}35.174 \dashrightarrow 00{:}21{:}37.046$  double the serum concentration.

NOTE Confidence: 0.86886486666667

 $00:21:37.050 \longrightarrow 00:21:39.750$  This is what gabapentin looks like.

NOTE Confidence: 0.86886486666667

 $00:21:39.750 \longrightarrow 00:21:42.456$  Look at how it flattens out.

NOTE Confidence: 0.86886486666667

 $00:21:42.460 \longrightarrow 00:21:44.320$  So when you increase the dose,

NOTE Confidence: 0.86886486666667

00:21:44.320 --> 00:21:46.846 you're not going to get increased

NOTE Confidence: 0.868864866666667

 $00:21:46.846 \longrightarrow 00:21:48.969$  serum concentrations if you give

NOTE Confidence: 0.86886486666667

 $00:21:48.969 \longrightarrow 00:21:50.809$  the medication all at once.

NOTE Confidence: 0.86886486666667

00:21:50.810 --> 00:21:53.514 So therefore, if you want to get doses,

NOTE Confidence: 0.86886486666667

00:21:53.520 --> 00:21:55.160 I generally cut it off

NOTE Confidence: 0.86886486666667

 $00:21:55.160 \longrightarrow 00:21:56.472$  at about 600 milligrams.

NOTE Confidence: 0.86886486666667

 $00:21:56.480 \longrightarrow 00:21:59.000$  If you want to give doses

NOTE Confidence: 0.86886486666667

 $00:21:59.000 \longrightarrow 00:22:00.260$  above 600 milligrams,

NOTE Confidence: 0.86886486666667

 $00:22:00.260 \longrightarrow 00:22:02.076$  I split the dosing,

 $00:22:02.076 \longrightarrow 00:22:06.120$  give it once and then two hours later.

NOTE Confidence: 0.86886486666667

 $00:22:06.120 \longrightarrow 00:22:07.614$  Give another dose.

NOTE Confidence: 0.86886486666667

00:22:07.614 --> 00:22:10.602 This way you can approximate more

NOTE Confidence: 0.86886486666667

 $00:22:10.602 \longrightarrow 00:22:13.550$  linear pharmacokinetics because the

NOTE Confidence: 0.86886486666667

 $00:22:13.550 \longrightarrow 00:22:17.169$  receptors in the gut are not saturated.

NOTE Confidence: 0.85395016

00:22:19.350 --> 00:22:22.086 Let's talk about iron. As you can see,

NOTE Confidence: 0.85395016

00:22:22.090 --> 00:22:24.190 I'm kind of rushing through these other

NOTE Confidence: 0.85395016

00:22:24.190 --> 00:22:26.115 treatments because I'm going to spend a

NOTE Confidence: 0.85395016

 $00{:}22{:}26.115 \dashrightarrow 00{:}22{:}27.952$  lot of time talking about opioids and

NOTE Confidence: 0.85395016

 $00:22:27.952 \longrightarrow 00:22:29.607$  about the management of augmentation.

NOTE Confidence: 0.85395016

00:22:29.610 --> 00:22:32.994 But just to give us some basis here

NOTE Confidence: 0.85395016

 $00:22:32.994 \longrightarrow 00:22:36.358$  on the four treatments for RLS.

NOTE Confidence: 0.85395016

 $00:22:36.360 \longrightarrow 00:22:43.182$  So. Iron has been shown to be

NOTE Confidence: 0.85395016

 $00:22:43.182 \longrightarrow 00:22:47.660$  efficacious in patients. Who have?

NOTE Confidence: 0.85395016

 $00:22:47.660 \longrightarrow 00:22:51.860$  Iron indices that are within certain ranges.

NOTE Confidence: 0.85395016

 $00:22:51.860 \longrightarrow 00:22:56.515$  So for PO iron and those individuals

 $00:22:56.520 \longrightarrow 00:22:59.310$  with ferritin less than 75,

NOTE Confidence: 0.85395016

 $00:22:59.310 \longrightarrow 00:23:01.476$  in fact the mean was 38.

NOTE Confidence: 0.85395016

00:23:01.480 --> 00:23:04.456 You can see the two groups at baseline

NOTE Confidence: 0.85395016

 $00:23:04.456 \longrightarrow 00:23:06.956$  were right around that 40 and 36.

NOTE Confidence: 0.85395016

 $00:23:06.960 \longrightarrow 00:23:11.052$  You can see what happens to

NOTE Confidence: 0.85395016

00:23:11.052 --> 00:23:15.489 the IRS score it went from.

NOTE Confidence: 0.85395016

 $00:23:15.490 \longrightarrow 00:23:17.520$  23 to 25 and the two groups,

NOTE Confidence: 0.85395016

 $00{:}23{:}17.520 \dashrightarrow 00{:}23{:}20.046$  Iron Group and the place bo group

NOTE Confidence: 0.85395016

00:23:20.046 --> 00:23:22.955 dropped 10 points on the IRS scale

NOTE Confidence: 0.85395016

 $00:23:22.955 \longrightarrow 00:23:25.622$  in the Iron Group and dropped only

NOTE Confidence: 0.85395016

 $00{:}23{:}25.706 \longrightarrow 00{:}23{:}28.166$  one point in the place bo group.

NOTE Confidence: 0.85395016

 $00{:}23{:}28.170 \dashrightarrow 00{:}23{:}31.838$  Really dramatic difference there.

NOTE Confidence: 0.85395016

00:23:31.838 --> 00:23:34.589 For IV iron.

NOTE Confidence: 0.85395016

00:23:34.590 --> 00:23:36.210 Umm.

NOTE Confidence: 0.85395016

 $00:23:36.210 \longrightarrow 00:23:36.776$  Generally,

 $00:23:36.776 \longrightarrow 00:23:40.172$  again we recommend that it be

NOTE Confidence: 0.85395016

 $00{:}23{:}40.172 \dashrightarrow 00{:}23{:}43.082$  used in individuals with ferritin

NOTE Confidence: 0.85395016

 $00:23:43.082 \longrightarrow 00:23:45.506$  level less than 100.

NOTE Confidence: 0.85395016

 $00{:}23{:}45.510 \dashrightarrow 00{:}23{:}48.828$  Here you can see a clinical trial

NOTE Confidence: 0.85395016

00:23:48.828 --> 00:23:51.666 of IV ferric carboxy maltose

NOTE Confidence: 0.85395016

 $00:23:51.666 \longrightarrow 00:23:53.754$  one 1000 milligram dose.

NOTE Confidence: 0.85395016

 $00{:}23{:}53.754 \dashrightarrow 00{:}23{:}56.622$  And again here you see placebo.

NOTE Confidence: 0.85395016

00:23:56.630 --> 00:23:58.655 It went from whatever it

NOTE Confidence: 0.85395016

 $00{:}23{:}58.655 \dashrightarrow 00{:}24{:}01.410$  went to my lost four points,

NOTE Confidence: 0.85395016

00:24:01.410 --> 00:24:03.708 improved 4 points at week one,

NOTE Confidence: 0.85395016

 $00:24:03.710 \longrightarrow 00:24:06.086$  but then really didn't change over that time.

NOTE Confidence: 0.85395016

 $00{:}24{:}06.090 \dashrightarrow 00{:}24{:}08.806$  On that and look what happens in

NOTE Confidence: 0.85395016

 $00:24:08.806 \longrightarrow 00:24:11.030$  the ferric carboxy maltose group

NOTE Confidence: 0.85395016

 $00:24:11.030 \longrightarrow 00:24:13.475$  and these are blinded patients.

NOTE Confidence: 0.85395016

 $00:24:13.480 \longrightarrow 00:24:16.040$  You're in a setting where the IV bag

NOTE Confidence: 0.85395016

 $00:24:16.040 \longrightarrow 00:24:18.696$  is and the line are both covered,

 $00:24:18.700 \longrightarrow 00:24:21.106$  so they can't tell because FCM

NOTE Confidence: 0.85395016

 $00{:}24{:}21.106 \dashrightarrow 00{:}24{:}23.188$  and most iron formulations are

NOTE Confidence: 0.85395016

 $00:24:23.188 \longrightarrow 00:24:24.820$  brown whereas saline was.

NOTE Confidence: 0.85395016

 $00:24:24.820 \longrightarrow 00:24:28.156$  The placebo is obviously not brand.

NOTE Confidence: 0.85395016

00:24:28.160 --> 00:24:31.352 So you can see here that IV

NOTE Confidence: 0.85395016

 $00:24:31.352 \longrightarrow 00:24:34.430$  iron takes a while to work.

NOTE Confidence: 0.85395016

00:24:34.430 --> 00:24:35.603 Doesn't work quickly.

NOTE Confidence: 0.85395016

00:24:35.603 --> 00:24:37.949 Seem to have its maximum benefit

NOTE Confidence: 0.85395016

 $00:24:37.949 \longrightarrow 00:24:39.738$  here at 12 weeks in fact.

NOTE Confidence: 0.9064463

 $00:24:41.980 \longrightarrow 00:24:46.290$  And #4. Finger would be opioids and

NOTE Confidence: 0.9064463

 $00{:}24{:}46.290 \dashrightarrow 00{:}24{:}49.443$  you can see of course we have a wide

NOTE Confidence: 0.9064463

 $00:24:49.443 \longrightarrow 00:24:51.471$  range of opioids available to us.

NOTE Confidence: 0.889562391111111

 $00:24:53.720 \longrightarrow 00:24:55.856$  And really, I've divided

NOTE Confidence: 0.889562391111111

 $00:24:55.856 \longrightarrow 00:24:58.526$  them based on half life.

NOTE Confidence: 0.889562391111111

 $00:24:58.530 \longrightarrow 00:25:01.988$  We have these shorter agents in here,

00:25:01.990 --> 00:25:04.258 Tramadol, codeine, morphine,

NOTE Confidence: 0.889562391111111

00:25:04.258 --> 00:25:05.770 oxycodone, hydrocodone.

NOTE Confidence: 0.889562391111111

 $00:25:05.770 \longrightarrow 00:25:09.739$  A couple of them have ER formulations

NOTE Confidence: 0.889562391111111

 $00:25:09.739 \longrightarrow 00:25:14.228$  which make them not so much short acting.

NOTE Confidence: 0.889562391111111

 $00:25:14.230 \longrightarrow 00:25:17.807$  And then the two long acting agents

NOTE Confidence: 0.889562391111111

00:25:17.807 --> 00:25:21.972 oftentimes once a day because of long

NOTE Confidence: 0.889562391111111

 $00:25:21.972 \longrightarrow 00:25:25.132$  half lives methodone and buprenorphine.

NOTE Confidence: 0.889562391111111

00:25:25.140 --> 00:25:27.236 And I'm not going to go into the

NOTE Confidence: 0.889562391111111

 $00:25:27.236 \longrightarrow 00:25:29.309$  details here of where you start the

NOTE Confidence: 0.889562391111111

 $00:25:29.309 \longrightarrow 00:25:31.150$  dose and the usual effective dose,

NOTE Confidence: 0.889562391111111

 $00:25:31.150 \longrightarrow 00:25:35.168$  but opioids are extremely effective for RLS.

NOTE Confidence: 0.9398017

 $00:25:37.590 \longrightarrow 00:25:41.988$  However. Most doctors in the

NOTE Confidence: 0.9398017

 $00:25:41.988 \longrightarrow 00:25:45.595$  United States are very, very.

NOTE Confidence: 0.9398017

 $00{:}25{:}45.595 \dashrightarrow 00{:}25{:}49.134$  Umm. Let me change that.

NOTE Confidence: 0.9398017

00:25:49.134 --> 00:25:51.840 About 1/3 of the United States

NOTE Confidence: 0.9398017

 $00{:}25{:}51.940 \dashrightarrow 00{:}25{:}54.288$  physicians will no longer,

 $00:25:54.290 \longrightarrow 00:25:57.746$  and during this period from 2012 to 2017,

NOTE Confidence: 0.9398017

 $00{:}25{:}57.750 \dashrightarrow 00{:}26{:}01.070$  stopped writing prescriptions for opioids.

NOTE Confidence: 0.9398017

 $00:26:01.070 \longrightarrow 00:26:03.626 1/3$  of doctors say,

NOTE Confidence: 0.9398017

00:26:03.626 --> 00:26:07.460 I don't prescribe them for anything.

NOTE Confidence: 0.9398017

 $00{:}26{:}07.460 \dashrightarrow 00{:}26{:}09.320$  Which I think is problematic.

NOTE Confidence: 0.9398017

 $00:26:09.320 \longrightarrow 00:26:11.300$  That's not our role as doctors.

NOTE Confidence: 0.9398017

 $00:26:11.300 \longrightarrow 00:26:13.580$  We balance risks and benefits.

NOTE Confidence: 0.9398017

 $00{:}26{:}13.580 \dashrightarrow 00{:}26{:}16.820$  That's what our training led us to do.

NOTE Confidence: 0.9398017

 $00:26:16.820 \longrightarrow 00:26:20.351$  And 1/3 of doctors are saying there

NOTE Confidence: 0.9398017

 $00{:}26{:}20.351 \dashrightarrow 00{:}26{:}24.628$  is no benefit that outweighs the risk.

NOTE Confidence: 0.9398017

 $00:26:24.630 \longrightarrow 00:26:25.878$  And that's unfortunate.

NOTE Confidence: 0.9398017

 $00:26:25.878 \longrightarrow 00:26:28.790$  So those of us who are prescribing

NOTE Confidence: 0.9398017

 $00{:}26{:}28.862 \dashrightarrow 00{:}26{:}31.718$  opioids for RLS are really kind of

NOTE Confidence: 0.9398017

 $00:26:31.718 \longrightarrow 00:26:33.828$  swimming upstream here going against

NOTE Confidence: 0.9398017

00:26:33.828 --> 00:26:36.693 what many other docs are doing, but.

 $00:26:36.693 \longrightarrow 00:26:39.794$  I think we need to recognize the

NOTE Confidence: 0.9398017

 $00:26:39.794 \longrightarrow 00:26:42.987$  pendulum has swung and the CDC kind of

NOTE Confidence: 0.9398017

 $00:26:42.990 \longrightarrow 00:26:46.038$  stated that just earlier at the end of

NOTE Confidence: 0.9398017

00:26:46.038 --> 00:26:49.077 last year and it will swing back and

NOTE Confidence: 0.9398017

 $00:26:49.077 \longrightarrow 00:26:51.961$  opioids will find a reasonable use in

NOTE Confidence: 0.9398017

 $00:26:51.961 \longrightarrow 00:26:55.076$  medicine and for the treatment of RLS.

NOTE Confidence: 0.9398017

 $00:26:55.080 \longrightarrow 00:26:59.456$  For doctors really is comes down to our

NOTE Confidence: 0.9398017

 $00:26:59.456 \longrightarrow 00:27:03.338$  fear versus our care of our patients.

NOTE Confidence: 0.9398017

 $00{:}27{:}03.340 \longrightarrow 00{:}27{:}05.762$  Everybody's got to find their own place

NOTE Confidence: 0.9398017

 $00:27:05.762 \longrightarrow 00:27:08.258$  where they feel comfortable with that.

NOTE Confidence: 0.9398017

 $00:27:08.260 \longrightarrow 00:27:11.596$  And so I'm not going to.

NOTE Confidence: 0.9398017

 $00:27:11.600 \longrightarrow 00:27:14.240$  Suggest that if your concern

NOTE Confidence: 0.9398017

00:27:14.240 --> 00:27:16.352 or discomfort with prescribing

NOTE Confidence: 0.9398017

 $00:27:16.352 \longrightarrow 00:27:18.998$  these medications is excessive,

NOTE Confidence: 0.9398017

 $00:27:19.000 \longrightarrow 00:27:20.660$  that you should do it.

NOTE Confidence: 0.9398017

 $00:27:20.660 \longrightarrow 00:27:22.010$  If you're uncomfortable,

 $00:27:22.010 \longrightarrow 00:27:24.710$  of course you shouldn't do it.

NOTE Confidence: 0.9398017

 $00:27:24.710 \longrightarrow 00:27:25.255$  However,

NOTE Confidence: 0.9398017

 $00:27:25.255 \longrightarrow 00:27:29.070$  you should know that a number of

NOTE Confidence: 0.9398017

00:27:29.070 --> 00:27:33.954 analysis have looked at doctors who

NOTE Confidence: 0.9398017

 $00:27:33.954 \longrightarrow 00:27:37.210$  did prescribe opioids inappropriately.

NOTE Confidence: 0.9398017

 $00:27:37.210 \longrightarrow 00:27:40.590$  And they identified these three

NOTE Confidence: 0.9398017

00:27:40.590 --> 00:27:43.000 CD's that predict who's going

NOTE Confidence: 0.9398017

 $00:27:43.000 \longrightarrow 00:27:45.410$  to be a problematic prescriber.

NOTE Confidence: 0.9398017

00:27:45.410 --> 00:27:47.270 People who are careless,

NOTE Confidence: 0.9398017

 $00:27:47.270 \longrightarrow 00:27:49.130$  doctors who are careless,

NOTE Confidence: 0.9398017

00:27:49.130 --> 00:27:50.561 corrupt or compromised.

NOTE Confidence: 0.9398017

00:27:50.561 --> 00:27:53.900 If you're not one of those things,

NOTE Confidence: 0.9398017

 $00:27:53.900 \longrightarrow 00:27:56.845$  you can prescribe opioids appropriately

NOTE Confidence: 0.9398017

 $00{:}27{:}56.845 \dashrightarrow 00{:}27{:}59.790$  and safely to your patients.

NOTE Confidence: 0.852984067142857

 $00:28:02.040 \longrightarrow 00:28:04.840$  Before starting an opioid for restless legs,

 $00:28:04.840 \longrightarrow 00:28:06.716$  there are few things you're going to

NOTE Confidence: 0.852984067142857

 $00:28:06.716 \longrightarrow 00:28:09.476$  want to do or that you're required to do.

NOTE Confidence: 0.852984067142857

 $00:28:09.480 \longrightarrow 00:28:11.070$  You want to think about the

NOTE Confidence: 0.852984067142857

 $00:28:11.070 \longrightarrow 00:28:12.709$  features and the opioid risk tool.

NOTE Confidence: 0.852984067142857

00:28:12.710 --> 00:28:15.140 This is really not been validated,

NOTE Confidence: 0.852984067142857

 $00:28:15.140 \longrightarrow 00:28:18.045$  but it's the best that we've got.

NOTE Confidence: 0.852984067142857

 $00:28:18.050 \longrightarrow 00:28:20.310$  Think about the individuals history

NOTE Confidence: 0.852984067142857

00:28:20.310 --> 00:28:22.472 of substance abuse, their family

NOTE Confidence: 0.852984067142857

 $00{:}28{:}22.472 \longrightarrow 00{:}28{:}25.292$  history of substance abuse, their age.

NOTE Confidence: 0.852984067142857

00:28:25.292 --> 00:28:29.534 Any history of pre adolescent sexual abuse?

NOTE Confidence: 0.852984067142857

 $00:28:29.540 \longrightarrow 00:28:31.121$  Certain psychiatric diseases.

NOTE Confidence: 0.852984067142857

00:28:31.121 --> 00:28:34.810 And then you add these numbers up

NOTE Confidence: 0.852984067142857

 $00{:}28{:}34.897 \dashrightarrow 00{:}28{:}37.905$  and it'll come up with a risk score.

NOTE Confidence: 0.852984067142857

 $00:28:37.910 \longrightarrow 00:28:40.556$  How likely the person is to

NOTE Confidence: 0.852984067142857

 $00:28:40.556 \longrightarrow 00:28:43.540$  misuse one of these medications?

NOTE Confidence: 0.852984067142857

 $00:28:43.540 \longrightarrow 00:28:45.476$  Always check the PDMP.

 $00:28:45.476 \longrightarrow 00:28:47.896$  I'd love checking the prescription

NOTE Confidence: 0.852984067142857

00:28:47.896 --> 00:28:49.879 monitoring program in my state.

NOTE Confidence: 0.852984067142857

00:28:49.880 --> 00:28:50.462 I don't know,

NOTE Confidence: 0.852984067142857

00:28:50.462 --> 00:28:52.212 maybe I you know I when I was a

NOTE Confidence: 0.852984067142857

 $00:28:52.212 \longrightarrow 00:28:53.872$  kid I wanted to be a cop and you

NOTE Confidence: 0.852984067142857

00:28:53.872 --> 00:28:55.396 get to combine kind of medicine

NOTE Confidence: 0.852984067142857

 $00:28:55.396 \longrightarrow 00:28:57.972$  and police work here and try to

NOTE Confidence: 0.852984067142857

 $00:28:57.972 \longrightarrow 00:29:00.690$  see what people are doing and.

NOTE Confidence: 0.852984067142857 00:29:00.690 --> 00:29:01.290 Umm. NOTE Confidence: 0.852984067142857

 $00:29:01.290 \longrightarrow 00:29:05.490$  And you can identify people who are

NOTE Confidence: 0.852984067142857

 $00{:}29{:}05.490 \dashrightarrow 00{:}29{:}08.450$  using medications in appropriately.

NOTE Confidence: 0.852984067142857

 $00:29:08.450 \longrightarrow 00:29:10.226$  I generally do not do it.

NOTE Confidence: 0.852984067142857

00:29:10.230 --> 00:29:12.240 You're in talk screen unless

NOTE Confidence: 0.852984067142857

 $00{:}29{:}12.240 \dashrightarrow 00{:}29{:}13.848$  I have particular concerns.

NOTE Confidence: 0.852984067142857

 $00:29:13.850 \longrightarrow 00:29:17.665$  And at mass general we are required

 $00:29:17.665 \longrightarrow 00:29:20.934$  to review an opioid agreement and have

NOTE Confidence: 0.852984067142857

 $00{:}29{:}20.934 \dashrightarrow 00{:}29{:}23.399$  patients verbally assent or sign it.

NOTE Confidence: 0.820939005

00:29:27.460 --> 00:29:30.188 When you're writing an

NOTE Confidence: 0.820939005

 $00:29:30.188 \longrightarrow 00:29:32.916$  opioid prescription for RLS.

NOTE Confidence: 0.820939005

 $00:29:32.920 \longrightarrow 00:29:35.182$  I always put these words in

NOTE Confidence: 0.820939005

 $00:29:35.182 \longrightarrow 00:29:37.459$  the notes for chronic RLS pain.

NOTE Confidence: 0.892015239166667

00:29:41.880 --> 00:29:44.912 #1 #2 you no longer need an X

NOTE Confidence: 0.892015239166667

 $00:29:44.912 \longrightarrow 00:29:48.040$  license to prescribe buprenorphine.

NOTE Confidence: 0.892015239166667

 $00:29:48.040 \longrightarrow 00:29:49.996$  They've just gotten rid of that.

NOTE Confidence: 0.892015239166667

00:29:50.000 --> 00:29:53.768 That is no longer relevant for for you.

NOTE Confidence: 0.892015239166667

 $00{:}29{:}53.770 \dashrightarrow 00{:}29{:}55.714$  And if somebody says you need an extra

NOTE Confidence: 0.892015239166667

 $00{:}29{:}55.714 \dashrightarrow 00{:}29{:}57.780$ license, say not anymore you don't,

NOTE Confidence: 0.892015239166667

 $00:29:57.780 \longrightarrow 00:30:02.108$  and you could also say it's for pain.

NOTE Confidence: 0.892015239166667

00:30:02.110 --> 00:30:04.186 I only write one month prescriptions.

NOTE Confidence: 0.892015239166667

 $00:30:04.190 \longrightarrow 00:30:05.947$  Obviously that's all you're able to write.

NOTE Confidence: 0.892015239166667

 $00:30:05.950 \longrightarrow 00:30:09.928$  No refills other than for bup renorphine.

 $00:30:09.930 \longrightarrow 00:30:13.344$  But I write 3 sequential one

NOTE Confidence: 0.892015239166667

 $00:30:13.344 \longrightarrow 00:30:15.620$  month prescriptions in EPIC.

NOTE Confidence: 0.892015239166667

00:30:15.620 --> 00:30:17.304 Dated one month sequentially,

NOTE Confidence: 0.892015239166667

00:30:17.304 --> 00:30:20.998 and I see people every three to four months,

NOTE Confidence: 0.892015239166667

 $00:30:21.000 \longrightarrow 00:30:23.286$  as is required by mass general

NOTE Confidence: 0.892015239166667

 $00:30:23.286 \longrightarrow 00:30:26.030$  and the state of Massachusetts.

NOTE Confidence: 0.892015239166667

 $00:30:26.030 \longrightarrow 00:30:27.722$  That's fine. I'm happy to see

NOTE Confidence: 0.892015239166667

 $00:30:27.722 \longrightarrow 00:30:29.599$  them every three or four months.

NOTE Confidence: 0.892015239166667

 $00:30:29.600 \longrightarrow 00:30:31.960$  And.

NOTE Confidence: 0.892015239166667

 $00:30:31.960 \longrightarrow 00:30:35.320$  Keep an eye on their RLS,

NOTE Confidence: 0.892015239166667

 $00:30:35.320 \longrightarrow 00:30:36.685$  their General Medical health and

NOTE Confidence: 0.892015239166667

00:30:36.685 --> 00:30:38.050 their use of these medicines.

NOTE Confidence: 0.84436287

 $00{:}30{:}40.420 \dashrightarrow 00{:}30{:}47.125$  So how would I use opioids for RLS so?

NOTE Confidence: 0.84436287

 $00:30:47.130 \longrightarrow 00:30:49.377$  Opioid treatment is based on the 24

NOTE Confidence: 0.84436287

 $00:30:49.377 \longrightarrow 00:30:51.149$  hour distribution of RLS symptoms.

00:30:51.150 --> 00:30:53.595 All RLS treatments are based

NOTE Confidence: 0.84436287

00:30:53.595 --> 00:30:56.040 on the 24 hour distribution.

NOTE Confidence: 0.84436287

 $00:30:56.040 \longrightarrow 00:30:57.452$  As they pointed out,

NOTE Confidence: 0.84436287

 $00:30:57.452 \longrightarrow 00:31:00.040$  people only have RLS symptoms at night.

NOTE Confidence: 0.84436287

00:31:00.040 --> 00:31:01.256 And if, God forbid,

NOTE Confidence: 0.84436287

 $00{:}31{:}01.256 \dashrightarrow 00{:}31{:}03.660$  you want to start a dopamine agonist,

NOTE Confidence: 0.84436287

 $00:31:03.660 \longrightarrow 00:31:04.784$  don't start a TID.

NOTE Confidence: 0.84436287

 $00:31:04.784 \longrightarrow 00:31:06.470$  Start at an hour or two

NOTE Confidence: 0.84436287

00:31:06.544 --> 00:31:08.020 before symptoms start.

NOTE Confidence: 0.84436287

 $00:31:08.020 \longrightarrow 00:31:10.408$  Same thing with gabapentin or pregabalin.

NOTE Confidence: 0.809017581428571

 $00{:}31{:}12.900 \dashrightarrow 00{:}31{:}14.475$  Opioids differ predominantly,

NOTE Confidence: 0.809017581428571

 $00:31:14.475 \longrightarrow 00:31:16.575$  and they're half life.

NOTE Confidence: 0.809017581428571

 $00:31:16.580 \longrightarrow 00:31:19.256$  And therefore I'm going to base

NOTE Confidence: 0.809017581428571

 $00:31:19.256 \longrightarrow 00:31:22.409$  the opioid choice on the pattern

NOTE Confidence: 0.809017581428571

 $00:31:22.409 \longrightarrow 00:31:25.599$  distribution of bothersome RLS symptoms.

NOTE Confidence: 0.809017581428571

 $00:31:25.600 \longrightarrow 00:31:27.462$  If they had just a few hours

00:31:27.462 --> 00:31:29.640 a day of our less symptoms,

NOTE Confidence: 0.809017581428571

00:31:29.640 --> 00:31:33.120 I may give them a short acting opioid,

NOTE Confidence: 0.809017581428571

00:31:33.120 --> 00:31:35.620 oxycodone, tramadol, hydrocodone, codeine.

NOTE Confidence: 0.809017581428571

 $00:31:35.620 \longrightarrow 00:31:38.120$  But remember these are

NOTE Confidence: 0.809017581428571

 $00{:}31{:}38.120 \dashrightarrow 00{:}31{:}40.690$ oxycodones like 4 hours codeine.

NOTE Confidence: 0.809017581428571

00:31:40.690 --> 00:31:42.035 You're not going to get

NOTE Confidence: 0.809017581428571

 $00:31:42.035 \longrightarrow 00:31:43.620$  even four hours out of it.

NOTE Confidence: 0.809017581428571

 $00{:}31{:}43.620 \dashrightarrow 00{:}31{:}46.275$  So these are short term and the concern is,

NOTE Confidence: 0.809017581428571

 $00:31:46.280 \longrightarrow 00:31:48.008$  is that when they wear off.

NOTE Confidence: 0.809017581428571

 $00:31:48.010 \longrightarrow 00:31:49.864$  There's going to be a rebound

NOTE Confidence: 0.809017581428571

00:31:49.864 --> 00:31:51.878 of RLS or that you're going

NOTE Confidence: 0.809017581428571

 $00:31:51.878 \longrightarrow 00:31:53.984$  to create a rebound of RLS.

NOTE Confidence: 0.809017581428571

 $00{:}31{:}53.990 \dashrightarrow 00{:}31{:}55.250$  For people who have symptoms,

NOTE Confidence: 0.809017581428571

 $00:31:55.250 \longrightarrow 00:31:57.434$  let's say that start at 10:00 o'clock

NOTE Confidence: 0.809017581428571

 $00:31:57.434 \longrightarrow 00:32:00.206$  at night and they are still waking up at

 $00:32:00.206 \longrightarrow 00:32:02.508$  3:00 o'clock in the morning with RLS.

NOTE Confidence: 0.809017581428571

 $00{:}32{:}02.510 \dashrightarrow 00{:}32{:}05.527$  I may use an extended release formulation,

NOTE Confidence: 0.809017581428571

 $00:32:05.530 \longrightarrow 00:32:07.506$  for instance oxycodone ER.

NOTE Confidence: 0.809017581428571

00:32:07.506 --> 00:32:10.470 But for people of symptoms more

NOTE Confidence: 0.809017581428571

00:32:10.564 --> 00:32:12.269 than 10 hours a day,

NOTE Confidence: 0.809017581428571

 $00:32:12.270 \longrightarrow 00:32:14.874$  I'm going to use methadone or buprenorphine.

NOTE Confidence: 0.894090817142857

00:32:17.420 --> 00:32:19.886 I want to briefly review data

NOTE Confidence: 0.894090817142857

 $00:32:19.886 \longrightarrow 00:32:21.530$  from the national Restless

NOTE Confidence: 0.894090817142857

 $00{:}32{:}21.609 \to 00{:}32{:}23.737$ leg syndrome opioid registry,

NOTE Confidence: 0.894090817142857

 $00:32:23.740 \longrightarrow 00:32:26.708$  a study that I started five years ago.

NOTE Confidence: 0.894090817142857

 $00{:}32{:}26.710 \dashrightarrow 00{:}32{:}29.014$  With funding from the Rs Foundation

NOTE Confidence: 0.894090817142857

 $00:32:29.014 \longrightarrow 00:32:31.667$  and now is primarily funded through

NOTE Confidence: 0.894090817142857

 $00:32:31.667 \longrightarrow 00:32:34.267$  the Bazooka Brain Research Foundation,

NOTE Confidence: 0.894090817142857

 $00:32:34.270 \longrightarrow 00:32:38.930$  we put, we contacted providers,

NOTE Confidence: 0.894090817142857

 $00:32:38.930 \longrightarrow 00:32:41.246$  Rs providers around the United States.

NOTE Confidence: 0.894090817142857

00:32:41.250 --> 00:32:43.018 Brian Koo was very,

 $00:32:43.018 \longrightarrow 00:32:45.228$  very helpful in this regard.

NOTE Confidence: 0.894090817142857

 $00{:}32{:}45.230 \dashrightarrow 00{:}32{:}49.500$  We putting them in something in

NOTE Confidence: 0.894090817142857

 $00:32:49.500 \longrightarrow 00:32:52.076$  the RLS Foundation website and we

NOTE Confidence: 0.894090817142857

 $00:32:52.076 \longrightarrow 00:32:54.560$  got a 500 people within about one

NOTE Confidence: 0.894090817142857

 $00:32:54.560 \longrightarrow 00:32:56.630$  year who wanted to participate.

NOTE Confidence: 0.894090817142857

 $00:32:56.630 \longrightarrow 00:33:00.014$  The date of 1 hour interview at the

NOTE Confidence: 0.894090817142857

 $00:33:00.014 \longrightarrow 00:33:02.072$  beginning followed up immediately by

NOTE Confidence: 0.894090817142857

 $00{:}33{:}02.072 \dashrightarrow 00{:}33{:}05.268$  about a 30 to 45 minute survey and

NOTE Confidence: 0.894090817142857

 $00:33:05.268 \longrightarrow 00:33:08.154$  every six months thereafter since then.

NOTE Confidence: 0.894090817142857

 $00:33:08.160 \longrightarrow 00:33:11.298$  We have been.

NOTE Confidence: 0.894090817142857

00:33:11.300 --> 00:33:14.555 Sending surveys out to individuals

NOTE Confidence: 0.894090817142857

 $00:33:14.555 \longrightarrow 00:33:18.569$  in the registry and we've had

NOTE Confidence: 0.894090817142857

 $00{:}33{:}18.569 \dashrightarrow 00{:}33{:}20.498$  enormous commitment from people,

NOTE Confidence: 0.894090817142857

 $00:33:20.498 \longrightarrow 00:33:25.150$  so we have about a 95%.

NOTE Confidence: 0.894090817142857

 $00:33:25.150 \longrightarrow 00:33:28.720$  Persistent involvement in our registry,

00:33:28.720 --> 00:33:30.478 of course few people have died,

NOTE Confidence: 0.894090817142857

 $00{:}33{:}30.480 \dashrightarrow 00{:}33{:}32.260$  some people have stopped opioids,

NOTE Confidence: 0.894090817142857

 $00:33:32.260 \longrightarrow 00:33:34.180$  but we've lost very few people.

NOTE Confidence: 0.894090817142857

 $00:33:34.180 \longrightarrow 00:33:36.996$  Otherwise it's you can see at baseline the

NOTE Confidence: 0.894090817142857

00:33:36.996 --> 00:33:39.660 majority of people were taking methadone,

NOTE Confidence: 0.894090817142857

 $00:33:39.660 \longrightarrow 00:33:43.302$  some were taking oxycodone or hydrocodone

NOTE Confidence: 0.894090817142857

 $00:33:43.302 \longrightarrow 00:33:47.418$  and then lesser numbers of other opioids.

NOTE Confidence: 0.894090817142857

 $00:33:47.420 \longrightarrow 00:33:51.634$  About 60% female majority are over 60.

NOTE Confidence: 0.894090817142857

 $00{:}33{:}51.640 \dashrightarrow 00{:}33{:}55.060$  Vast majority are white.

NOTE Confidence: 0.894090817142857

00:33:55.060 --> 00:33:57.850 Baseline median MDMA morphine

NOTE Confidence: 0.894090817142857

 $00{:}33{:}57.850 \dashrightarrow 00{:}34{:}00.010$  milligram equivalent was thirty.

NOTE Confidence: 0.894090817142857

00:34:00.010 --> 00:34:03.130 It's 20 milligrams of oxycodone,

NOTE Confidence: 0.894090817142857

 $00:34:03.130 \longrightarrow 00:34:06.720$  7 1/2 milligrams of methadone.

NOTE Confidence: 0.894090817142857

 $00:34:06.720 \longrightarrow 00:34:10.239$  80% of people taking an ME less than 50,

NOTE Confidence: 0.894090817142857 00:34:10.240 --> 00:34:11.010 so that's.

NOTE Confidence: 0.92885807

00:34:13.630 --> 00:34:15.858 35 milligrams of oxycodone,

 $00:34:15.858 \longrightarrow 00:34:18.643$  12 1/2 milligrams of methadone,

NOTE Confidence: 0.92885807

 $00:34:18.650 \longrightarrow 00:34:21.180 80\%$  taking less than that.

NOTE Confidence: 0.938621012

 $00:34:24.130 \longrightarrow 00:34:27.712$  We just had our paper two

NOTE Confidence: 0.938621012

 $00:34:27.712 \longrightarrow 00:34:29.218$  year longitudinal data.

NOTE Confidence: 0.87763326625

 $00:34:31.420 \longrightarrow 00:34:34.828$  Accepted to neurology and you can see here,

NOTE Confidence: 0.87763326625

 $00:34:34.830 \longrightarrow 00:34:37.086$  let's just focus on dosing and you can

NOTE Confidence: 0.87763326625

 $00:34:37.086 \longrightarrow 00:34:39.336$  see here from baseline to two years.

NOTE Confidence: 0.87763326625

 $00:34:39.340 \longrightarrow 00:34:40.580$  And let me make clear,

NOTE Confidence: 0.87763326625

 $00:34:40.580 \longrightarrow 00:34:43.340$  when people entered the registry,

NOTE Confidence: 0.87763326625

 $00:34:43.340 \longrightarrow 00:34:46.014$  the median time on opioids was already

NOTE Confidence: 0.87763326625

 $00{:}34{:}46.014 \dashrightarrow 00{:}34{:}49.320$  one to three-year, two to three years.

NOTE Confidence: 0.87763326625

 $00:34:49.320 \longrightarrow 00:34:50.610$  The there were some who

NOTE Confidence: 0.87763326625

00:34:50.610 --> 00:34:51.900 were less than one year,

NOTE Confidence: 0.87763326625

 $00:34:51.900 \longrightarrow 00:34:53.797$  some there were more than three years.

NOTE Confidence: 0.87763326625

 $00:34:53.800 \longrightarrow 00:34:55.084$  A number of there were even

 $00:34:55.084 \longrightarrow 00:34:55.940$  more than five years.

NOTE Confidence: 0.87763326625

 $00:34:55.940 \longrightarrow 00:34:59.078$  But from baseline to two years,

NOTE Confidence: 0.87763326625

 $00:34:59.080 \longrightarrow 00:35:01.260$  here's change in opioid.

NOTE Confidence: 0.87763326625

 $00:35:01.260 \longrightarrow 00:35:04.145$  See about 45% of people had no

NOTE Confidence: 0.87763326625

 $00:35:04.145 \longrightarrow 00:35:05.940$  change in their opioid dose.

NOTE Confidence: 0.87763326625

 $00:35:05.940 \longrightarrow 00:35:09.396$  About 25% had an IME increase

NOTE Confidence: 0.87763326625

 $00:35:09.396 \longrightarrow 00:35:11.700$  of less than 10.

NOTE Confidence: 0.87763326625

00:35:11.700 --> 00:35:14.690 That's 7 milligrams of oxycodone

NOTE Confidence: 0.87763326625

 $00:35:14.690 \longrightarrow 00:35:17.815$  increased 2 1/2 milligrams of methadone

NOTE Confidence: 0.87763326625

 $00:35:17.815 \longrightarrow 00:35:19.835$  increase we were particularly.

NOTE Confidence: 0.87763326625

 $00:35:19.840 \longrightarrow 00:35:22.528$  Interested in those people

NOTE Confidence: 0.87763326625

 $00:35:22.528 \longrightarrow 00:35:25.216$  who had large increases?

NOTE Confidence: 0.87763326625

 $00:35:25.220 \longrightarrow 00:35:26.132$  In opioid dose,

NOTE Confidence: 0.87763326625

 $00:35:26.132 \longrightarrow 00:35:27.956$  those are the ones that we

NOTE Confidence: 0.87763326625

 $00:35:27.956 \longrightarrow 00:35:29.539$  would be concerned about.

NOTE Confidence: 0.87763326625

 $00{:}35{:}29.540 {\:{\mbox{--}}\!>}\ 00{:}35{:}31.940$  Obviously they're bumping up in

 $00:35:31.940 \longrightarrow 00:35:34.340$  two years of substantial increase.

NOTE Confidence: 0.87763326625

 $00{:}35{:}34.340 \dashrightarrow 00{:}35{:}37.778$  In ME this is 35 milligram

NOTE Confidence: 0.87763326625

 $00:35:37.778 \longrightarrow 00:35:39.497$  increase of oxycodone,

NOTE Confidence: 0.87763326625

 $00:35:39.500 \longrightarrow 00:35:42.020$  12 1/2 milligram increase of methodone

NOTE Confidence: 0.87763326625

 $00:35:42.020 \longrightarrow 00:35:45.480$  and these were the independent predictors.

NOTE Confidence: 0.87763326625

 $00:35:45.480 \longrightarrow 00:35:48.364$  And so at baseline people with these

NOTE Confidence: 0.87763326625

 $00:35:48.364 \longrightarrow 00:35:51.158$  things or people who are on opioids,

NOTE Confidence: 0.87763326625

 $00{:}35{:}51.160 \dashrightarrow 00{:}35{:}53.662$  these are people you want to

NOTE Confidence: 0.87763326625

 $00:35:53.662 \longrightarrow 00:35:55.330$  have more vigilance about.

NOTE Confidence: 0.87763326625

 $00:35:55.330 \longrightarrow 00:35:57.238$  People who are using an opioid

NOTE Confidence: 0.87763326625

 $00:35:57.238 \longrightarrow 00:35:58.510$  for comorbid pain condition,

NOTE Confidence: 0.87763326625 00:35:58.510 --> 00:35:58.882 well, NOTE Confidence: 0.87763326625

 $00{:}35{:}58.882 \dashrightarrow 00{:}36{:}01.114$  it's probably the comorbid pain condition

NOTE Confidence: 0.87763326625

 $00:36:01.114 \longrightarrow 00:36:03.488$  that's leading to the increase in dose.

NOTE Confidence: 0.87763326625

 $00:36:03.490 \longrightarrow 00:36:05.158$  People who stopped another

00:36:05.158 --> 00:36:06.740 medication for RLS, well,

NOTE Confidence: 0.87763326625

 $00:36:06.740 \longrightarrow 00:36:09.050$  if there were two medicines before working

NOTE Confidence: 0.87763326625

00:36:09.050 --> 00:36:11.549 for RLS and you took one of them away,

NOTE Confidence: 0.87763326625

 $00:36:11.550 \longrightarrow 00:36:13.737$  it makes sense that one of them might need

NOTE Confidence: 0.87763326625

 $00:36:13.737 \longrightarrow 00:36:16.038$  to increase people who switched opioids.

NOTE Confidence: 0.87763326625

 $00:36:16.040 \longrightarrow 00:36:18.764$  These were oftentimes people

NOTE Confidence: 0.87763326625

 $00:36:18.764 \longrightarrow 00:36:21.488$  who switched to methadone.

NOTE Confidence: 0.87763326625

 $00:36:21.490 \longrightarrow 00:36:23.933$  And what we found was that there

NOTE Confidence: 0.87763326625

00:36:23.933 --> 00:36:25.989 RLS severity scores went way down,

NOTE Confidence: 0.87763326625

 $00:36:25.990 \longrightarrow 00:36:30.046$  but the ME went up in these individuals

NOTE Confidence: 0.87763326625

 $00:36:30.046 \longrightarrow 00:36:33.599$  and some of that has to do with.

NOTE Confidence: 0.87763326625

 $00:36:33.600 \longrightarrow 00:36:36.060$  Some unusual characteristics of

NOTE Confidence: 0.87763326625

 $00:36:36.060 \longrightarrow 00:36:38.520$  methadone equivalencies in figuring

NOTE Confidence: 0.87763326625

 $00{:}36{:}38.520 \to 00{:}36{:}42.215$  out the MMA male sex was a predictor,

NOTE Confidence: 0.87763326625

00:36:42.220 --> 00:36:43.612 people with depressive disorder

NOTE Confidence: 0.87763326625

 $00:36:43.612 \longrightarrow 00:36:45.352$  at baseline was a predictor,

 $00:36:45.360 \longrightarrow 00:36:48.441$  and younger people.

NOTE Confidence: 0.87763326625

 $00{:}36{:}48.441 --> 00{:}36{:}49.468 \ {\rm Younger}.$ 

NOTE Confidence: 0.87763326625

00:36:49.470 --> 00:36:51.567 At this point, I guess I have to say

NOTE Confidence: 0.87763326625

 $00:36:51.567 \longrightarrow 00:36:53.627$  that less than 45 is younger people.

NOTE Confidence: 0.87763326625

 $00:36:53.630 \longrightarrow 00:36:56.080$  It was also a predictor.

NOTE Confidence: 0.87763326625

 $00:36:56.080 \longrightarrow 00:36:57.900$  As I talked about,

NOTE Confidence: 0.87763326625

 $00:36:57.900 \longrightarrow 00:37:00.630$  no change in median dose from

NOTE Confidence: 0.87763326625

 $00:37:00.729 \dashrightarrow 00:37:04.239$  baseline for methadone for oxycodone,

NOTE Confidence: 0.87763326625

 $00:37:04.240 \longrightarrow 00:37:06.384$  ateny increase for hydrocodone,

NOTE Confidence: 0.87763326625

 $00:37:06.384 \longrightarrow 00:37:09.600$  somewhat of an increase for tramadol,

NOTE Confidence: 0.87763326625

 $00:37:09.600 \longrightarrow 00:37:12.526$  but you can see for most of

NOTE Confidence: 0.87763326625

 $00:37:12.526 \longrightarrow 00:37:14.825$  the medications there was no

NOTE Confidence: 0.87763326625

 $00{:}37{:}14.825 \dashrightarrow 00{:}37{:}16.259$  median increase dose.

NOTE Confidence: 0.87763326625

00:37:16.260 --> 00:37:17.588 Let's talk about augmentation,

NOTE Confidence: 0.87763326625

 $00:37:17.588 \longrightarrow 00:37:19.580$  because this is where the rubber

 $00:37:19.638 \longrightarrow 00:37:21.378$  hits the road with your patients.

NOTE Confidence: 0.87763326625

 $00:37:21.380 \longrightarrow 00:37:23.090$  Now we've talked about the

NOTE Confidence: 0.87763326625

 $00:37:23.090 \longrightarrow 00:37:24.458$  four classes of medicines.

NOTE Confidence: 0.87763326625

 $00:37:24.460 \longrightarrow 00:37:26.180$  Let's talk about what the

NOTE Confidence: 0.87763326625

 $00:37:26.180 \longrightarrow 00:37:27.900$  mechanism is for using them.

NOTE Confidence: 0.823621534444444

00:37:30.050 --> 00:37:32.102 You see somebody with augmentation on

NOTE Confidence: 0.823621534444444

00:37:32.102 --> 00:37:34.506 a dopamine agonist, most docs just say,

NOTE Confidence: 0.823621534444444

 $00:37:34.506 \longrightarrow 00:37:38.854$  well, just increase the dose. Bad idea.

NOTE Confidence: 0.823621534444444

 $00{:}37{:}38.854 \dashrightarrow 00{:}37{:}42.088$  You're putting out the fire with gasoline,

NOTE Confidence: 0.823621534444444

 $00:37:42.090 \longrightarrow 00:37:47.347$  or as Will Rogers Will Rogers said.

NOTE Confidence: 0.823621534444444

 $00{:}37{:}47.350 \dashrightarrow 00{:}37{:}49.758$  If you find yourself in a hole.

NOTE Confidence: 0.823621534444444

 $00:37:49.760 \longrightarrow 00:37:52.920$  The first thing to do is stop digging.

NOTE Confidence: 0.823621534444444

00:37:52.920 --> 00:37:54.834 And I'll see many patients whose

NOTE Confidence: 0.823621534444444

 $00:37:54.834 \longrightarrow 00:37:56.914$  doctors started on the dopamine agonist

NOTE Confidence: 0.823621534444444

 $00:37:56.914 \longrightarrow 00:37:58.873$  digging a hole, digging a hole.

NOTE Confidence: 0.823621534444444

 $00:37:58.873 \longrightarrow 00:38:00.278$  Things are getting worse digging,

 $00:38:00.280 \longrightarrow 00:38:02.898$  and at a certain point they realize

NOTE Confidence: 0.823621534444444

 $00:38:02.898 \longrightarrow 00:38:05.440$  that they're in the hall looking up.

NOTE Confidence: 0.823621534444444

 $00:38:05.440 \longrightarrow 00:38:09.000$  And now the patient is on a high dose.

NOTE Confidence: 0.823621534444444

 $00:38:09.000 \longrightarrow 00:38:12.360$  Bad. Powerless again. What do I do?

NOTE Confidence: 0.823621534444444 00:38:12.360 --> 00:38:12.928 They say. NOTE Confidence: 0.823621534444444

00:38:12.928 --> 00:38:15.200 And that's when they say to the patient,

NOTE Confidence: 0.823621534444444 00:38:15.200 --> 00:38:15.954 I'm sorry, NOTE Confidence: 0.823621534444444

 $00:38:15.954 \longrightarrow 00:38:18.593$  I'm not going to increase your dose.

NOTE Confidence: 0.823621534444444

 $00{:}38{:}18.600 \dashrightarrow 00{:}38{:}21.330$  You really should go see some body else.

NOTE Confidence: 0.798282063125

 $00:38:23.940 \longrightarrow 00:38:27.124$  The workup for worsening RLS is very similar

NOTE Confidence: 0.798282063125

 $00:38:27.124 \longrightarrow 00:38:30.418$  to the workup for at your first visit.

NOTE Confidence: 0.798282063125

 $00:38:30.420 \longrightarrow 00:38:32.204$  Iron medications, sleep disorders.

NOTE Confidence: 0.798282063125

 $00{:}38{:}32.204 \dashrightarrow 00{:}38{:}34.880$  Make sure that the medications are

NOTE Confidence: 0.798282063125

 $00:38:34.950 \longrightarrow 00:38:37.278$  being taken at the appropriate time.

NOTE Confidence: 0.798282063125

 $00:38:37.280 \longrightarrow 00:38:40.857$  Make sure they don't have sleep apnea.

 $00:38:40.860 \longrightarrow 00:38:43.590$  For mild augmentation.

NOTE Confidence: 0.798282063125

 $00{:}38{:}43.590 \dashrightarrow 00{:}38{:}46.188$  Maybe you can split the dose.

NOTE Confidence: 0.798282063125

 $00:38:46.190 \longrightarrow 00:38:49.655$  You can take that same dose and move some

NOTE Confidence: 0.798282063125

 $00:38:49.655 \longrightarrow 00:38:53.726$  of it earlier and keep the rest of it later.

NOTE Confidence: 0.798282063125

 $00:38:53.730 \longrightarrow 00:38:57.082$  Maybe you can switch to a short to

NOTE Confidence: 0.798282063125

 $00:38:57.082 \longrightarrow 00:38:59.520$  intermediate acting dopamine agonist to

NOTE Confidence: 0.798282063125

 $00:38:59.520 \longrightarrow 00:39:02.550$  a longer acting dopamine agonist from

NOTE Confidence: 0.798282063125

00:39:02.550 --> 00:39:05.699 mirapex or requip pramipexole ropinirole.

NOTE Confidence: 0.798282063125

 $00:39:05.700 \longrightarrow 00:39:07.842$  To an extended release version of one

NOTE Confidence: 0.798282063125

 $00:39:07.842 \longrightarrow 00:39:10.230$  of those medicines, or to retigabine.

NOTE Confidence: 0.798282063125

 $00{:}39{:}10.230 \dashrightarrow 00{:}39{:}13.170$  My experience has been you're just

NOTE Confidence: 0.798282063125

 $00:39:13.170 \longrightarrow 00:39:15.550$  kicking the can down the road.

NOTE Confidence: 0.798282063125

 $00:39:15.550 \longrightarrow 00:39:17.615$  You're going to treat those earlier symptoms,

NOTE Confidence: 0.798282063125

 $00:39:17.620 \dashrightarrow 00:39:20.948$ yes, because you're giving drug all day long.

NOTE Confidence: 0.798282063125

 $00:39:20.950 \longrightarrow 00:39:24.310$  But it's only a matter of time before

NOTE Confidence: 0.798282063125

 $00:39:24.310 \longrightarrow 00:39:27.888$  Rs comes back at various times of day.

 $00:39:27.890 \longrightarrow 00:39:30.884$  I would strongly encourage you to

NOTE Confidence: 0.798282063125

 $00:39:30.884 \longrightarrow 00:39:33.491$  not increase the dopamine agonist

NOTE Confidence: 0.798282063125

00:39:33.491 --> 00:39:35.587 dose above FDA maximum.

NOTE Confidence: 0.798282063125

00:39:35.590 --> 00:39:38.804 I'll give you pramipexole up to .75,

NOTE Confidence: 0.798282063125

00:39:38.804 --> 00:39:43.448 ropinirole to four, rotigotine to three,

NOTE Confidence: 0.798282063125

 $00:39:43.450 \longrightarrow 00:39:47.350$  but if you're above those doses.

NOTE Confidence: 0.798282063125

00:39:47.350 --> 00:39:49.294 Patients in trouble?

NOTE Confidence: 0.798282063125

 $00:39:49.294 \longrightarrow 00:39:50.590$  They're augmented.

NOTE Confidence: 0.798282063125

 $00{:}39{:}50.590 \dashrightarrow 00{:}39{:}52.258$  And hopefully you've discussed

NOTE Confidence: 0.798282063125

 $00:39:52.258 \longrightarrow 00:39:53.509$  this with them,

NOTE Confidence: 0.798282063125

 $00:39:53.510 \longrightarrow 00:39:56.534$  but it's time to do something more dramatic.

NOTE Confidence: 0.771069445

 $00:39:58.910 \longrightarrow 00:40:00.908$  Think about iron.

NOTE Confidence: 0.771069445

 $00{:}40{:}00.908 \dashrightarrow 00{:}40{:}03.711$  Think about adding gabapentin,

NOTE Confidence: 0.771069445

 $00:40:03.711 \longrightarrow 00:40:07.716$  pregabalin, gabapentin in a carbal.

NOTE Confidence: 0.771069445

 $00:40:07.720 \longrightarrow 00:40:10.845$  If these approaches to mild

00:40:10.845 --> 00:40:12.720 augmentation aren't effective,

NOTE Confidence: 0.771069445

 $00:40:12.720 \longrightarrow 00:40:14.664$  this is when you need to

NOTE Confidence: 0.771069445

 $00:40:14.664 \longrightarrow 00:40:15.636$  do something radical,

NOTE Confidence: 0.771069445

 $00:40:15.640 \longrightarrow 00:40:17.530$  and this is not easy.

NOTE Confidence: 0.89197428375

00:40:20.990 --> 00:40:23.206 You're not just going to be tinkering here,

NOTE Confidence: 0.89197428375

 $00:40:23.210 \longrightarrow 00:40:25.527$  you're going to be making major changes.

NOTE Confidence: 0.89197428375

00:40:25.530 --> 00:40:27.864 You're going to eventually to try

NOTE Confidence: 0.89197428375

 $00:40:27.864 \longrightarrow 00:40:30.050$  to reduce the dopamine agonist.

NOTE Confidence: 0.89197428375

 $00:40:30.050 \longrightarrow 00:40:32.850$  And that is not easy because each time

NOTE Confidence: 0.89197428375

00:40:32.850 --> 00:40:35.788 you drop down on the dopamine agonist,

NOTE Confidence: 0.89197428375

 $00:40:35.790 \longrightarrow 00:40:38.678$  people have a withdrawal.

NOTE Confidence: 0.89197428375

 $00:40:38.680 \longrightarrow 00:40:42.404$  Their Rs comes back with a vengeance.

NOTE Confidence: 0.89197428375

 $00:40:42.410 \longrightarrow 00:40:44.909$  So you need to provide them something

NOTE Confidence: 0.89197428375

 $00:40:44.909 \longrightarrow 00:40:47.149$  else to manage that withdrawal.

NOTE Confidence: 0.89197428375

 $00:40:47.150 \longrightarrow 00:40:51.518$  They are detoxing and I use that word.

NOTE Confidence: 0.89197428375

 $00:40:51.520 \longrightarrow 00:40:52.748$  With the full understanding

 $00:40:52.748 \longrightarrow 00:40:53.976$  of what it suggests,

NOTE Confidence: 0.89197428375

 $00:40:53.980 \longrightarrow 00:40:55.815$  they are detoxing from the

NOTE Confidence: 0.89197428375

00:40:55.815 --> 00:40:58.058 dopamine agonist and you need to

NOTE Confidence: 0.89197428375

 $00:40:58.058 \longrightarrow 00:41:00.104$  give them something to treat the

NOTE Confidence: 0.89197428375

00:41:00.104 --> 00:41:02.110 RLS that worsens as they detox.

NOTE Confidence: 0.877782845

00:41:04.510 --> 00:41:07.286 So how do you switch from the dopamine

NOTE Confidence: 0.877782845

00:41:07.286 --> 00:41:11.318 agonist to either an A2D or an opioid?

NOTE Confidence: 0.877782845

00:41:11.320 --> 00:41:13.456 Don't try taking the dopamine agonist

NOTE Confidence: 0.877782845

 $00:41:13.456 \longrightarrow 00:41:15.800$  away without giving them something else.

NOTE Confidence: 0.877782845

 $00{:}41{:}15.800 \dashrightarrow 00{:}41{:}18.418$  All that does is convince the patient.

NOTE Confidence: 0.877782845

00:41:18.420 --> 00:41:19.580 I can't do that, Doc.

NOTE Confidence: 0.877782845

 $00{:}41{:}19.580 \dashrightarrow 00{:}41{:}21.224$  I tried to reduce the medicine

NOTE Confidence: 0.877782845

 $00:41:21.224 \longrightarrow 00:41:22.920$  once and it was terrible.

NOTE Confidence: 0.877782845

 $00{:}41{:}22.920 \dashrightarrow 00{:}41{:}24.776$  I didn't sleep for days and days and

NOTE Confidence: 0.877782845

 $00:41:24.776 \longrightarrow 00:41:26.735$  days and then I had to go back on it.

 $00:41:26.740 \longrightarrow 00:41:29.330$  So first give them something

NOTE Confidence: 0.877782845

 $00:41:29.330 \longrightarrow 00:41:31.402$  to manage those symptoms.

NOTE Confidence: 0.877782845

 $00:41:31.410 \longrightarrow 00:41:34.889$  Worsen symptoms that are going to develop.

NOTE Confidence: 0.877782845

 $00:41:34.890 \longrightarrow 00:41:37.503$  And either that's going to be an A2D.

NOTE Confidence: 0.877782845

00:41:37.503 --> 00:41:41.607 Or it's going to be an opioid after

NOTE Confidence: 0.877782845

00:41:41.607 --> 00:41:45.939 you've added that second medication then?

NOTE Confidence: 0.877782845

 $00:41:45.940 \longrightarrow 00:41:48.655$  Only then start chipping away

NOTE Confidence: 0.877782845

 $00:41:48.655 \longrightarrow 00:41:50.827$  at the dopamine agonist.

NOTE Confidence: 0.877782845

 $00{:}41{:}50.830 \dashrightarrow 00{:}41{:}52.554$  Other people have different

NOTE Confidence: 0.877782845

 $00:41:52.554 \longrightarrow 00:41:53.847$  approaches to this.

NOTE Confidence: 0.877782845

 $00:41:53.850 \longrightarrow 00:41:55.975$  Some doctors will stop the

NOTE Confidence: 0.877782845

 $00:41:55.975 \longrightarrow 00:41:57.675$  dopamine agonist like that.

NOTE Confidence: 0.840625575882353

 $00:42:00.010 \longrightarrow 00:42:02.572$  Have patients go cold Turkey either

NOTE Confidence: 0.840625575882353

 $00:42:02.572 \longrightarrow 00:42:04.857$  before adding the other medication

NOTE Confidence: 0.840625575882353

 $00:42:04.857 \longrightarrow 00:42:07.839$  or after adding the other medication.

NOTE Confidence: 0.840625575882353

 $00:42:07.840 \longrightarrow 00:42:11.128$  My experience has not been good with that.

 $00:42:11.130 \longrightarrow 00:42:14.130$  Because the withdrawal is bad

NOTE Confidence: 0.840625575882353

00:42:14.130 --> 00:42:18.080 and people just. Can't achieve.

NOTE Confidence: 0.719944906666667

 $00:42:21.230 \longrightarrow 00:42:22.542$  Staying off these medications,

NOTE Confidence: 0.719944906666667

 $00:42:22.542 \longrightarrow 00:42:24.182$  staying off the dopamine agonist.

NOTE Confidence: 0.8317131686875

 $00:42:28.350 \longrightarrow 00:42:31.150$  So the order and the the approach

NOTE Confidence: 0.8317131686875

 $00:42:31.150 \longrightarrow 00:42:34.244$  to this considerate can correct any

NOTE Confidence: 0.8317131686875

00:42:34.244 --> 00:42:36.056 underlying exacerbating factors,

NOTE Confidence: 0.8317131686875

 $00:42:36.060 \longrightarrow 00:42:40.232$  ones we've talked about. Add and maximum,

NOTE Confidence: 0.8317131686875

 $00:42:40.232 \longrightarrow 00:42:43.085$  maximize the A2D to a tolerable dose

NOTE Confidence: 0.8317131686875

 $00{:}42{:}43.085 \to 00{:}42{:}45.478$  that may take a little bit of time.

NOTE Confidence: 0.8317131686875

00:42:45.480 --> 00:42:48.318 Then taper the dopamine agonist slowly.

NOTE Confidence: 0.8317131686875

00:42:48.320 --> 00:42:50.096 If that doesn't work,

NOTE Confidence: 0.8317131686875

 $00{:}42{:}50.096 \dashrightarrow 00{:}42{:}52.316$  then I add the opioid.

NOTE Confidence: 0.8317131686875

 $00:42:52.320 \longrightarrow 00:42:53.232$  So at this point,

NOTE Confidence: 0.8317131686875

00:42:53.232 --> 00:42:54.890 they're on 3 medicines for our list.

 $00:42:54.890 \longrightarrow 00:42:57.473$  They say Doc, I'm on 3 medicines for RLS.

NOTE Confidence: 0.8317131686875

 $00{:}42{:}57.480 --> 00{:}42{:}59.487$  I say, yeah, we got to get all of

NOTE Confidence: 0.8317131686875

 $00:42:59.487 \longrightarrow 00:43:01.246$  our reinforcements here if we want

NOTE Confidence: 0.8317131686875

 $00:43:01.246 \longrightarrow 00:43:03.809$  to get you off the dopamine agonist.

NOTE Confidence: 0.8317131686875

 $00:43:03.810 \longrightarrow 00:43:05.406$  They say OK.

NOTE Confidence: 0.8317131686875

00:43:05.406 --> 00:43:08.066 And keep tapering the dopamine

NOTE Confidence: 0.8317131686875

 $00:43:08.066 \longrightarrow 00:43:10.810$  agonist to discontinuation.

NOTE Confidence: 0.8317131686875

00:43:10.810 --> 00:43:12.736 And in many people you're going

NOTE Confidence: 0.8317131686875

 $00:43:12.736 \longrightarrow 00:43:15.180$  to be able to discontinue the

NOTE Confidence: 0.8317131686875

 $00:43:15.180 \longrightarrow 00:43:16.806$  dopamine agonist then.

NOTE Confidence: 0.8317131686875

 $00:43:16.810 \longrightarrow 00:43:18.980$  They're on the A2D and the opioid

NOTE Confidence: 0.8317131686875

 $00:43:18.980 \longrightarrow 00:43:21.080$  and maybe then you can taper the

NOTE Confidence: 0.8317131686875

00:43:21.080 --> 00:43:24.458 A2D now that the dopamine agonist

NOTE Confidence: 0.8317131686875

 $00{:}43{:}24.458 \dashrightarrow 00{:}43{:}27.719$  is no longer worsening their Rs,

NOTE Confidence: 0.8317131686875

 $00:43:27.720 \longrightarrow 00:43:28.989$  it's worsening it.

NOTE Confidence: 0.8317131686875

 $00:43:28.989 \longrightarrow 00:43:31.527$  The Agonist is always helping and

00:43:31.527 --> 00:43:34.090 worsening helping and worsening always.

NOTE Confidence: 0.8431568

 $00:43:37.380 \longrightarrow 00:43:43.310$  We so I wondered whether this approach

NOTE Confidence: 0.8431568

00:43:43.310 --> 00:43:48.689 which is basically guideline approach.

NOTE Confidence: 0.8431568

00:43:48.690 --> 00:43:51.126 I wondered whether this approach worked,

NOTE Confidence: 0.8431568

00:43:51.130 --> 00:43:52.985 and so I did something that's stupid,

NOTE Confidence: 0.8431568

 $00:43:52.990 \longrightarrow 00:43:56.520$  which was to assess its

NOTE Confidence: 0.8431568

 $00:43:56.520 \longrightarrow 00:44:00.670$  efficacy in retrospectively.

NOTE Confidence: 0.8431568

 $00:44:00.670 \longrightarrow 00:44:03.990$  So I looked at roughly 60 or 70

NOTE Confidence: 0.8431568

 $00{:}44{:}03.990 \dashrightarrow 00{:}44{:}06.802$  patients who I saw over a few

NOTE Confidence: 0.8431568

 $00:44:06.802 \longrightarrow 00:44:09.588$  year period who came in with

NOTE Confidence: 0.8431568

 $00{:}44{:}09.588 \to 00{:}44{:}12.878$  augmentation on the dopamine agonist.

NOTE Confidence: 0.8431568

 $00{:}44{:}12.880 \dashrightarrow 00{:}44{:}16.184$  And I looked at how this approach worked.

NOTE Confidence: 0.8431568

 $00:44:16.190 \longrightarrow 00:44:19.137$  And here you see severity at baseline

NOTE Confidence: 0.8431568

 $00{:}44{:}19.137 \dashrightarrow 00{:}44{:}21.748$  and severity at the final visit,

NOTE Confidence: 0.8431568

 $00:44:21.750 \longrightarrow 00:44:25.683$  which was you can see about 2 1/2 years

00:44:25.683 --> 00:44:30.227 later and 80% were very much or much better.

NOTE Confidence: 0.8431568

00:44:30.230 --> 00:44:33.366 You can see the dark colors here,

NOTE Confidence: 0.8431568

 $00:44:33.370 \longrightarrow 00:44:36.765$  more severe changed into the lighter colors,

NOTE Confidence: 0.8431568

 $00:44:36.770 \longrightarrow 00:44:40.946$  less severe at the final visit.

NOTE Confidence: 0.8431568

 $00:44:40.950 \longrightarrow 00:44:41.834$  Lot of data here.

NOTE Confidence: 0.8431568

00:44:41.834 --> 00:44:43.483 You can look up this paper that

NOTE Confidence: 0.8431568

 $00:44:43.483 \longrightarrow 00:44:45.115$  was published last year in sleep.

NOTE Confidence: 0.850766829

 $00:44:47.520 \longrightarrow 00:44:49.510$  78% were responders at the

NOTE Confidence: 0.850766829

 $00{:}44{:}49.510 \dashrightarrow 00{:}44{:}51.500$  final visit and the responders.

NOTE Confidence: 0.850766829

 $00:44:51.500 \longrightarrow 00:44:55.340$  They were borderline to mildly ill.

NOTE Confidence: 0.850766829

 $00:44:55.340 \longrightarrow 00:45:00.275$  Only 60% of the patients that I.

NOTE Confidence: 0.850766829

 $00:45:00.280 \longrightarrow 00:45:01.805$  Who started on dopamine agonists

NOTE Confidence: 0.850766829

00:45:01.805 --> 00:45:03.768 and everybody was on a dopamine

NOTE Confidence: 0.850766829

00:45:03.768 --> 00:45:05.276 agonist at the beginning,

NOTE Confidence: 0.850766829

 $00:45:05.280 \longrightarrow 00:45:06.708$  were able to discontinue

NOTE Confidence: 0.850766829

 $00:45:06.708 \longrightarrow 00:45:08.493$  those by the final visit.

00:45:08.500 --> 00:45:12.235 Some of them have now after we did this,

NOTE Confidence: 0.850766829

 $00{:}45{:}12.240 \longrightarrow 00{:}45{:}14.796$  data analysis continued to chip away,

NOTE Confidence: 0.850766829

00:45:14.800 --> 00:45:15.564 chip away,

NOTE Confidence: 0.850766829

00:45:15.564 --> 00:45:18.238 chip away and so more are discontinued,

NOTE Confidence: 0.850766829

 $00:45:18.240 \longrightarrow 00:45:20.022$  but there are still going to

NOTE Confidence: 0.850766829

 $00:45:20.022 \longrightarrow 00:45:22.210$  be 25% of patients who I just

NOTE Confidence: 0.850766829

 $00:45:22.210 \longrightarrow 00:45:24.090$  can't get off their agonist.

NOTE Confidence: 0.850766829

 $00:45:24.090 \longrightarrow 00:45:28.395$  The median the mean time to dopamine

NOTE Confidence: 0.850766829

 $00:45:28.395 \longrightarrow 00:45:31.499$  agonist discontinuation was nine months.

NOTE Confidence: 0.850766829

 $00:45:31.500 \longrightarrow 00:45:37.676$  This is going bad .3 milligrams per month.

NOTE Confidence: 0.850766829

 $00{:}45{:}37.680 \dashrightarrow 00{:}45{:}42.650$  OK. It's ripping oral equivalence.

NOTE Confidence: 0.850766829

 $00:45:42.650 \longrightarrow 00:45:44.150$  So it takes a long time.

NOTE Confidence: 0.850766829

 $00{:}45{:}44.150 --> 00{:}45{:}45.446$  Don't rush it.

NOTE Confidence: 0.850766829

00:45:45.446 --> 00:45:46.736 You'll fail, I think,

NOTE Confidence: 0.850766829

 $00:45:46.736 \longrightarrow 00:45:47.588$  if you rush it.

 $00:45:49.860 \longrightarrow 00:45:50.766$  Here's the question.

NOTE Confidence: 0.858957166923077

00:45:50.766 --> 00:45:52.276 Can addition of the this

NOTE Confidence: 0.858957166923077

 $00:45:52.276 \longrightarrow 00:45:53.739$  is from this data set?

NOTE Confidence: 0.858957166923077

 $00:45:53.740 \longrightarrow 00:45:57.620$  Can addition of just an A2D allow

NOTE Confidence: 0.858957166923077

 $00:45:57.620 \longrightarrow 00:46:00.200$  you to stop the dopamine agonist?

NOTE Confidence: 0.858957166923077

 $00:46:00.200 \longrightarrow 00:46:01.448$  You can see that.

NOTE Confidence: 0.932181168

 $00:46:04.520 \longrightarrow 00:46:08.202$  23 out of 60 ish people were

NOTE Confidence: 0.932181168

 $00:46:08.202 \longrightarrow 00:46:11.990$  able to discontinue. Umm.

NOTE Confidence: 0.932181168

00:46:11.990 --> 00:46:14.286 There's something weird about

NOTE Confidence: 0.932181168

 $00:46:14.286 \longrightarrow 00:46:16.461$  this picture here. But.

NOTE Confidence: 0.932181168

 $00:46:16.461 \longrightarrow 00:46:19.167$  A number of them could not.

NOTE Confidence: 0.932181168

 $00:46:19.170 \longrightarrow 00:46:21.234$  Ohh yeah 7 here was these were able

NOTE Confidence: 0.932181168

 $00:46:21.234 \longrightarrow 00:46:23.656$  to cut the blue was able to come off.

NOTE Confidence: 0.932181168

00:46:23.660 --> 00:46:25.916 The people that weren't able to

NOTE Confidence: 0.932181168

 $00:46:25.916 \longrightarrow 00:46:27.872$  come off the dopamine agonist

NOTE Confidence: 0.932181168

 $00:46:27.872 \longrightarrow 00:46:31.042$  with the A2D was either because

00:46:31.042 --> 00:46:33.284 it didn't have efficacy,

NOTE Confidence: 0.932181168

 $00:46:33.284 \longrightarrow 00:46:36.386$  it was not tolerable or both.

NOTE Confidence: 0.932181168

 $00:46:36.390 \longrightarrow 00:46:39.204$  Here's the same data for an opioid.

NOTE Confidence: 0.932181168

 $00:46:39.210 \longrightarrow 00:46:41.646$  About 1313 out of 31 were able

NOTE Confidence: 0.932181168

 $00:46:41.646 \longrightarrow 00:46:44.236$  to come off the dopamine agonist

NOTE Confidence: 0.932181168

 $00:46:44.236 \longrightarrow 00:46:46.180$  with just an opioid.

NOTE Confidence: 0.9318955725

 $00:46:48.380 \longrightarrow 00:46:51.316$  But you can see that more than 50%

NOTE Confidence: 0.9318955725

00:46:51.320 --> 00:46:53.020 needed something else or weren't

NOTE Confidence: 0.9318955725

 $00:46:53.020 \longrightarrow 00:46:55.300$  able to come off The Agonist,

NOTE Confidence: 0.9318955725

 $00:46:55.300 \longrightarrow 00:46:57.856$  either due to lack of efficacy,

NOTE Confidence: 0.9318955725

00:46:57.860 --> 00:47:01.710 lack of tolerability, or both.

NOTE Confidence: 0.9318955725

 $00:47:01.710 \longrightarrow 00:47:04.248$  And I'm not going to show this as a

NOTE Confidence: 0.9318955725

 $00{:}47{:}04.248 \dashrightarrow 00{:}47{:}06.784$  pie chart of what people ended up on

NOTE Confidence: 0.9318955725

 $00:47:06.784 \longrightarrow 00:47:09.876$  at the end of this 2 1/2 year period.

NOTE Confidence: 0.9318955725

 $00:47:09.876 \longrightarrow 00:47:13.118$  And you can see about 1/4 of patients

 $00:47:13.118 \longrightarrow 00:47:16.376$  were on an A2D with or without an agonist.

NOTE Confidence: 0.9318955725

 $00{:}47{:}16.380 \to 00{:}47{:}19.508$  About a sixth were on opioids and an

NOTE Confidence: 0.9318955725

00:47:19.508 --> 00:47:23.668 eighth were on an A2D and an opioid.

NOTE Confidence: 0.9318955725

 $00:47:23.670 \longrightarrow 00:47:25.350$  That it was common to have people

NOTE Confidence: 0.9318955725

 $00:47:25.350 \longrightarrow 00:47:27.166$  at the end to be on all three.

NOTE Confidence: 0.85049591375

 $00:47:29.380 \longrightarrow 00:47:32.340$  Think this is my next to last slide.

NOTE Confidence: 0.85049591375

 $00:47:32.340 \longrightarrow 00:47:35.450$  This is kind of my.

NOTE Confidence: 0.85049591375

 $00:47:35.450 \longrightarrow 00:47:37.154$  What do you call it when

NOTE Confidence: 0.85049591375

00:47:37.154 --> 00:47:41.080 you're making a recipe?

NOTE Confidence: 0.85049591375

00:47:41.080 --> 00:47:44.952 From. God blinking underwear.

NOTE Confidence: 0.85049591375

 $00:47:44.952 \longrightarrow 00:47:47.822$  Anyway, you want to make

NOTE Confidence: 0.85049591375

 $00{:}47{:}47.822 \dashrightarrow 00{:}47{:}50.094$  whatever you're making food

NOTE Confidence: 0.85049591375

 $00:47:50.094 \longrightarrow 00:47:52.659$  wise and you're following a.

NOTE Confidence: 0.8329472675

 $00{:}47{:}54.670 \dashrightarrow 00{:}47{:}56.646$  I'll just call it a road map now,

NOTE Confidence: 0.8329472675

 $00:47:56.650 \longrightarrow 00:47:58.235$  but that's not what you

NOTE Confidence: 0.8329472675

 $00:47:58.235 \longrightarrow 00:47:59.503$  use when you're cooking.

 $00:47:59.510 \longrightarrow 00:48:03.118$  This is my recommendations

NOTE Confidence: 0.8329472675

 $00:48:03.118 \longrightarrow 00:48:07.212$  for how to treat severe,

NOTE Confidence: 0.8329472675

00:48:07.212 --> 00:48:09.140 refractory, and augmented RLS.

NOTE Confidence: 0.904246047

 $00:48:11.680 \longrightarrow 00:48:13.948$  And is kind of an expanded

NOTE Confidence: 0.904246047

 $00:48:13.948 \longrightarrow 00:48:15.460$  version of this talk.

NOTE Confidence: 0.904246047

 $00:48:15.460 \longrightarrow 00:48:16.795$  It was published just this

NOTE Confidence: 0.904246047

 $00:48:16.795 \longrightarrow 00:48:18.500$  last year in the journal Chest.

NOTE Confidence: 0.904246047

00:48:18.500 --> 00:48:20.705 They have a section called how I

NOTE Confidence: 0.904246047

 $00:48:20.705 \longrightarrow 00:48:24.525$  do it and this is how I do it.

NOTE Confidence: 0.904246047

 $00{:}48{:}24.530 \dashrightarrow 00{:}48{:}27.274$  For those of you who are interested.

NOTE Confidence: 0.904246047

 $00:48:27.280 \longrightarrow 00:48:30.520$  So in conclusion.

NOTE Confidence: 0.904246047

 $00:48:30.520 \longrightarrow 00:48:33.065$  Always assess your patients for

NOTE Confidence: 0.904246047

 $00:48:33.065 \longrightarrow 00:48:35.101$  underlying contributors because RSI

NOTE Confidence: 0.904246047

 $00{:}48{:}35.101 \dashrightarrow 00{:}48{:}37.508$  is reversible and some people you

NOTE Confidence: 0.904246047

00:48:37.508 --> 00:48:41.473 can make it go away by giving iron by

 $00:48:41.473 \longrightarrow 00:48:43.545$  stopping a serotonergic antidepressant.

NOTE Confidence: 0.904246047

 $00:48:43.550 \longrightarrow 00:48:45.612$  Um, etcetera.

NOTE Confidence: 0.904246047

 $00:48:45.612 \longrightarrow 00:48:49.736$  Initial treatment is not.

NOTE Confidence: 0.904246047

 $00:48:49.740 \longrightarrow 00:48:50.775$  A dopamine agonist.

NOTE Confidence: 0.904246047

 $00:48:50.775 \longrightarrow 00:48:52.500$  Hope I made that clear.

NOTE Confidence: 0.904246047

00:48:52.500 --> 00:48:57.644 Generally you should start with a A2D ligand,

NOTE Confidence: 0.904246047

00:48:57.644 --> 00:48:58.968 pregabalin, gabapentin,

NOTE Confidence: 0.904246047

 $00:48:58.968 \longrightarrow 00:49:01.616$  gabapentin and a carpool.

NOTE Confidence: 0.904246047

 $00{:}49{:}01.620 \dashrightarrow 00{:}49{:}04.616$  If you do use a dopamine agonist,

NOTE Confidence: 0.904246047

 $00:49:04.620 \longrightarrow 00:49:07.300$  keep dosages within the approved

NOTE Confidence: 0.904246047

 $00{:}49{:}07.300 \dashrightarrow 00{:}49{:}09.980$  range and ask those questions.

NOTE Confidence: 0.904246047

 $00:49:09.980 \longrightarrow 00:49:11.436$  How many days a week do you have

NOTE Confidence: 0.904246047

 $00:49:11.436 \longrightarrow 00:49:12.330$  it at this time?

NOTE Confidence: 0.904246047

 $00:49:12.330 \longrightarrow 00:49:13.940$  How bad is it at that time?

NOTE Confidence: 0.904246047 00:49:13.940 --> 00:49:14.318 OK. NOTE Confidence: 0.904246047

00:49:14.318 --> 00:49:17.342 Next period of time between noon and five,

00:49:17.350 --> 00:49:18.946 how many days a week and mild,

NOTE Confidence: 0.904246047

00:49:18.950 --> 00:49:20.710 moderate, severe or very severe?

NOTE Confidence: 0.904246047

 $00:49:20.710 \longrightarrow 00:49:23.645$  This will allow you to

NOTE Confidence: 0.904246047

 $00:49:23.645 \longrightarrow 00:49:26.580$  have a moving chart of.

NOTE Confidence: 0.904246047

 $00{:}49{:}26.580 \dashrightarrow 00{:}49{:}30.185$  Daily severity and timing of

NOTE Confidence: 0.904246047

 $00:49:30.185 \longrightarrow 00:49:32.284$  symptoms in augmented patients.

NOTE Confidence: 0.904246047

 $00:49:32.284 \longrightarrow 00:49:36.250$  The goal is to stop the dopamine agonist.

NOTE Confidence: 0.894261342857143

 $00:49:38.570 \longrightarrow 00:49:40.358$  Just making things worse.

NOTE Confidence: 0.894261342857143

 $00{:}49{:}40.358 \dashrightarrow 00{:}49{:}44.140$  And you do that by adding a new

NOTE Confidence: 0.894261342857143

00:49:44.140 --> 00:49:47.181 medication first, maximizing its dose,

NOTE Confidence: 0.894261342857143

00:49:47.181 --> 00:49:51.243 and then slowly withdrawing The Agonist.

NOTE Confidence: 0.894261342857143

 $00:49:51.250 \longrightarrow 00:49:55.723$  On that note, I'm going to stop

NOTE Confidence: 0.894261342857143

 $00:49:55.723 \longrightarrow 00:50:00.278$  and answer any and all questions.

NOTE Confidence: 0.899024353333333

 $00{:}50{:}03.040 \dashrightarrow 00{:}50{:}05.650$  And I think I had some in the chat,

NOTE Confidence: 0.899024353333333

 $00:50:05.650 \longrightarrow 00:50:07.426$  so I'll just start with those.

00:50:07.430 --> 00:50:09.908 But mayor, because he is mayor,

NOTE Confidence: 0.899024353333333

 $00:50:09.910 \longrightarrow 00:50:12.688$  gets first shot.

NOTE Confidence: 0.899024353333333

00:50:12.690 --> 00:50:16.165 So before some of these drugs were

NOTE Confidence: 0.899024353333333

 $00:50:16.165 \longrightarrow 00:50:18.558$  introduced and I can I can mention

NOTE Confidence: 0.899024353333333

 $00:50:18.560 \longrightarrow 00:50:22.230$  this because of my advanced age.

NOTE Confidence: 0.899024353333333

 $00:50:22.230 \longrightarrow 00:50:24.030$  Anyways, we used to use

NOTE Confidence: 0.899024353333333

 $00:50:24.030 \longrightarrow 00:50:25.675$  clonazepam at very low doses.

NOTE Confidence: 0.899024353333333

 $00:50:25.675 \longrightarrow 00:50:28.160$  And it was actually in a lot

NOTE Confidence: 0.8990243533333333

00:50:28.242 --> 00:50:30.890 of patients very effective,

NOTE Confidence: 0.899024353333333

 $00:50:30.890 \longrightarrow 00:50:32.360$  especially in patients

NOTE Confidence: 0.899024353333333

 $00{:}50{:}32.360 {\:{\mbox{--}}\!>\:} 00{:}50{:}34.560$  that used to get restless

NOTE Confidence: 0.914554975

00:50:34.570 --> 00:50:36.868 legs, for example, on an airplane.

NOTE Confidence: 0.914554975

 $00:50:36.870 \longrightarrow 00:50:38.355$  And the rest of the time it was

NOTE Confidence: 0.914554975

 $00:50:38.360 \longrightarrow 00:50:40.516$  kind of controlled. Is there a role

NOTE Confidence: 0.848116494545455

 $00:50:40.530 \longrightarrow 00:50:42.466$  for clonazepam? At all.

NOTE Confidence: 0.848116494545455

 $00:50:42.466 \longrightarrow 00:50:46.684$  So I think for a PRN use, it's OK.

 $00:50:46.684 \longrightarrow 00:50:48.594$  I mean, for PRN use,

NOTE Confidence: 0.848116494545455

 $00:50:48.600 \longrightarrow 00:50:49.785$  I'd rather use a dopamine

NOTE Confidence: 0.848116494545455

 $00:50:49.785 \longrightarrow 00:50:50.970$  agonist if you're going to

NOTE Confidence: 0.848116494545455

 $00:50:51.025 \longrightarrow 00:50:52.255$  use it just on an airplane,

NOTE Confidence: 0.848116494545455

00:50:52.260 --> 00:50:54.900 or when they're getting acupuncture,

NOTE Confidence: 0.848116494545455

00:50:54.900 --> 00:50:57.084 or getting your, you know, Mayor,

NOTE Confidence: 0.848116494545455

00:50:57.084 --> 00:50:58.604 mayor, when you're getting your

NOTE Confidence: 0.848116494545455

00:50:58.604 --> 00:51:00.540 hair done at the hairdresser,

NOTE Confidence: 0.848116494545455

 $00:51:00.540 \longrightarrow 00:51:02.276$  I think it's reasonable to use a

NOTE Confidence: 0.848116494545455

 $00:51:02.276 \longrightarrow 00:51:03.789$  dopamine agonist in those contexts.

NOTE Confidence: 0.8839115

00:51:06.120 --> 00:51:08.760 I don't use clonazepam #1,

NOTE Confidence: 0.8839115

00:51:08.760 --> 00:51:11.766 it's got a 40 hour half-life.

NOTE Confidence: 0.8839115

00:51:11.770 --> 00:51:13.962 I don't use clonazepam

NOTE Confidence: 0.8839115

00:51:13.962 --> 00:51:15.606 within sleep disorders.

NOTE Confidence: 0.8839115

00:51:15.610 --> 00:51:18.284 Just doesn't make any sense for insomnia.

00:51:18.290 --> 00:51:21.170 40 hour, half life at the end of a week,

NOTE Confidence: 0.8839115

00:51:21.170 --> 00:51:22.378 you're at steady state.

NOTE Confidence: 0.8839115

 $00:51:22.378 \longrightarrow 00:51:24.750$  What kind of a sleep drug is that?

NOTE Confidence: 0.8839115

00:51:24.750 --> 00:51:26.854 So I don't use clonazepam if I'm going

NOTE Confidence: 0.8839115

 $00:51:26.854 \longrightarrow 00:51:29.293$  to use a benzo just to help people

NOTE Confidence: 0.8839115

 $00:51:29.293 \longrightarrow 00:51:31.224$  fall asleep because lying there for

NOTE Confidence: 0.8839115

 $00{:}51{:}31.224 \dashrightarrow 00{:}51{:}33.108$ an hour we'll provoke our lesson.

NOTE Confidence: 0.8839115

 $00:51:33.110 \longrightarrow 00:51:34.362$  Some people for sure.

NOTE Confidence: 0.8839115

00:51:34.362 --> 00:51:36.670 So I'm going to treat their insomnia

NOTE Confidence: 0.8839115

 $00:51:36.670 \longrightarrow 00:51:39.176$  so they're not just lying there waiting

NOTE Confidence: 0.8839115

 $00{:}51{:}39.176 \dashrightarrow 00{:}51{:}41.818$  for RLS to come get them in the dark.

NOTE Confidence: 0.8839115

 $00:51:41.820 \longrightarrow 00:51:44.220$  There's no evidence that clonazepam works.

NOTE Confidence: 0.8839115

 $00:51:44.220 \longrightarrow 00:51:46.160$  The clinical trials were

NOTE Confidence: 0.8839115

 $00:51:46.160 \longrightarrow 00:51:47.615$  negative for clonazepam.

NOTE Confidence: 0.8839115

00:51:47.620 --> 00:51:49.972 Sure if you put people to sleep they're

NOTE Confidence: 0.8839115

 $00:51:49.972 \longrightarrow 00:51:51.940$  not going to complain about RLS.

00:51:51.940 --> 00:51:52.840 But you know,

NOTE Confidence: 0.8839115

 $00:51:52.840 \longrightarrow 00:51:55.360$  we could use propofol if while we're at it.

NOTE Confidence: 0.8839115

00:51:55.360 --> 00:51:58.468 So I would encourage you to avoid

NOTE Confidence: 0.8839115

 $00:51:58.468 \longrightarrow 00:52:00.353$  benzodiazepines in these people

NOTE Confidence: 0.8839115

 $00:52:00.353 \longrightarrow 00:52:02.688$  unless you think anxiety is

NOTE Confidence: 0.8839115

 $00{:}52{:}02.688 {\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}}{\:\raisebox{--}{\text{--}}} 00{:}52{:}05.391$  playing a substantial part in the

NOTE Confidence: 0.8839115

00:52:05.391 --> 00:52:07.641 emergence of their symptoms or they

NOTE Confidence: 0.8839115

 $00{:}52{:}07.641 \to 00{:}52{:}09.291$  have a day time anxiety disorder.

NOTE Confidence: 0.8839115

 $00:52:09.291 \longrightarrow 00:52:11.899$  And if you do want to use a benzo.

NOTE Confidence: 0.8839115

 $00:52:11.900 \longrightarrow 00:52:13.310$  There's a short acting one.

NOTE Confidence: 0.896647463

 $00:52:15.840 \longrightarrow 00:52:17.992$  We have a few questions here in the

NOTE Confidence: 0.896647463

 $00:52:17.992 \longrightarrow 00:52:19.766$  chat room if you want to read those.

NOTE Confidence: 0.896647463

00:52:19.770 --> 00:52:20.898 Sure. Yeah, yeah.

NOTE Confidence: 0.896647463

 $00:52:20.898 \longrightarrow 00:52:23.530$  First one is from Doctor Karen Johnson.

NOTE Confidence: 0.896647463

 $00:52:23.530 \longrightarrow 00:52:24.994$  For the people who you can't

00:52:24.994 --> 00:52:26.470 get off the dopamine agonists,

NOTE Confidence: 0.896647463

 $00:52:26.470 \longrightarrow 00:52:28.360$  do you try to convert using long

NOTE Confidence: 0.896647463

 $00:52:28.360 \longrightarrow 00:52:29.776$  acting formulation or will you

NOTE Confidence: 0.896647463

00:52:29.776 --> 00:52:31.166 continue them on short acting?

NOTE Confidence: 0.916317814285714

 $00:52:34.160 \longrightarrow 00:52:36.800$  I don't believe that the long

NOTE Confidence: 0.916317814285714

00:52:36.800 --> 00:52:38.647 acting provides any advantage.

NOTE Confidence: 0.916317814285714

 $00:52:38.647 \longrightarrow 00:52:40.992$  It does treat their symptoms

NOTE Confidence: 0.916317814285714

 $00:52:40.992 \longrightarrow 00:52:43.239$  in terms of augmentation.

NOTE Confidence: 0.916317814285714

00:52:43.240 --> 00:52:46.375 I don't think it produces

NOTE Confidence: 0.916317814285714

 $00:52:46.375 \longrightarrow 00:52:48.256$  a tremendous advantage.

NOTE Confidence: 0.916317814285714

 $00:52:48.260 \longrightarrow 00:52:50.156$  So if I can't get them off it,

NOTE Confidence: 0.916317814285714

 $00:52:50.160 \longrightarrow 00:52:51.472$  they still have symptoms,

NOTE Confidence: 0.916317814285714

 $00:52:51.472 \longrightarrow 00:52:53.440$  quite a bit of the day,

NOTE Confidence: 0.916317814285714

 $00:52:53.440 \longrightarrow 00:52:56.478$  and that context I will switch them

NOTE Confidence: 0.916317814285714

00:52:56.478 --> 00:53:00.574 to from a IR to an ER or to the patch.

NOTE Confidence: 0.916317814285714

00:53:00.580 --> 00:53:03.800 But I don't fool myself into thinking

 $00:53:03.800 \longrightarrow 00:53:07.719$  and I don't I make very clear to them.

NOTE Confidence: 0.916317814285714

 $00{:}53{:}07.720 \dashrightarrow 00{:}53{:}09.495$  These dopamine agonists are still

NOTE Confidence: 0.916317814285714

 $00:53:09.495 \longrightarrow 00:53:11.999$  doing their bad things to your brain,

NOTE Confidence: 0.916317814285714

 $00:53:12.000 \longrightarrow 00:53:15.500$  and so we need to be really

NOTE Confidence: 0.916317814285714

 $00:53:15.500 \longrightarrow 00:53:17.620$  aware of that and.

NOTE Confidence: 0.916317814285714

 $00:53:17.620 \longrightarrow 00:53:20.490$  And they're scared because I've

NOTE Confidence: 0.916317814285714

 $00:53:20.490 \longrightarrow 00:53:22.429$  made them scared of this and so

NOTE Confidence: 0.916317814285714

 $00:53:22.429 \longrightarrow 00:53:23.910$  they're vigilant for it as well.

NOTE Confidence: 0.916317814285714 00:53:23.910 --> 00:53:24.454 But yes, NOTE Confidence: 0.916317814285714

 $00{:}53{:}24.454 \dashrightarrow 00{:}53{:}27.828$  I will move from a an IR to an ER only

NOTE Confidence: 0.916317814285714

00:53:27.828 --> 00:53:30.425 if they have symptoms that weren't it.

NOTE Confidence: 0.916317814285714

 $00:53:30.430 \longrightarrow 00:53:33.130$  They just have symptoms at night.

NOTE Confidence: 0.916317814285714 00:53:33.130 --> 00:53:33.490 There, NOTE Confidence: 0.916317814285714

 $00{:}53{:}33.490 \dashrightarrow 00{:}53{:}35.650$  I really don't think there's an

NOTE Confidence: 0.916317814285714

 $00:53:35.650 \longrightarrow 00:53:37.729$  advantage of the extended release

 $00:53:37.729 \longrightarrow 00:53:40.525$  medicines in terms of less augmentation.

NOTE Confidence: 0.916317814285714

00:53:40.530 --> 00:53:43.506 I just think they mask augmentation,

NOTE Confidence: 0.916317814285714

 $00:53:43.510 \longrightarrow 00:53:44.780$  at least at the beginning.

NOTE Confidence: 0.647516232

00:53:46.940 --> 00:53:49.240 Second question from T Kumar,

NOTE Confidence: 0.647516232

 $00:53:49.240 \longrightarrow 00:53:51.744$  people who may have mild OSA and are

NOTE Confidence: 0.647516232

00:53:51.744 --> 00:53:54.077 not willing to treat it and with RLS,

NOTE Confidence: 0.647516232

 $00:53:54.080 \longrightarrow 00:53:56.405$  will it get better with

NOTE Confidence: 0.647516232

 $00:53:56.405 \longrightarrow 00:53:58.136$  dopamine agonists or A2D?

NOTE Confidence: 0.647516232

 $00:53:58.136 \longrightarrow 00:53:59.816$  What's the maximum dose of

NOTE Confidence: 0.647516232

00:53:59.816 --> 00:54:01.160 methadone you would use?

NOTE Confidence: 0.647516232

00:54:01.160 --> 00:54:02.510 And she says I may have

NOTE Confidence: 0.767015462

 $00:54:02.520 \longrightarrow 00:54:04.120$  missed a variety of questions.

NOTE Confidence: 0.767015462

00:54:04.120 --> 00:54:08.916 Thank you. Yes, as far as I know,

NOTE Confidence: 0.767015462

00:54:08.920 --> 00:54:12.126 every kind of RLS responds to dopamine,

NOTE Confidence: 0.767015462

 $00:54:12.130 \longrightarrow 00:54:14.056$  I guess. I mean, they're remarkable.

NOTE Confidence: 0.767015462

 $00:54:14.060 \longrightarrow 00:54:16.100$  They're remarkable medicines for our lives,

 $00:54:16.100 \longrightarrow 00:54:18.986$  for the short term. So OSA,

NOTE Confidence: 0.767015462

 $00{:}54{:}18.986 \dashrightarrow 00{:}54{:}22.523$  if you think OSA is causing their RLS or

NOTE Confidence: 0.767015462

00:54:22.523 --> 00:54:25.278 causing sleep disturbance causing RLS,

NOTE Confidence: 0.767015462

00:54:25.280 --> 00:54:26.448 dopamine agonists will work,

NOTE Confidence: 0.767015462

 $00:54:26.448 \longrightarrow 00:54:27.908$  that still doesn't mean I'm

NOTE Confidence: 0.767015462

 $00:54:27.908 \longrightarrow 00:54:29.188$  going to want to use them.

NOTE Confidence: 0.767015462

 $00:54:29.190 \longrightarrow 00:54:30.838$  As first line treatments.

NOTE Confidence: 0.8666533625

00:54:33.830 --> 00:54:35.882 The maximum dose of methodone that

NOTE Confidence: 0.8666533625

 $00{:}54{:}35.882 \dashrightarrow 00{:}54{:}39.040$  I prescribe. I rarely go above 20

NOTE Confidence: 0.8666533625

 $00:54:39.040 \longrightarrow 00:54:43.530$  milligrams I maybe twice in the last.

NOTE Confidence: 0.8666533625

 $00{:}54{:}43.530 \dashrightarrow 00{:}54{:}47.636$ 15 years have I gone above 20 milligrams and

NOTE Confidence: 0.8666533625

 $00:54:47.636 \longrightarrow 00:54:50.570$  one of them was a patient with severe RLS,

NOTE Confidence: 0.8666533625

 $00{:}54{:}50.570 \dashrightarrow 00{:}54{:}55.480$  end stage renal disease and.

NOTE Confidence: 0.8666533625

 $00:54:55.480 \longrightarrow 00:54:57.380$  From basement, memory and disease

NOTE Confidence: 0.8666533625

 $00:54:57.380 \longrightarrow 00:55:00.098$  actually lost most of her heart muscle

 $00:55:00.098 \longrightarrow 00:55:03.719$  and both kidneys in at the age of 40 and

NOTE Confidence: 0.8666533625

 $00:55:03.719 \longrightarrow 00:55:06.179$  she got transplanted a few years ago.

NOTE Confidence: 0.8666533625

 $00:55:06.180 \longrightarrow 00:55:10.620$  RLS and she was on 25 maybe of

NOTE Confidence: 0.8666533625

 $00:55:10.620 \longrightarrow 00:55:13.832$  methodone and transplanted. Now,

NOTE Confidence: 0.8666533625

00:55:13.832 --> 00:55:16.820 on no opioid and a little bit of gabapentin,

NOTE Confidence: 0.8666533625

 $00:55:16.820 \longrightarrow 00:55:17.880$  I mean, our great story.

NOTE Confidence: 0.8666533625

 $00:55:17.880 \longrightarrow 00:55:19.860$  So I rarely go above 20.

NOTE Confidence: 0.8666533625

00.55.19.860 -> 00.55.21.358 I say to people at the beginning,

NOTE Confidence: 0.8666533625

 $00:55:21.360 \dashrightarrow 00:55:24.700$  most people are going to be between 5 and 15.

NOTE Confidence: 0.8666533625

 $00:55:24.700 \longrightarrow 00:55:25.615$  It's my experience.

NOTE Confidence: 0.8666533625

00:55:25.615 --> 00:55:28.250 And I go up by 2 1/2 milligrams

NOTE Confidence: 0.8666533625

 $00:55:28.250 \longrightarrow 00:55:30.794$  at a time because I'm cheap.

NOTE Confidence: 0.8666533625

 $00:55:30.800 \longrightarrow 00:55:32.670$  I'm really cheap with these

NOTE Confidence: 0.8666533625

00:55:32.670 --> 00:55:34.166 medicines because small dose

NOTE Confidence: 0.8666533625

 $00:55:34.166 \longrightarrow 00:55:36.067$  increases can make a big difference.

NOTE Confidence: 0.826427299

 $00:55:38.380 \longrightarrow 00:55:39.880$  So the next question we

 $00:55:39.880 \longrightarrow 00:55:41.380$  have is from Daniel Ellie.

NOTE Confidence: 0.826427299

 $00:55:41.380 \longrightarrow 00:55:42.436$  There's two question.

NOTE Confidence: 0.826427299

 $00:55:42.436 \longrightarrow 00:55:44.840$  Number one, what do you think is

NOTE Confidence: 0.826427299

 $00:55:44.840 \longrightarrow 00:55:46.564$  the mechanism for augmentation #2

NOTE Confidence: 0.826427299

 $00:55:46.564 \longrightarrow 00:55:48.384$  for patient with evening bedtime

NOTE Confidence: 0.826427299

 $00:55:48.384 \longrightarrow 00:55:50.629$  early sleep time symptoms in light

NOTE Confidence: 0.826427299

00:55:50.629 --> 00:55:52.085 of the nonlinear pharmacology

NOTE Confidence: 0.826427299

 $00:55:52.085 \longrightarrow 00:55:54.080$  of gabapentin thing at the end?

NOTE Confidence: 0.826427299

 $00{:}55{:}54.080 \dashrightarrow 00{:}55{:}55.904$  How do you handle dosing for

NOTE Confidence: 0.826427299

 $00{:}55{:}55.904 \dashrightarrow 00{:}55{:}57.916$  patients who need more than 600

NOTE Confidence: 0.826427299

00:55:57.916 --> 00:55:59.746 of gabapentin to control symptoms?

NOTE Confidence: 0.642053045714286

 $00:56:00.080 \longrightarrow 00:56:05.498$  OK, what's the? Brain mechanisms of RLS.

NOTE Confidence: 0.642053045714286

 $00{:}56{:}05.500 \dashrightarrow 00{:}56{:}07.215$  I don't know. I stopped thinking about

NOTE Confidence: 0.642053045714286

 $00{:}56{:}07.215 \dashrightarrow 00{:}56{:}08.879$  those kinds of questions long ago.

NOTE Confidence: 0.642053045714286

 $00:56:08.880 \longrightarrow 00:56:12.486$  I'm just mostly a. Practical person.

00:56:12.490 --> 00:56:15.814 I leave the higher level analysis

NOTE Confidence: 0.642053045714286

 $00:56:15.814 \longrightarrow 00:56:18.744$  of causes and mechanisms to others

NOTE Confidence: 0.642053045714286

 $00:56:18.744 \longrightarrow 00:56:20.886$  who are much smarter than me.

NOTE Confidence: 0.642053045714286

 $00:56:20.890 \longrightarrow 00:56:22.699$  What do I do with people who have an

NOTE Confidence: 0.642053045714286

 $00:56:22.699 \longrightarrow 00:56:26.010$  early bedtime? They go to bed at 8:30.

NOTE Confidence: 0.642053045714286

 $00:56:26.010 \longrightarrow 00:56:30.328$  And they get home from work at 5:30, so.

NOTE Confidence: 0.642053045714286

 $00:56:30.328 \longrightarrow 00:56:32.452$  So I'll give them some at

NOTE Confidence: 0.642053045714286

 $00:56:32.452 \longrightarrow 00:56:34.459$  6 and some at eight.

NOTE Confidence: 0.642053045714286

 $00:56:34.460 \longrightarrow 00:56:37.400$  People are going to bed before 8:30.

NOTE Confidence: 0.642053045714286

 $00:56:37.400 \longrightarrow 00:56:39.600$  You know you have to.

NOTE Confidence: 0.642053045714286

 $00{:}56{:}39.600 \dashrightarrow 00{:}56{:}40.852$  Trouble shoot with them and

NOTE Confidence: 0.642053045714286

 $00:56:40.852 \longrightarrow 00:56:43.040$  say can you take a little bit?

NOTE Confidence: 0.642053045714286

00:56:43.040 --> 00:56:44.480 You know early,

NOTE Confidence: 0.642053045714286

 $00:56:44.480 \longrightarrow 00:56:47.360$  and I understand that it may

NOTE Confidence: 0.642053045714286

 $00:56:47.360 \longrightarrow 00:56:50.009$  interfere with your alertness when

NOTE Confidence: 0.642053045714286

00:56:50.009 --> 00:56:51.904 you're doing that very important

00:56:51.904 --> 00:56:54.159 exercise after after you eat dinner.

NOTE Confidence: 0.642053045714286

 $00{:}56{:}54.160 \dashrightarrow 00{:}56{:}54.992$  This exercise,

NOTE Confidence: 0.642053045714286

 $00:56:54.992 \longrightarrow 00:56:56.240$  the thumb exercise,

NOTE Confidence: 0.642053045714286

 $00:56:56.240 \longrightarrow 00:56:59.840$  clicking the channel changer.

NOTE Confidence: 0.642053045714286

 $00:56:59.840 \longrightarrow 00:57:01.757$  You want people to have a quality of life.

NOTE Confidence: 0.642053045714286

00:57:01.760 --> 00:57:03.848 You want them to be able to change that,

NOTE Confidence: 0.642053045714286

00:57:03.850 --> 00:57:05.680 to stay awake with their partner,

NOTE Confidence: 0.642053045714286

 $00:57:05.680 \longrightarrow 00:57:06.868$  to watch TV.

NOTE Confidence: 0.884884997272727

 $00:57:09.060 \longrightarrow 00:57:09.882$  But do you want to try

NOTE Confidence: 0.884884997272727

 $00:57:09.882 \longrightarrow 00:57:10.720$  to get ahead of things?

NOTE Confidence: 0.884884997272727

00:57:10.720 --> 00:57:13.208 I if if it's basically what I would

NOTE Confidence: 0.884884997272727

 $00:57:13.208 \longrightarrow 00:57:15.806$  do would be to give them pregabalin.

NOTE Confidence: 0.884884997272727

 $00{:}57{:}15.810 \dashrightarrow 00{:}57{:}18.438$  Now that Lyrica has gone generic,

NOTE Confidence: 0.884884997272727

 $00:57:18.440 \longrightarrow 00:57:21.098$  I'm I've switched many, not all,

NOTE Confidence: 0.884884997272727

 $00:57:21.100 \longrightarrow 00:57:24.022$  but many of my gabapentin patients

 $00:57:24.022 \longrightarrow 00:57:26.450$  to pregabalin because it's just.

NOTE Confidence: 0.884884997272727

00:57:26.450 --> 00:57:28.172 I know what I'm getting, gabapentin.

NOTE Confidence: 0.884884997272727

00:57:28.172 --> 00:57:30.104 I don't know what I'm getting.

NOTE Confidence: 0.90271185

 $00:57:34.030 \longrightarrow 00:57:38.144$  Next question, what was the lowest

NOTE Confidence: 0.90271185

 $00:57:38.144 \longrightarrow 00:57:39.849$  level of pramipexole that you

NOTE Confidence: 0.90271185

00:57:39.849 --> 00:57:42.060 see caused augmentation example,

NOTE Confidence: 0.90271185

00:57:42.060 --> 00:57:44.810 have you seen it at 0.125 milligram?

NOTE Confidence: 0.916109223333333

 $00:57:46.240 \longrightarrow 00:57:48.893$  I think it can happen at .125.

NOTE Confidence: 0.916109223333333

 $00{:}57{:}48.893 \dashrightarrow 00{:}57{:}51.758$  Maybe it happens more slowly.

NOTE Confidence: 0.916109223333333

00:57:51.760 --> 00:57:55.430 Umm. But I think it can happen

NOTE Confidence: 0.9161092233333333

 $00{:}57{:}55.430 \to 00{:}57{:}57.018$  and I think you say to patients,

NOTE Confidence: 0.916109223333333

 $00:57:57.020 \longrightarrow 00:58:00.350$  you know this is a very low dose and

NOTE Confidence: 0.916109223333333

 $00{:}58{:}00.350 \dashrightarrow 00{:}58{:}02.219$  sometimes I see patients on half

NOTE Confidence: 0.916109223333333

 $00:58:02.219 \longrightarrow 00:58:04.710$  of 1 of of a .125 and you say it's

NOTE Confidence: 0.916109223333333

00:58:04.710 --> 00:58:06.714 a really low dose and your risk of

NOTE Confidence: 0.916109223333333

 $00:58:06.714 \longrightarrow 00:58:08.454$  augmentation is less than other people,

 $00:58:08.460 \longrightarrow 00:58:13.290$  but it is certainly not 0. And. So.

NOTE Confidence: 0.89606783555555

 $00:58:15.550 \longrightarrow 00:58:20.284$  You know, in the end the decision is theirs.

NOTE Confidence: 0.89606783555555

 $00:58:20.290 \longrightarrow 00:58:22.690$  And if they don't tolerate the

NOTE Confidence: 0.89606783555555

 $00:58:22.690 \longrightarrow 00:58:24.330$  other medicines, if they don't

NOTE Confidence: 0.89606783555555

 $00:58:24.330 \longrightarrow 00:58:25.730$  respond to the other medicines,

NOTE Confidence: 0.89606783555555

 $00:58:25.730 \longrightarrow 00:58:28.766$  they're really the ones driving this.

NOTE Confidence: 0.89606783555555

 $00:58:28.770 \longrightarrow 00:58:30.804$  You give them the risks and

NOTE Confidence: 0.896067835555555

 $00:58:30.804 \longrightarrow 00:58:32.800$  benefits and you say to them.

NOTE Confidence: 0.8855214875

00:58:35.210 --> 00:58:36.586 You know you have a risk of this,

NOTE Confidence: 0.8855214875

 $00:58:36.590 \longrightarrow 00:58:37.940$  but I understand your symptoms

NOTE Confidence: 0.8855214875

 $00{:}58{:}37.940 \dashrightarrow 00{:}58{:}39.020$  didn't respond to anything

NOTE Confidence: 0.8855214875

00:58:39.020 --> 00:58:40.467 else or you didn't tolerate it.

NOTE Confidence: 0.8855214875

 $00:58:40.470 \longrightarrow 00:58:42.790$  It's up to you and,

NOTE Confidence: 0.8855214875

00:58:42.790 --> 00:58:44.368 and I'll see you very regularly,

NOTE Confidence: 0.8855214875

 $00:58:44.370 \longrightarrow 00:58:45.520$  I don't see the people,

 $00{:}58{:}45.520 \dashrightarrow 00{:}58{:}48.394$  these people on dopamine agonist once

NOTE Confidence: 0.8855214875

 $00:58:48.394 \longrightarrow 00:58:51.374$  a year because things move too fast

NOTE Confidence: 0.8855214875

 $00:58:51.374 \longrightarrow 00:58:53.898$  at no less than every six months,

NOTE Confidence: 0.8855214875

00:58:53.898 --> 00:58:56.220 and maybe even more often than

NOTE Confidence: 0.8855214875

 $00:58:56.301 \longrightarrow 00:58:58.491$  that because we want to try

NOTE Confidence: 0.8855214875

 $00:58:58.491 \longrightarrow 00:58:59.951$  to avoid this problem.

NOTE Confidence: 0.815314465454545

 $00:59:02.840 \longrightarrow 00:59:05.311$  OK. And then does a higher ferritin

NOTE Confidence: 0.815314465454545

00:59:05.311 --> 00:59:07.240 level protect against augmentation?

NOTE Confidence: 0.838418585714286

 $00:59:08.260 \dashrightarrow 00:59:12.817$  Well, low ferritin levels seem to promote.

NOTE Confidence: 0.838418585714286

00:59:12.820 --> 00:59:14.106 Augmentation. However,

NOTE Confidence: 0.838418585714286

 $00:59:14.106 \longrightarrow 00:59:17.964$  going from there's no evidence that

NOTE Confidence: 0.838418585714286

 $00:59:17.964 \longrightarrow 00:59:21.416$  going from 100 to 300 is protective.

NOTE Confidence: 0.838418585714286

00:59:21.416 --> 00:59:24.780 Ferritin is funky, as I'm sure you're aware.

NOTE Confidence: 0.838418585714286

 $00:59:24.780 \longrightarrow 00:59:26.520$  It's an acute phase reactant,

NOTE Confidence: 0.838418585714286

00:59:26.520 --> 00:59:29.940 and it doesn't take much to bump it up.

NOTE Confidence: 0.838418585714286

 $00:59:29.940 \longrightarrow 00:59:33.220$  So you can't trust the ferritin and I,

 $00:59:33.220 \longrightarrow 00:59:34.726$  you know, even the fellows I

NOTE Confidence: 0.838418585714286

 $00:59:34.726 \longrightarrow 00:59:36.439$  see them just are are fellows.

NOTE Confidence: 0.838418585714286

00:59:36.440 --> 00:59:38.036 They're just getting a fair 10, I say.

NOTE Confidence: 0.838418585714286

 $00:59:38.036 \longrightarrow 00:59:39.176$  You're just missing the boat.

NOTE Confidence: 0.838418585714286

 $00:59:39.180 \longrightarrow 00:59:42.156$  That 3:20, your ferritin means nothing.

NOTE Confidence: 0.838418585714286 00:59:42.160 --> 00:59:42.856 I don't know.

NOTE Confidence: 0.838418585714286

 $00:59:42.856 \longrightarrow 00:59:44.480$  I have no idea what it means,

NOTE Confidence: 0.838418585714286

 $00:59:44.480 \longrightarrow 00:59:47.099$  but it probably doesn't have to do with iron.

NOTE Confidence: 0.838418585714286 00:59:47.100 --> 00:59:49.780 And so. NOTE Confidence: 0.838418585714286

 $00:59:49.780 \longrightarrow 00:59:52.596$  This is why I always get ferritin iron

NOTE Confidence: 0.838418585714286

00:59:52.600 --> 00:59:55.552 TIBC and I tell people I want you to

NOTE Confidence: 0.838418585714286

 $00{:}59{:}55.552 \dashrightarrow 00{:}59{:}57.974$  take no iron containing vitamins and

NOTE Confidence: 0.838418585714286

 $00{:}59{:}57.974 \dashrightarrow 01{:}00{:}01.764$  no red meat for at least 24 hours

NOTE Confidence: 0.838418585714286

01:00:01.764 --> 01:00:05.676 before you get your blood test.

NOTE Confidence: 0.838418585714286

 $01:00:05.680 \longrightarrow 01:00:07.400$  I want your iron level.

01:00:07.400 --> 01:00:10.096 I do not want the bacon from your

NOTE Confidence: 0.838418585714286

 $01:00:10.096 \longrightarrow 01:00:12.729$  bacon and eggs this morning level.

NOTE Confidence: 0.8818008

 $01:00:15.540 \longrightarrow 01:00:16.540$  I had a quick question.

NOTE Confidence: 0.8818008

 $01:00:16.540 \longrightarrow 01:00:18.892$  So if if you see someone

NOTE Confidence: 0.8818008

01:00:18.892 --> 01:00:20.460 who's on dopamine agonist,

NOTE Confidence: 0.8818008

01:00:20.460 --> 01:00:22.505 would you preemptively change them

NOTE Confidence: 0.8818008

 $01:00:22.505 \longrightarrow 01:00:25.762$  to alpha do to like delta, you know,

NOTE Confidence: 0.8818008

 $01:00:25.762 \longrightarrow 01:00:27.808$  so that you can avoid augmentation?

NOTE Confidence: 0.684302056666667

01:00:28.080 --> 01:00:29.326 Probably yes.

NOTE Confidence: 0.684302056666667

01:00:29.326 --> 01:00:33.126 I'll explain to them my concerns,

NOTE Confidence: 0.684302056666667

 $01:00:33.126 \dashrightarrow 01:00:37.697$  but I'm not doing anything to anybody.

NOTE Confidence: 0.684302056666667

 $01:00:37.700 \longrightarrow 01:00:40.720$  I'm not changing their medicine.

NOTE Confidence: 0.684302056666667

 $01:00:40.720 \longrightarrow 01:00:43.060$  I'm providing them with guidance.

NOTE Confidence: 0.684302056666667

01:00:43.060 --> 01:00:45.170 That's what we do, right?

NOTE Confidence: 0.684302056666667

 $01:00:45.170 \longrightarrow 01:00:47.606$  And in the end, it's their body.

NOTE Confidence: 0.684302056666667

01:00:47.610 --> 01:00:48.309 And you know,

01:00:48.309 --> 01:00:50.243 at a certain point if they're on super

NOTE Confidence: 0.684302056666667

 $01{:}00{:}50.243 \to 01{:}00{:}52.014$  high doses or something and they say

NOTE Confidence: 0.684302056666667

01:00:52.014 --> 01:00:53.888 I'm not going to make any changes,

NOTE Confidence: 0.684302056666667

01:00:53.890 --> 01:00:55.022 I'll say, you know,

NOTE Confidence: 0.684302056666667

01:00:55.022 --> 01:00:57.660 I don't think that I can care for

NOTE Confidence: 0.684302056666667

01:00:57.660 --> 01:01:00.534 you appropriately, but I rarely,

NOTE Confidence: 0.684302056666667

 $01:01:00.534 \longrightarrow 01:01:03.206$  rarely do that but.

NOTE Confidence: 0.684302056666667

 $01:01:03.210 \longrightarrow 01:01:06.810$  Give them the best odds that I can

NOTE Confidence: 0.684302056666667

 $01:01:06.810 \longrightarrow 01:01:10.345$  and allow them to make a decision.

NOTE Confidence: 0.684302056666667

01:01:10.350 --> 01:01:12.525 But I'm gonna keep nagging

NOTE Confidence: 0.684302056666667

01:01:12.525 --> 01:01:15.250 them every time I see them,

NOTE Confidence: 0.684302056666667

 $01:01:15.250 \longrightarrow 01:01:17.896$  because that's my job is to nag.

NOTE Confidence: 0.851054376666667

 $01{:}01{:}19.390 \dashrightarrow 01{:}01{:}23.702$  Any further questions? I don't see

NOTE Confidence: 0.851054376666667

 $01{:}01{:}23.702 \dashrightarrow 01{:}01{:}25.708$  any questions, no hands raised.

NOTE Confidence: 0.801096545

 $01:01:25.720 \longrightarrow 01:01:27.024$  I just, I just didn't want to say,

 $01:01:27.030 \longrightarrow 01:01:28.446$  John, thanks so much for that

NOTE Confidence: 0.801096545

 $01:01:28.446 \longrightarrow 01:01:30.158$  talk and it's always nice to hear

NOTE Confidence: 0.801096545

 $01:01:30.158 \longrightarrow 01:01:31.598$  from somebody that's been in the

NOTE Confidence: 0.801096545

 $01:01:31.598 \longrightarrow 01:01:33.460$  field a really long time, so.

NOTE Confidence: 0.820000828095238

 $01:01:35.860 \longrightarrow 01:01:39.415$  But I do. I know I do want to say that

NOTE Confidence: 0.820000828095238

01:01:39.415 --> 01:01:42.929 this message is so important it it's

NOTE Confidence: 0.820000828095238

 $01:01:42.929 \longrightarrow 01:01:45.340$  it's important for even people who are

NOTE Confidence: 0.820000828095238

 $01:01:45.340 \longrightarrow 01:01:47.430$  in the sleep field to here because I

NOTE Confidence: 0.820000828095238

01:01:47.430 --> 01:01:49.682 think it is a real change in how we

NOTE Confidence: 0.820000828095238

 $01:01:49.682 \longrightarrow 01:01:51.754$  think about how we treat restless legs.

NOTE Confidence: 0.820000828095238

 $01{:}01{:}51.760 \dashrightarrow 01{:}01{:}53.576$  And and the first thing is to educate.

NOTE Confidence: 0.820000828095238

 $01:01:53.580 \longrightarrow 01:01:55.225$  Educate, to make people aware

NOTE Confidence: 0.820000828095238

 $01:01:55.225 \longrightarrow 01:01:57.720$  that this is a really big problem.

NOTE Confidence: 0.820000828095238

01:01:57.720 --> 01:02:00.240 And you know you first have to change the

NOTE Confidence: 0.820000828095238

 $01:02:00.240 \longrightarrow 01:02:02.300$  practice of the people that are in the

NOTE Confidence: 0.820000828095238

 $01:02:02.300 \longrightarrow 01:02:04.779$  field and then you can maybe begin to change.

 $01:02:04.780 \longrightarrow 01:02:06.035$  The practice of people that

NOTE Confidence: 0.820000828095238

 $01:02:06.035 \longrightarrow 01:02:07.290$  are outside of the field.

NOTE Confidence: 0.820000828095238

 $01:02:07.290 \longrightarrow 01:02:09.474$  But this is going to take a

NOTE Confidence: 0.820000828095238

01:02:09.474 --> 01:02:11.050 monumental effort and you know,

NOTE Confidence: 0.820000828095238

01:02:11.050 --> 01:02:13.198 I'm glad that that that, you know,

NOTE Confidence: 0.820000828095238

 $01:02:13.198 \longrightarrow 01:02:15.310$  we can do it kind of that we're

NOTE Confidence: 0.820000828095238

 $01:02:15.382 \longrightarrow 01:02:16.478$  on the same page.

NOTE Confidence: 0.820000828095238

 $01{:}02{:}16.480 \dashrightarrow 01{:}02{:}18.874$  That's a great comment and I want

NOTE Confidence: 0.820000828095238

 $01:02:18.874 \longrightarrow 01:02:21.517$  to point out for all of you there

NOTE Confidence: 0.820000828095238

01:02:21.517 --> 01:02:25.100 in New Haven that you've got a

NOTE Confidence: 0.820000828095238

 $01:02:25.100 \longrightarrow 01:02:27.760$  world expert right there.

NOTE Confidence: 0.820000828095238 01:02:27.760 --> 01:02:28.045 Right.

NOTE Confidence: 0.820000828095238

 $01{:}02{:}28.045 \dashrightarrow 01{:}02{:}30.040$  That is home today with his kids

NOTE Confidence: 0.820000828095238

 $01{:}02{:}30.040 \dashrightarrow 01{:}02{:}32.037$  who went home early from school.

NOTE Confidence: 0.820000828095238

 $01:02:32.040 \longrightarrow 01:02:35.239$  So when you have questions about your

01:02:35.239 --> 01:02:38.060 RLS patients, your augmented RLS patients,

NOTE Confidence: 0.820000828095238

01:02:38.060 --> 01:02:39.960 you're difficult RLS patients.

NOTE Confidence: 0.820000828095238

01:02:39.960 --> 01:02:41.408 Just to e-mail Brian,

NOTE Confidence: 0.820000828095238

01:02:41.408 --> 01:02:44.012 you're I'm sure you're going to give

NOTE Confidence: 0.820000828095238

01:02:44.012 --> 01:02:46.504 them your home phone number just e-mail

NOTE Confidence: 0.820000828095238

01:02:46.504 --> 01:02:48.994 or call Brian at home because you

NOTE Confidence: 0.820000828095238

 $01:02:48.994 \longrightarrow 01:02:53.800$  know it's there are not many experts,

NOTE Confidence: 0.820000828095238

 $01:02:53.800 \longrightarrow 01:02:55.605$  Rs experts and you're really

NOTE Confidence: 0.820000828095238

 $01{:}02{:}55.605 --> 01{:}02{:}57.900$  lucky to have one right there.

NOTE Confidence: 0.820000828095238

 $01:02:57.900 \longrightarrow 01:02:59.920$  So take advantage of him.

NOTE Confidence: 0.875957486923077

 $01:03:03.400 \longrightarrow 01:03:05.472$  Well, thank you. Thank you so much

NOTE Confidence: 0.875957486923077

 $01:03:05.472 \longrightarrow 01:03:07.498$  Doctor Winkleman for this excellent talk.

NOTE Confidence: 0.875957486923077

 $01:03:07.500 \longrightarrow 01:03:10.420$  I'm sure everybody enjoyed and learned a lot.

NOTE Confidence: 0.875957486923077

01:03:10.420 --> 01:03:14.660 Thank you everyone for your time. Bye, bye,

NOTE Confidence: 0.702096952857143

 $01:03:14.700 \longrightarrow 01:03:16.884$  bye, all. Good to see you all.

NOTE Confidence: 0.702096952857143

01:03:16.890 --> 01:03:18.330 See you soon, Brian.

 $01:03:18.330 \longrightarrow 01:03:20.349$  See you. Bye, bye, bye.