WEBVTT

00:00:00.000 --> 00:00:02.142 1st, please take a moment to ensure

00:00:02.142 --> 00:00:04.117 that you're muted in order to

00:00:04.117 --> 00:00:05.777 receive CME credit for attendance,

00:00:05.780 --> 00:00:07.908 please see the chat room for instructions.

00:00:07.910 --> 00:00:10.374 You can text the unique ID for this

00:00:10.374 --> 00:00:12.625 conference anytime until 3:15 PM if you're

00:00:12.625 --> 00:00:14.599 not already registered with the LC Me,

00:00:14.600 --> 00:00:16.728 you will need to do that first.

00:00:16.730 --> 00:00:18.245 If you have any questions

00:00:18.245 --> 00:00:19.154 during the presentation,

00:00:19.160 --> 00:00:21.080 I encourage you to make use of the

00:00:21.080 --> 00:00:23.013 chat room throughout the hour and

00:00:23.013 --> 00:00:24.758 recorded versions of these lectures

00:00:24.758 --> 00:00:26.722 will be available online within two

NOTE Confidence: 0.8719163

00:00:26.722 --> 00:00:29.096 weeks at the link provided in the chat.

NOTE Confidence: 0.8719163

00:00:29.096 --> 00:00:31.000 Finally, please feel free to share the

NOTE Confidence: 0.8719163

00:00:31.053 --> 00:00:32.678 announcements for our weekly lecture

NOTE Confidence: 0.8719163

00:00:32.678 --> 00:00:35.320 series to anyone who you think maybe intro.

NOTE Confidence: 0.8719163

00:00:35.320 --> 00:00:37.145 Posted, or contact Debbie Lovejoy

NOTE Confidence: 0.8719163

00:00:37.145 --> 00:00:39.819 to be added to the email list.

NOTE Confidence: 0.8719163

00:00:39.820 --> 00:00:42.070 So now I'm delighted to introduce

NOTE Confidence: 0.8719163

00:00:42.070 --> 00:00:43.195 Doctor Eliana, Matt,

NOTE Confidence: 0.8719163

00:00:43.195 --> 00:00:45.445 Eva as our speaker this afternoon,

NOTE Confidence: 0.8719163

00:00:45.450 --> 00:00:47.135 Doctor Matt Eva completed her

NOTE Confidence: 0.8719163

00:00:47.135 --> 00:00:49.318 medical training at the New York

NOTE Confidence: 0.8719163

00:00:49.318 --> 00:00:51.066 College of Osteopathic Medicine,

NOTE Confidence: 0.8719163

00:00:51.070 --> 00:00:52.570 an residency at Nassau

NOTE Confidence: 0.8719163

00:00:52.570 --> 00:00:53.695 University Medical Center.

NOTE Confidence: 0.8719163

00:00:53.700 --> 00:00:56.171 She was a fellow in pulmonary and

NOTE Confidence: 0.8719163

00:00:56.171 --> 00:00:58.087 critical care medicine and then

NOTE Confidence: 0.8719163

00:00:58.087 --> 00:01:00.067 Sleep Medicine at Norwalk Hospital.

NOTE Confidence: 0.8719163

00:01:00.070 --> 00:01:02.830 In this year joined the faculty at Vassar

NOTE Confidence: 0.8719163

00:01:02.830 --> 00:01:04.949 Brothers Medical Center in Poughkeepsie,

NOTE Confidence: 0.8719163

00:01:04.950 --> 00:01:05.347 NY.

NOTE Confidence: 0.8719163

00:01:05.347 --> 00:01:07.332 She's published several case reports

NOTE Confidence: 0.8719163

00:01:07.332 --> 00:01:10.459 and chest and is involved in research,

NOTE Confidence: 0.8719163

00:01:10.460 --> 00:01:12.660 currently examining cases of extrapulmonary

NOTE Confidence: 0.8719163

00:01:12.660 --> 00:01:14.420 tuberculosis within our hospital

NOTE Confidence: 0.8719163

00:01:14.420 --> 00:01:16.717 at trial examining the impact of a

NOTE Confidence: 0.8719163

00:01:16.717 --> 00:01:18.870 vitamin C cocktail for treatment of

NOTE Confidence: 0.8719163

00:01:18.870 --> 00:01:21.095 septic shock and retrospective observation.

NOTE Confidence: 0.8719163

00:01:21.100 --> 00:01:23.458 ULL study looking at critical illness.

NOTE Confidence: 0.8719163

00:01:23.460 --> 00:01:24.642 Polyneuropathy Doctor Montaivo

NOTE Confidence: 0.8719163

00:01:24.642 --> 00:01:27.006 is scheduled to give this talk.

NOTE Confidence: 0.8719163

00:01:27.010 --> 00:01:28.350 Last year's asleep fellow,

NOTE Confidence: 0.8719163

00:01:28.350 --> 00:01:30.360 just as Covid was beginning to

NOTE Confidence: 0.8719163

00:01:30.423 --> 00:01:32.130 impact Connecticut hospitals.

NOTE Confidence: 0.8719163

00:01:32.130 --> 00:01:34.488 So we unfortunately had to cancel.

NOTE Confidence: 0.8719163

00:01:34.490 --> 00:01:36.980 But I'm delighted that she was.

NOTE Confidence: 0.8719163

00:01:36.980 --> 00:01:39.170 We're willing to return again today,

NOTE Confidence: 0.8719163

00:01:39.170 --> 00:01:40.995 virtually to provide this review

NOTE Confidence: 0.8719163

00:01:40.995 --> 00:01:42.090 of idiopathic hypersomnia,

NOTE Confidence: 0.8719163

00:01:42.090 --> 00:01:43.310 so please join me.

NOTE Confidence: 0.8719163

00:01:43.310 --> 00:01:45.140 Join me in giving me her

NOTE Confidence: 0.8719163

00:01:45.213 --> 00:01:47.197 warm welcome this afternoon.

NOTE Confidence: 0.8719163

00:01:47.200 --> 00:01:49.025 And with that I'll turn

NOTE Confidence: 0.8719163

00:01:49.025 --> 00:01:50.850 it over to you Eliana.

NOTE Confidence: 0.8719163

00:01:50.850 --> 00:01:51.220 Thank

NOTE Confidence: 0.82992303

00:01:51.220 --> 00:01:53.045 God after Tobias, thank you

NOTE Confidence: 0.82992303

00:01:53.045 --> 00:01:54.870 for giving me this opportunity.

NOTE Confidence: 0.82992303

00:01:54.870 --> 00:01:57.930 I was excited to give this lecture as a

NOTE Confidence: 0.82992303

00:01:57.930 --> 00:02:00.708 fellow so this was a literature review.

NOTE Confidence: 0.82992303

00:02:00.710 --> 00:02:04.252 Part of my fellowship Grand Rounds review

NOTE Confidence: 0.82992303

00:02:04.252 --> 00:02:08.438 of idiopathic hypersomnia and I do not

NOTE Confidence: 0.82992303

00:02:08.438 --> 00:02:12.440 have any financial disclosures to give.

NOTE Confidence: 0.82992303

00:02:12.440 --> 00:02:14.967 So just to give a presentation outline,

NOTE Confidence: 0.82992303

00:02:14.970 --> 00:02:17.091 as a fellow, I was inspired by

NOTE Confidence: 0.82992303

00:02:17.091 --> 00:02:19.281 a particular case which I will

NOTE Confidence: 0.82992303

00:02:19.281 --> 00:02:21.301 discuss today to illustrate age

NOTE Confidence: 0.82992303

00:02:21.301 --> 00:02:22.939 opathic hypersomnia will review,

NOTE Confidence: 0.82992303

00:02:22.940 --> 00:02:25.376 but the Physiology will review the clinical

NOTE Confidence: 0.82992303

00:02:25.376 --> 00:02:27.223 evaluation of the patient contrasted

NOTE Confidence: 0.82992303

00:02:27.223 --> 00:02:29.449 with narcolepsy type one and two,

NOTE Confidence: 0.82992303

00:02:29.450 --> 00:02:32.362 and then discuss the some of the treatment

NOTE Confidence: 0.82992303

00:02:32.362 --> 00:02:35.088 updates as well as emerging treatments.

NOTE Confidence: 0.82992303

00:02:35.090 --> 00:02:36.490 For for this condition.

NOTE Confidence: 0.82992303

00:02:36.490 --> 00:02:39.045 So I picked up this patient after

NOTE Confidence: 0.82992303

00:02:39.045 --> 00:02:41.691 some time that she was already being

NOTE Confidence: 0.82992303

00:02:41.691 --> 00:02:44.240 evaluated at our Norwalk Sleep Clinic.

NOTE Confidence: 0.82992303

00:02:44.240 --> 00:02:46.728 This was a 52 year old female who

NOTE Confidence: 0.82992303

00:02:46.728 --> 00:02:48.165 initially presented for evaluation

NOTE Confidence: 0.82992303

00:02:48.165 --> 00:02:50.045 of hypersomnia and non restorative

NOTE Confidence: 0.82992303

00:02:50.045 --> 00:02:51.759 sleep for over 20 years.

NOTE Confidence: 0.82992303

00:02:51.760 --> 00:02:54.077 So it was interesting that she would

NOTE Confidence: 0.82992303

00:02:54.077 --> 00:02:57.215 go to bed at 8:00 PM fall asleep like

NOTE Confidence: 0.82992303

00:02:57.215 --> 00:02:59.970 she would say within 5 minutes or less.

NOTE Confidence: 0.82992303

00:02:59.970 --> 00:03:01.306 There was no snoring.

NOTE Confidence: 0.82992303

00:03:01.306 --> 00:03:03.310 No witnessed Apneic episodes by her

NOTE Confidence: 0.82992303

00:03:03.375 --> 00:03:05.376 bed partner. No gasping for air.

NOTE Confidence: 0.82992303

00:03:05.376 --> 00:03:08.019 No Brooks is no nocturia and she would

NOTE Confidence: 0.82992303

00:03:08.019 --> 00:03:10.507 wake up at 7:00 AM with alarm Clock.

NOTE Confidence: 0.82992303

00:03:10.510 --> 00:03:12.519 What was impressive was her sleep inertia,

NOTE Confidence: 0.82992303

00:03:12.520 --> 00:03:14.599 which would last more than 30 minutes

NOTE Confidence: 0.82992303

00:03:14.599 --> 00:03:17.263 at a time to a point where her husband

NOTE Confidence: 0.82992303

00:03:17.263 --> 00:03:19.796 had to bring her two mugs of coffee to

NOTE Confidence: 0.82992303

00:03:19.796 --> 00:03:22.290 bed in order for her to kind of start

NOTE Confidence: 0.82992303

00:03:22.290 --> 00:03:24.859 moving and be able to get out of bed.

NOTE Confidence: 0.82992303

00:03:24.860 --> 00:03:27.012 She worked in a city and so she

NOTE Confidence: 0.82992303

00:03:27.012 --> 00:03:29.331 also slept on the way to work on a

NOTE Confidence: 0.82992303

00:03:29.331 --> 00:03:31.131 train and then she napped another

NOTE Confidence: 0.82992303

00:03:31.131 --> 00:03:33.469 two to four hours during the day,

NOTE Confidence: 0.82992303

00:03:33.470 --> 00:03:35.479 try to sneak in her naps at

NOTE Confidence: 0.82992303

00:03:35.479 --> 00:03:36.340 work strikes again.

NOTE Confidence: 0.82992303

00:03:36.340 --> 00:03:37.672 If she was home,

NOTE Confidence: 0.82992303

00:03:37.672 --> 00:03:39.670 she would sleep up to four

NOTE Confidence: 0.82992303

00:03:39.755 --> 00:03:41.228 hours in afternoon.

NOTE Confidence: 0.82992303

00:03:41.230 --> 00:03:43.666 She denied a history of cataplexy.

NOTE Confidence: 0.82992303

00:03:43.670 --> 00:03:46.112 There was no sleep paralysis or

NOTE Confidence: 0.82992303

00:03:46.112 --> 00:03:47.740 did not hypnagogic hallucinations.

NOTE Confidence: 0.82992303

00:03:47.740 --> 00:03:50.182 She never had vivid dreams and

NOTE Confidence: 0.82992303

00:03:50.182 --> 00:03:52.273 freshly couldn't even remember any

NOTE Confidence: 0.82992303

00:03:52.273 --> 00:03:54.595 of her dreams denied having any

NOTE Confidence: 0.82992303

00:03:54.595 --> 00:03:56.699 history of Parasomnias her daughter,

NOTE Confidence: 0.82992303

00:03:56.700 --> 00:03:59.549 who was at this point a teenager,

NOTE Confidence: 0.82992303

00:03:59.550 --> 00:04:01.098 also has Hypersomnolence Ann.

NOTE Confidence: 0.82992303

00:04:01.098 --> 00:04:04.020 Mom has Parkinson's no use of alcohol.

NOTE Confidence: 0.82992303

00:04:04.020 --> 00:04:06.456 No user ballistic drugs or smoking.

NOTE Confidence: 0.82992303

00:04:06.460 --> 00:04:08.780 She's not on any medications

NOTE Confidence: 0.82992303

00:04:08.780 --> 00:04:11.100 or an an anti depressants.

NOTE Confidence: 0.82992303

00:04:11.100 --> 00:04:13.320 Worked in administrations and you know,

NOTE Confidence: 0.82992303

00:04:13.320 --> 00:04:16.458 takes care of her family members.

NOTE Confidence: 0.82992303

00:04:16.460 --> 00:04:19.322 Her on a physical exam was

NOTE Confidence: 0.82992303

00:04:19.322 --> 00:04:21.620 significant for BMI of 30.

NOTE Confidence: 0.82992303

00:04:21.620 --> 00:04:23.965 Mallampati was two and an

NOTE Confidence: 0.82992303

00:04:23.965 --> 00:04:26.310 extra conference was 12 inches,

NOTE Confidence: 0.82992303

00:04:26.310 --> 00:04:29.010 so PSG was done which essentially

NOTE Confidence: 0.82992303

00:04:29.010 --> 00:04:30.810 essentially showed a good

NOTE Confidence: 0.82992303

00:04:30.894 --> 00:04:32.878 sleep efficiency of 95.1%.

NOTE Confidence: 0.82992303

00:04:32.880 --> 00:04:35.220 Sleep onset was 3.5 minutes,

NOTE Confidence: 0.82992303

00:04:35.220 --> 00:04:39.336 but ram latency from sleep onset was

NOTE Confidence: 0.82992303

00:04:39.336 --> 00:04:43.719 about 141 minutes or hi was actually 3.5.

NOTE Confidence: 0.82992303

00:04:43.720 --> 00:04:46.632 So this is just to see the hypnogram

NOTE Confidence: 0.82992303

00:04:46.632 --> 00:04:48.946 to demonstrate that she rather fell

NOTE Confidence: 0.82992303

00:04:48.946 --> 00:04:51.975 asleep quite quickly and the RAM on set

NOTE Confidence: 0.82992303

00:04:51.975 --> 00:04:54.711 was over 90 minutes into her sleep onset.

NOTE Confidence: 0.82992303

00:04:54.720 --> 00:04:57.000 MSIT was done an what you see here

NOTE Confidence: 0.82992303

00:04:57.000 --> 00:04:59.140 is that her average sleep latency

NOTE Confidence: 0.82992303

00:04:59.140 --> 00:05:01.384 was one minute and 30 seconds

9

NOTE Confidence: 0.7396026

00:05:01.452 --> 00:05:03.558 and there were no ramsley naps.

NOTE Confidence: 0.80397564

00:05:05.760 --> 00:05:09.328 So that brings us to Asia Pathic hypersomnia,

NOTE Confidence: 0.80397564

00:05:09.330 --> 00:05:12.078 which is defined as quote, unquote,

NOTE Confidence: 0.80397564

00:05:12.078 --> 00:05:14.668 chronic neurologic disorder that manifests

NOTE Confidence: 0.80397564

00:05:14.668 --> 00:05:16.740 as pathologic daytime sleepiness.

NOTE Confidence: 0.80397564

00:05:16.740 --> 00:05:19.211 Just to go into histories that in

NOTE Confidence: 0.80397564

00:05:19.211 --> 00:05:21.856 general lot of things in Sleep Medicine

NOTE Confidence: 0.80397564

00:05:21.856 --> 00:05:25.070 are more or less young and kind of GNU,

NOTE Confidence: 0.80397564

00:05:25.070 --> 00:05:26.626 GNU, GNU diagnosis established,

NOTE Confidence: 0.80397564

00:05:26.626 --> 00:05:29.348 but the first time you get the

NOTE Confidence: 0.80397564

00:05:29.348 --> 00:05:31.574 Kuiper Sammy kind of gets on this,

NOTE Confidence: 0.80397564

00:05:31.580 --> 00:05:33.757 our medical map is around 1956 when

NOTE Confidence: 0.80397564

00:05:33.757 --> 00:05:36.239 Doctor Bedrich Roth Equal was a check

NOTE Confidence: 0.80397564

00:05:36.239 --> 00:05:37.731 neurobiologists and your physiologists

NOTE Confidence: 0.80397564

00:05:37.731 --> 00:05:40.097 and sleep researcher identify that this

NOTE Confidence: 0.80397564

00:05:40.097 --> 00:05:42.047 condition as this sleep drunkenness

NOTE Confidence: 0.80397564

00:05:42.047 --> 00:05:45.070 and kind of coined this term.

NOTE Confidence: 0.80397564

00:05:45.070 --> 00:05:47.702 And he thought of it as a symptom

NOTE Confidence: 0.80397564

00:05:47.702 --> 00:05:51.146 as well as a syndrome in 1966 that

NOTE Confidence: 0.80397564

00:05:51.146 --> 00:05:53.430 the demands accordingly wrote that,

NOTE Confidence: 0.80397564

00:05:53.430 --> 00:05:55.818 and I think this is important

NOTE Confidence: 0.80397564

00:05:55.818 --> 00:05:58.200 because it this takes it apart,

NOTE Confidence: 0.80397564

00:05:58.200 --> 00:06:00.588 takes it as a separate entity

NOTE Confidence: 0.80397564

00:06:00.588 --> 00:06:01.384 from narcolepsy.

NOTE Confidence: 0.80397564

00:06:01.390 --> 00:06:03.922 Those patients without cataplexy or sleep

NOTE Confidence: 0.80397564

00:06:03.922 --> 00:06:06.559 paralysis holes of failed to show sleep,

NOTE Confidence: 0.80397564

00:06:06.560 --> 00:06:08.948 onset REM periods in laboratory tests,

NOTE Confidence: 0.80397564

00:06:08.950 --> 00:06:10.940 probably do not have narcolepsy,

NOTE Confidence: 0.80397564

00:06:10.940 --> 00:06:12.925 and should be relegated to

NOTE Confidence: 0.80397564

00:06:12.925 --> 00:06:14.116 another diagnostic category.

NOTE Confidence: 0.80397564

00:06:14.120 --> 00:06:15.500 Another 10 years.

NOTE Confidence: 0.80397564

00:06:15.500 --> 00:06:16.880 Dash is by.

NOTE Confidence: 0.80397564

00:06:16.880 --> 00:06:17.272 Again,

NOTE Confidence: 0.80397564

00:06:17.272 --> 00:06:19.624 Doctor Roth reports about 642 cases

NOTE Confidence: 0.80397564

00:06:19.624 --> 00:06:21.808 of patients with narcolepsy and

NOTE Confidence: 0.80397564

00:06:21.808 --> 00:06:24.604 hypersomnia and coins this term age

NOTE Confidence: 0.80397564

00:06:24.604 --> 00:06:26.801 opathic hypersomnia is to separate

NOTE Confidence: 0.80397564

00:06:26.801 --> 00:06:28.397 this patients from narcoleptics

NOTE Confidence: 0.80397564

00:06:28.397 --> 00:06:30.384 and there are two categories.

NOTE Confidence: 0.80397564

00:06:30.384 --> 00:06:32.736 There's defined as Paula symptomatic form

NOTE Confidence: 0.80397564

00:06:32.736 --> 00:06:35.539 where they have excessive daytime sleepiness,

NOTE Confidence: 0.80397564

00:06:35.540 --> 00:06:38.494 nocturnal sleep duration more than 12 hours,

NOTE Confidence: 0.80397564

00:06:38.500 --> 00:06:39.976 and sleep inertia,

NOTE Confidence: 0.80397564

00:06:39.976 --> 00:06:42.436 and then there's a monosymptomatic

NOTE Confidence: 0.80397564

00:06:42.436 --> 00:06:44.706 form which is basically access

NOTE Confidence: 0.80397564

00:06:44.706 --> 00:06:47.112 if there are no sleep 1979.

NOTE Confidence: 0.80397564

00:06:47.120 --> 00:06:50.726 We have a diagnosis or diagnosis

NOTE Confidence: 0.80397564

00:06:50.726 --> 00:06:52.529 established of idiopathic.

NOTE Confidence: 0.80397564

00:06:52.530 --> 00:06:54.395 Dennis hypersomnolence and it was

NOTE Confidence: 0.80397564

00:06:54.395 --> 00:06:56.795 defined quote unquote as a disorder

NOTE Confidence: 0.80397564

00:06:56.795 --> 00:06:58.663 of excessive daytime somnolence

NOTE Confidence: 0.80397564

00:06:58.663 --> 00:07:00.531 without irresistible need to

NOTE Confidence: 0.80397564

00:07:00.531 --> 00:07:02.676 sleep as a scene and narcolepsy,

NOTE Confidence: 0.80397564

00:07:02.680 --> 00:07:04.816 and again now with saying there

NOTE Confidence: 0.80397564

00:07:04.816 --> 00:07:07.229 should be no so Rams on PSG.

NOTE Confidence: 0.27132785

00:07:09.500 --> 00:07:13.254 All. This is a huge opathic hypersomnia

NOTE Confidence: 0.27132785

00:07:13.254 --> 00:07:14.670 dynamic diagnostic criteria in

NOTE Confidence: 0.27132785

00:07:14.728 --> 00:07:16.552 the Inter internal international

NOTE Confidence: 0.27132785

00:07:16.552 --> 00:07:18.376 classification of sleep disorders.

NOTE Confidence: 0.27132785

00:07:18.380 --> 00:07:21.628 First addition to go over this very

NOTE Confidence: 0.27132785

00:07:21.628 --> 00:07:24.373 quickly is basically all the following

NOTE Confidence: 0.27132785

00:07:24.373 --> 00:07:27.327 criteria must be met so they have

NOTE Confidence: 0.27132785

00:07:27.419 --> 00:07:29.989 to be daily daytime sleepiness.

NOTE Confidence: 0.27132785

00:07:29.990 --> 00:07:31.790 Which would be present for

NOTE Confidence: 0.27132785

00:07:31.790 --> 00:07:33.230 at least three months.

NOTE Confidence: 0.27132785

00:07:33.230 --> 00:07:33.862 No cataplexy,

NOTE Confidence: 0.27132785

00:07:33.862 --> 00:07:36.074 which becomes very important as to which

NOTE Confidence: 0.27132785

00:07:36.074 --> 00:07:38.628 are differentiated from narcolepsy type one.

NOTE Confidence: 0.27132785

00:07:38.630 --> 00:07:41.528 No MSL? T evidence of narcolepsy.

NOTE Confidence: 0.27132785

00:07:41.530 --> 00:07:43.238 An electrophysiology evidence of

NOTE Confidence: 0.27132785

00:07:43.238 --> 00:07:44.946 hypersomnolence dis defined as

NOTE Confidence: 0.27132785

00:07:44.946 --> 00:07:46.630 either mean sleep latency animus

NOTE Confidence: 0.27132785

00:07:46.630 --> 00:07:48.940 Lt of less or equal to 8 minutes,

NOTE Confidence: 0.27132785

00:07:48.940 --> 00:07:52.470 or at least 11 hours of sleep for 24 hours,

NOTE Confidence: 0.27132785

00:07:52.470 --> 00:07:55.294 which could be documented over 24 hour PSG.

NOTE Confidence: 0.27132785

00:07:55.300 --> 00:07:57.400 I'm not sure how many labs

NOTE Confidence: 0.27132785

00:07:57.400 --> 00:07:59.180 actually do 24 hour PSG,

NOTE Confidence: 0.27132785

00:07:59.180 --> 00:08:01.520 but another way to look at it is to

NOTE Confidence: 0.27132785

00:08:01.520 --> 00:08:03.605 do actigraphy and calculate that

NOTE Confidence: 0.27132785

00:08:03.605 --> 00:08:06.233 amount of sleep time through that.

NOTE Confidence: 0.27132785

00:08:06.240 --> 00:08:08.058 One of the most important thing

NOTE Confidence: 0.27132785

00:08:08.058 --> 00:08:10.964 to do is to make sure we rule

NOTE Confidence: 0.27132785

00:08:10.964 --> 00:08:12.584 out insufficient sleep time,

NOTE Confidence: 0.27132785

00:08:12.590 --> 00:08:15.694 which we can do with the Sleep Diaries.

NOTE Confidence: 0.27132785

00:08:15.700 --> 00:08:18.010 And Actigraphy here is especially important.

NOTE Confidence: 0.27132785

00:08:18.010 --> 00:08:19.940 No other disorders substance use.

NOTE Confidence: 0.27132785

00:08:19.940 --> 00:08:21.480 Better explains the symptoms.

NOTE Confidence: 0.27132785

00:08:21.480 --> 00:08:23.020 So in a way,

NOTE Confidence: 0.27132785

00:08:23.020 --> 00:08:25.708 it becomes sort of diagnosis of exclusion.

NOTE Confidence: 0.808584281481481

00:08:28.140 --> 00:08:31.124 So. If we this this table was published

NOTE Confidence: 0.808584281481481

00:08:31.124 --> 00:08:34.428 in Chest in 2015 and it basically kind

NOTE Confidence: 0.808584281481481

00:08:34.428 --> 00:08:37.230 of gives you diagnostic criteria in

NOTE Confidence: 0.808584281481481

00:08:37.230 --> 00:08:39.900 comparison with narcolepsy type one.

NOTE Confidence: 0.808584281481481

00:08:39.900 --> 00:08:42.230 I collected tattoo and idiopathic

NOTE Confidence: 0.808584281481481

00:08:42.230 --> 00:08:45.019 hypersomnia and you see that what

NOTE Confidence: 0.808584281481481

00:08:45.019 --> 00:08:47.651 connects all of them is this daily

NOTE Confidence: 0.808584281481481

00:08:47.651 --> 00:08:50.590 periods of irrepressible need to sleep.

NOTE Confidence: 0.808584281481481

00:08:50.590 --> 00:08:52.888 But again, you have mean sleep

NOTE Confidence: 0.808584281481481

00:08:52.888 --> 00:08:55.250 latency of less than 8 minutes,

NOTE Confidence: 0.808584281481481

00:08:55.250 --> 00:08:57.566 which applies to all of them.

NOTE Confidence: 0.808584281481481

00:08:57.570 --> 00:08:59.898 And then the so ramps start

NOTE Confidence: 0.808584281481481

00:08:59.898 --> 00:09:01.062 differentiating the narcolepsy,

NOTE Confidence: 0.808584281481481

00:09:01.070 --> 00:09:02.573 fromage opathic hypersomnia.

NOTE Confidence: 0.808584281481481

00:09:02.573 --> 00:09:05.579 So in idiopathic hypersomnia need to

NOTE Confidence: 0.808584281481481

00:09:05.579 --> 00:09:08.237 have fewer than two storms on SLT.

NOTE Confidence: 0.808584281481481

00:09:08.240 --> 00:09:10.115 And that's also including the

NOTE Confidence: 0.808584281481481

00:09:10.115 --> 00:09:11.990 storm and not PSG itself.

NOTE Confidence: 0.73693526

00:09:14.400 --> 00:09:17.214 Another way to look is at cataplexy,

NOTE Confidence: 0.73693526

00:09:17.220 --> 00:09:18.832 but presence of cataplexy

NOTE Confidence: 0.73693526

00:09:18.832 --> 00:09:20.847 applies to narcolepsy type one,

NOTE Confidence: 0.73693526

00:09:20.850 --> 00:09:23.979 and there's by default should be no

NOTE Confidence: 0.73693526

00:09:23.979 --> 00:09:27.069 cataplexy for each opathic hypersomnia.

NOTE Confidence: 0.73693526

00:09:27.070 --> 00:09:28.960 Yes Sir, for hypocretin one

NOTE Confidence: 0.73693526

00:09:28.960 --> 00:09:30.472 concentration less than 110.

NOTE Confidence: 0.73693526

00:09:30.480 --> 00:09:32.604 Guess it's not a very common

NOTE Confidence: 0.73693526

00:09:32.604 --> 00:09:34.913 diagnostic tool that we use to

NOTE Confidence: 0.73693526

00:09:34.913 --> 00:09:36.549 diagnose narcolepsy type one,

NOTE Confidence: 0.73693526

00:09:36.550 --> 00:09:38.998 but it would be that that level is

NOTE Confidence: 0.73693526

00:09:38.998 --> 00:09:42.349 normal in neck electric Type 2 as well

NOTE Confidence: 0.73693526

00:09:42.349 --> 00:09:44.129 as idiopathic hypersomnia patients.

NOTE Confidence: 0.804784

00:09:46.230 --> 00:09:48.762 Again, Actigraphy has a role in

NOTE Confidence: 0.804784

00:09:48.762 --> 00:09:51.778 diagnosing to look at the, you know,

NOTE Confidence: 0.804784

00:09:51.778 --> 00:09:54.098 insufficient sleep time versus the

NOTE Confidence: 0.804784

00:09:54.098 --> 00:09:56.857 amount of time that patients actually

NOTE Confidence: 0.804784

00:09:56.857 --> 00:10:00.250 sleep in a 24 hour period. Very imp.

NOTE Confidence: 0.804784

00:10:00.250 --> 00:10:01.890 Wouldn't you always calculate?

NOTE Confidence: 0.804784

00:10:01.890 --> 00:10:05.082 Make sure that we don't have insufficient

NOTE Confidence: 0.804784

00:10:05.082 --> 00:10:07.210 sleep syndrome and rule out,

NOTE Confidence: 0.804784

00:10:07.210 --> 00:10:09.920 maybe even other issues like

NOTE Confidence: 0.804784

00:10:09.920 --> 00:10:12.630 psychiatric issue that can predispose

NOTE Confidence: 0.804784

00:10:12.713 --> 00:10:15.668 somebody to hypersomnolence as well.

NOTE Confidence: 0.804784

00:10:15.670 --> 00:10:17.250 So Epidemiology will prevalence

NOTE Confidence: 0.804784

00:10:17.250 --> 00:10:19.624 is not really well known. Why?

NOTE Confidence: 0.804784

00:10:19.624 --> 00:10:21.988 Because we don't really have the

NOTE Confidence: 0.804784

00:10:21.988 --> 00:10:24.085 robust studies, to my knowledge,

NOTE Confidence: 0.804784

00:10:24.085 --> 00:10:26.260 reports are suggestive of idiopathic

NOTE Confidence: 0.804784

00:10:26.260 --> 00:10:28.541 hypersomnia being 5 to 1010 times

NOTE Confidence: 0.804784

00:10:28.541 --> 00:10:29.889 less common than narcolepsy.

NOTE Confidence: 0.804784

00:10:29.890 --> 00:10:32.396 Or is it because we kind of

NOTE Confidence: 0.804784

00:10:32.396 --> 00:10:35.029 misdiagnosed it or don't recognize it?

NOTE Confidence: 0.804784

00:10:35.030 --> 00:10:37.000 I'm not really sure estimated

NOTE Confidence: 0.804784

00:10:37.000 --> 00:10:40.512 to be about 1% of patients in a

NOTE Confidence: 0.804784

00:10:40.512 --> 00:10:42.444 neurological respiratory sleep centers.

NOTE Confidence: 0.804784

00:10:42.450 --> 00:10:45.355 So going back to the Wisconsin sleep

NOTE Confidence: 0.804784

00:10:45.355 --> 00:10:47.711 Cohort basically showed that about 20

NOTE Confidence: 0.804784

00:10:47.711 --> 00:10:50.540 three point 838% of men and 22.90% of

NOTE Confidence: 0.804784

00:10:50.540 --> 00:10:52.841 women in that cohort showed Msellati

NOTE Confidence: 0.804784

00:10:52.841 --> 00:10:55.844 findings of sleep onset of less than,

NOTE Confidence: 0.804784

00:10:55.850 --> 00:10:58.208 equal or less than 8 minutes.

NOTE Confidence: 0.804784

00:10:58.210 --> 00:10:59.782 We know it's higher,

NOTE Confidence: 0.804784

00:10:59.782 --> 00:11:00.568 more prevalent,

NOTE Confidence: 0.804784

00:11:00.570 --> 00:11:04.186 and woman an age events at various and

NOTE Confidence: 0.804784

00:11:04.186 --> 00:11:08.046 it will range between 10 to 30 years.

NOTE Confidence: 0.804784

00:11:08.050 --> 00:11:10.070 So is there genetic predisposition,

NOTE Confidence: 0.804784

00:11:10.070 --> 00:11:12.610 family history of excessive sleepiness

NOTE Confidence: 0.804784

00:11:12.610 --> 00:11:14.642 or another central hypersomnia

NOTE Confidence: 0.804784

00:11:14.642 --> 00:11:16.676 disorder is seen in about 34 to

NOTE Confidence: 0.804784

00:11:16.676 --> 00:11:18.930 38% of patients diagnosed with IH.

NOTE Confidence: 0.804784

00:11:18.930 --> 00:11:21.744 There is a parent child transmission which

NOTE Confidence: 0.804784

00:11:21.744 --> 00:11:24.569 is observed about 12.5% of IH patients.

NOTE Confidence: 0.804784

00:11:24.569 --> 00:11:25.778 Or for example,

NOTE Confidence: 0.804784

00:11:25.780 --> 00:11:28.198 if there's if these patients don't

NOTE Confidence: 0.804784

00:11:28.198 --> 00:11:29.810 carry the official diagnosis,

NOTE Confidence: 0.804784

00:11:29.810 --> 00:11:32.674 then you know if you do the history

NOTE Confidence: 0.804784

00:11:32.674 --> 00:11:35.854 you'd find out that maybe one of their

NOTE Confidence: 0.804784

00:11:35.854 --> 00:11:38.769 parents or first degree relatives would.

NOTE Confidence: 0.804784

00:11:38.770 --> 00:11:40.225 Would be sleeping for more

NOTE Confidence: 0.804784

00:11:40.225 --> 00:11:41.680 than 9.5 hours per night.

NOTE Confidence: 0.843064995

00:11:44.500 --> 00:11:47.560 We know that. There is Association

NOTE Confidence: 0.843064995

00:11:47.560 --> 00:11:50.260 and will between narcolepsy Type 1.

NOTE Confidence: 0.843064995

00:11:50.260 --> 00:11:52.633 And HLA DQ B 10602 allele and

NOTE Confidence: 0.843064995

00:11:52.633 --> 00:11:54.720 it's not observed in idiopathic

NOTE Confidence: 0.843064995

00:11:54.720 --> 00:11:57.195 hypersomnia like I've said before,

NOTE Confidence: 0.843064995

00:11:57.200 --> 00:11:59.888 CSF hypocretin one concentrations are normal

NOTE Confidence: 0.843064995

00:11:59.888 --> 00:12:02.910 in patients with each of at the copper.

NOTE Confidence: 0.843064995

00:12:02.910 --> 00:12:04.950 Sonya well now there is.

NOTE Confidence: 0.843064995

00:12:04.950 --> 00:12:07.320 There was some, you know discussions

NOTE Confidence: 0.843064995

00:12:07.320 --> 00:12:10.250 and talks about the role of histamine.

NOTE Confidence: 0.7599491

00:12:12.610 --> 00:12:15.158 And the reduce use of histamine has

NOTE Confidence: 0.7599491

00:12:15.158 --> 00:12:17.728 been observed in narcolepsy type one,

NOTE Confidence: 0.7599491

00:12:17.730 --> 00:12:22.446 as well as IH, but was normally no say.

NOTE Confidence: 0.7599491

00:12:22.450 --> 00:12:24.255 So this chart is essentially

NOTE Confidence: 0.7599491

00:12:24.255 --> 00:12:26.544 demonstrates you know the level of

NOTE Confidence: 0.7599491

00:12:26.544 --> 00:12:28.228 hypocretin levels in narcolepsy.

NOTE Confidence: 0.7599491

00:12:28.230 --> 00:12:30.558 Type one and you can see

NOTE Confidence: 0.7599491

00:12:30.558 --> 00:12:32.460 where the blue arrow is.

NOTE Confidence: 0.7599491

00:12:32.460 --> 00:12:34.390 That tends to be low.

NOTE Confidence: 0.7599491

00:12:34.390 --> 00:12:35.930 It's, but it's normal.

NOTE Confidence: 0.7599491

00:12:35.930 --> 00:12:36.700 In narcolepsy,

NOTE Confidence: 0.7599491

00:12:36.700 --> 00:12:38.620 without cataplexy as well as

NOTE Confidence: 0.7599491

00:12:38.620 --> 00:12:40.156 normal in idiopathic hypersomnia.

NOTE Confidence: 0.7113056

00:12:44.160 --> 00:12:48.756 So this was the study done

NOTE Confidence: 0.7113056

00:12:48.756 --> 00:12:51.820 by Doctor Scott Akashi.

NOTE Confidence: 0.7113056

00:12:51.820 --> 00:12:54.286 I'm mispronouncing the name and it

NOTE Confidence: 0.7113056

00:12:54.286 --> 00:12:56.953 basically shows that the lower CSF

NOTE Confidence: 0.7113056

00:12:56.953 --> 00:12:59.323 histamine levels mostly observed in

NOTE Confidence: 0.7113056

00:12:59.323 --> 00:13:01.765 non medicated patients and significant

NOTE Confidence: 0.7113056

00:13:01.765 --> 00:13:04.135 reductions in histamine levels were

NOTE Confidence: 0.7113056

00:13:04.135 --> 00:13:06.820 observed only in non medicated patients

NOTE Confidence: 0.7113056

00:13:06.820 --> 00:13:08.500 with hypocretin deficient narcolepsy

NOTE Confidence: 0.7113056

00:13:08.500 --> 00:13:11.060 with cataplexy and idiopathic hypersomnia.

NOTE Confidence: 0.7113056

00:13:11.060 --> 00:13:14.948 But then. Um, another study comes

NOTE Confidence: 0.7113056

00:13:14.948 --> 00:13:19.579 along and kind of disproves this.

NOTE Confidence: 0.7113056

00:13:19.580 --> 00:13:21.656 So, uh, is CSF.

NOTE Confidence: 0.7113056

00:13:21.656 --> 00:13:23.213 Histamine biomarker reflecting

NOTE Confidence: 0.7113056

00:13:23.213 --> 00:13:26.498 the degree of hypersomnia over H?

NOTE Confidence: 0.7113056

00:13:26.500 --> 00:13:31.855 And basically TMH is a stable metabolite

NOTE Confidence: 0.7113056

00:13:31.855 --> 00:13:37.508 of histamine and this group has measured.

NOTE Confidence: 0.7113056

00:13:37.510 --> 00:13:40.186 Histamine levels in CSF in patients

NOTE Confidence: 0.7113056

00:13:40.186 --> 00:13:41.970 with different ideologists of

NOTE Confidence: 0.7113056

00:13:42.047 --> 00:13:44.039 excessive daytime sleepiness,

NOTE Confidence: 0.7113056

00:13:44.040 --> 00:13:46.044 so narcolepsy type ones

NOTE Confidence: 0.7113056

00:13:46.044 --> 00:13:47.547 narcolepsy without cataplexy,

NOTE Confidence: 0.7113056

00:13:47.550 --> 00:13:50.862 Type 2 as well as in patients with

NOTE Confidence: 0.7113056

00:13:50.862 --> 00:13:54.075 age opathic hypersomnia and those

NOTE Confidence: 0.7113056

00:13:54.075 --> 00:13:56.370 with unspecified hypersomnia.

NOTE Confidence: 0.7113056

00:13:56.370 --> 00:13:59.506 And when they did their final analysis,

NOTE Confidence: 0.7113056

00:13:59.510 --> 00:14:01.310 basically they saw no

NOTE Confidence: 0.7113056

00:14:01.310 --> 00:14:02.210 significant associations.

NOTE Confidence: 0.642477

00:14:06.220 --> 00:14:10.724 So then all the glances turned to Gabo.

NOTE Confidence: 0.642477

00:14:10.730 --> 00:14:14.078 And you know God is promising.

NOTE Confidence: 0.642477

00:14:14.080 --> 00:14:16.418 So I guess I'm starting the slide

NOTE Confidence: 0.642477

00:14:16.418 --> 00:14:18.932 saying that there was a study that

NOTE Confidence: 0.642477

00:14:18.932 --> 00:14:21.092 looked at 32 hyper somnolent patients,

NOTE Confidence: 0.642477

00:14:21.100 --> 00:14:23.557 and so again a function GABA A.

NOTE Confidence: 0.642477

00:14:23.560 --> 00:14:25.940 But what does it mean?

NOTE Confidence: 0.642477

00:14:25.940 --> 00:14:29.223 So um Garba is receptors are the

NOTE Confidence: 0.642477

00:14:29.223 --> 00:14:30.630 major inhibitory neurotransmitter

NOTE Confidence: 0.642477

00:14:30.707 --> 00:14:32.767 receptors in mammalian brain.

NOTE Confidence: 0.642477

00:14:32.770 --> 00:14:36.578 Just to give a quick background they are

NOTE Confidence: 0.642477

00:14:36.578 --> 00:14:40.060 located in the postsynaptic membrane.

NOTE Confidence: 0.642477

00:14:40.060 --> 00:14:41.854 And there's fasic,

NOTE Confidence: 0.642477

24

00:14:41.854 --> 00:14:44.246 which is fast inhibition.

NOTE Confidence: 0.642477

00:14:44.250 --> 00:14:47.958 Uh, and each is a form of GABAA consists

NOTE Confidence: 0.642477

00:14:47.958 --> 00:14:51.154 of five homologous or identical

NOTE Confidence: 0.642477

00:14:51.154 --> 00:14:54.509 subunits around an essential chloride

NOTE Confidence: 0.642477

00:14:54.509 --> 00:14:58.539 ion selective channel created by Gabo.

NOTE Confidence: 0.642477

00:14:58.540 --> 00:15:01.718 We don't know how many isoforms of

NOTE Confidence: 0.642477

00:15:01.718 --> 00:15:03.849 these receptors actually do exist.

NOTE Confidence: 0.642477

00:15:03.850 --> 00:15:06.150 And these receptors can inactivate

NOTE Confidence: 0.642477

00:15:06.150 --> 00:15:08.450 widespread regions of the brain

NOTE Confidence: 0.642477

00:15:08.525 --> 00:15:10.757 and therefore dampen consciousness

NOTE Confidence: 0.642477

00:15:10.757 --> 00:15:12.989 and therefore regulate sleep.

NOTE Confidence: 0.642477

00:15:12.990 --> 00:15:15.540 An obviously GABA A receptors are

NOTE Confidence: 0.642477

00:15:15.540 --> 00:15:17.950 responsive to wide variety of drugs.

NOTE Confidence: 0.642477

00:15:17.950 --> 00:15:21.177 We all know and use Benzodiazepine's which

NOTE Confidence: 0.642477

00:15:21.177 --> 00:15:25.249 are used for sedatives and hypnotic effects.

NOTE Confidence: 0.642477

00:15:25.250 --> 00:15:27.190 But then the question is,

NOTE Confidence: 0.642477

00:15:27.190 --> 00:15:30.673 you know why is it a sign of hope?

NOTE Confidence: 0.642477

00:15:30.680 --> 00:15:31.058 Well,

NOTE Confidence: 0.642477

00:15:31.058 --> 00:15:33.704 because we haven't agonist of GABA A

NOTE Confidence: 0.642477

00:15:33.704 --> 00:15:35.586 receptors flumazenil which was shown

NOTE Confidence: 0.642477

00:15:35.586 --> 00:15:37.710 to improve vigilance and some patients

NOTE Confidence: 0.642477

00:15:37.710 --> 00:15:39.988 with hepatic encephalopathy as well,

NOTE Confidence: 0.642477

00:15:39.990 --> 00:15:43.218 and those who are sleep deprived.

NOTE Confidence: 0.642477

00:15:43.220 --> 00:15:44.972 We don't necessarily know

NOTE Confidence: 0.642477

00:15:44.972 --> 00:15:47.162 for sure why it works,

NOTE Confidence: 0.642477

00:15:47.170 --> 00:15:50.222 and we also know that the benefit

NOTE Confidence: 0.642477

00:15:50.222 --> 00:15:52.880 of this medication is short lived.

NOTE Confidence: 0.677344375

00:15:54.960 --> 00:15:59.498 Um? So like I said before, you know,

NOTE Confidence: 0.677344375

00:15:59.498 --> 00:16:02.396 this is a demonstration of the eyes,

NOTE Confidence: 0.677344375

00:16:02.400 --> 00:16:06.010 a form which is made of two A2 beta and

NOTE Confidence: 0.677344375

00:16:06.110 --> 00:16:09.416 one gamma subunit, and when the receptors

NOTE Confidence: 0.677344375

00:16:09.416 --> 00:16:12.330 are activated by the binding of GABA,

NOTE Confidence: 0.677344375

00:16:12.330 --> 00:16:14.745 the ion channel opens, allowing

NOTE Confidence: 0.677344375

00:16:14.745 --> 00:16:18.160 chloride ions to pass into the neuron.

NOTE Confidence: 0.677344375

00:16:18.160 --> 00:16:21.860 Negatively charged ions enter.

NOTE Confidence: 0.677344375

00:16:21.860 --> 00:16:25.088 In the influx of these negative

NOTE Confidence: 0.677344375

00:16:25.088 --> 00:16:27.861 charges inhibits neuron firing action

NOTE Confidence: 0.677344375

00:16:27.861 --> 00:16:31.059 potential and then you get sedation.

NOTE Confidence: 0.677344375

00:16:31.060 --> 00:16:33.566 Also, GABA is actually known to bind

NOTE Confidence: 0.677344375

00:16:33.566 --> 00:16:35.684 between Alpha subunit, an beta,

NOTE Confidence: 0.677344375

00:16:35.684 --> 00:16:38.816 which is was demonstrated on this.

NOTE Confidence: 0.677344375

00:16:38.820 --> 00:16:41.010 Picture. Um?

NOTE Confidence: 0.75092614

00:16:43.320 --> 00:16:45.558 And benzos can only buy in

NOTE Confidence: 0.75092614

00:16:45.558 --> 00:16:47.750 between Gama an Alpha subunit.

NOTE Confidence: 0.7954349

00:16:51.680 --> 00:16:54.459 So essentially to think about it is

NOTE Confidence: 0.7954349

00:16:54.459 --> 00:16:57.245 to say deficit of wakefulness means

NOTE Confidence: 0.7954349

00:16:57.245 --> 00:17:00.263 excessive activity of GABA a system.

NOTE Confidence: 0.7954349

00:17:00.270 --> 00:17:02.976 And how do we address it?

NOTE Confidence: 0.7954349

00:17:02.980 --> 00:17:05.240 How do we manage it?

NOTE Confidence: 0.7954349

00:17:05.240 --> 00:17:08.376 So the team at Emory speak speculate the

NOTE Confidence: 0.7954349

00:17:08.376 --> 00:17:10.769 existence of this endogenous ligands

NOTE Confidence: 0.7954349

00:17:10.769 --> 00:17:13.829 that can affect the receptor function.

NOTE Confidence: 0.7954349

00:17:13.830 --> 00:17:16.086 Essentially, that can normalize

NOTE Confidence: 0.7954349

00:17:16.086 --> 00:17:17.778 the receptor function.

NOTE Confidence: 0.7954349

00:17:17.780 --> 00:17:20.868 And they enrolled 10 men and 20 two

NOTE Confidence: 0.7954349

00:17:20.868 --> 00:17:24.306 women who were who had chronic primary

NOTE Confidence: 0.7954349

00:17:24.306 --> 00:17:27.759 hypersomnia they have for sleep in a

NOTE Confidence: 0.7954349

00:17:27.759 --> 00:17:30.919 scale beyond that mean would be about 17.

NOTE Confidence: 0.7954349

00:17:30.920 --> 00:17:34.232 And despite the fact that they've

NOTE Confidence: 0.7954349

00:17:34.232 --> 00:17:37.489 had plenty of hours of sleep.

NOTE Confidence: 0.7954349

00:17:37.490 --> 00:17:39.015 The main subject was what

NOTE Confidence: 0.7954349

00:17:39.015 --> 00:17:40.235 they were all mostly.

NOTE Confidence: 0.7954349

00:17:40.240 --> 00:17:42.994 Name it 30s and the mean BMI was 20,

NOTE Confidence: 0.7954349

00:17:43.000 --> 00:17:44.192 about 25.

NOTE Confidence: 0.7954349

00:17:44.192 --> 00:17:46.576 And daytime sleepiness was

NOTE Confidence: 0.7954349

00:17:46.576 --> 00:17:49.560 also confirmed with the MSLT.

NOTE Confidence: 0.7954349

00:17:49.560 --> 00:17:52.248 So they identify the presence of

NOTE Confidence: 0.7954349

00:17:52.248 --> 00:17:54.668 endogenous substance in the CSF

NOTE Confidence: 0.7954349

00:17:54.668 --> 00:17:56.876 of patients with hypersomnolence,

NOTE Confidence: 0.7954349

00:17:56.880 --> 00:17:59.808 which increases GABA a inhibitory effects.

NOTE Confidence: 0.7954349

00:17:59.810 --> 00:18:02.185 This endogenous substance was shown

NOTE Confidence: 0.7954349

00:18:02.185 --> 00:18:05.635 to act to increase the influx of

NOTE Confidence: 0.7954349

00:18:05.635 --> 00:18:08.587 chloride ions through GABA a receptor,

NOTE Confidence: 0.7954349

00:18:08.590 --> 00:18:12.556 increase the inhibition of the neuron.

NOTE Confidence: 0.7954349

00:18:12.560 --> 00:18:14.250 So it does not activate.

NOTE Confidence: 0.7954349

00:18:14.250 --> 00:18:16.266 There is the government sector itself,

NOTE Confidence: 0.7954349

00:18:16.270 --> 00:18:19.276 it just makes it more efficient.

NOTE Confidence: 0.7954349

00:18:19.280 --> 00:18:22.660 An flumazenil prevents the binding.

NOTE Confidence: 0.7954349

00:18:22.660 --> 00:18:26.264 Um Overture gabaa receptor.

NOTE Confidence: 0.7954349

00:18:26.264 --> 00:18:28.967 So when it?

NOTE Confidence: 0.7954349

00:18:28.970 --> 00:18:31.694 When the GABAA receptor is exposed

NOTE Confidence: 0.7954349

00:18:31.694 --> 00:18:34.284 to this endogenous ligands as well

NOTE Confidence: 0.7954349

00:18:34.284 --> 00:18:36.713 As for marginals at the same time,

NOTE Confidence: 0.7954349

00:18:36.720 --> 00:18:38.760 the function of the receptor

NOTE Confidence: 0.7954349

00:18:38.760 --> 00:18:39.984 returns to normal.

NOTE Confidence: 0.7954349

00:18:39.990 --> 00:18:42.030 Therefore, be fewer negatively charged.

NOTE Confidence: 0.7954349

00:18:42.030 --> 00:18:44.070 Chloride ions entering the neuron,

NOTE Confidence: 0.7954349

00:18:44.070 --> 00:18:46.380 and therefore they will be normal

NOTE Confidence: 0.7954349

00:18:46.380 --> 00:18:48.960 level of inhibition in less sedation.

NOTE Confidence: 0.7815892

00:18:52.670 --> 00:18:54.260 Again, benzos benzodiazepine's.

NOTE Confidence: 0.7815892

00:18:54.260 --> 00:18:57.970 An indulgent molecules are not the same,

NOTE Confidence: 0.7815892

00:18:57.970 --> 00:19:01.680 and in general more research is needed.

NOTE Confidence: 0.7815892

00:19:01.680 --> 00:19:04.330 Needed to understand this phenomenon.

NOTE Confidence: 0.83709663

00:19:06.430 --> 00:19:08.810 Well, the next question is,

NOTE Confidence: 0.83709663

00:19:08.810 --> 00:19:12.023 is there role of circadian regulation in

NOTE Confidence: 0.83709663

00:19:12.023 --> 00:19:15.162 hypersomnia and we would be looking and

NOTE Confidence: 0.83709663

00:19:15.162 --> 00:19:18.335 we know that the circadian master Clock

NOTE Confidence: 0.83709663

00:19:18.335 --> 00:19:21.190 is located in suprachiasmatic nucleus,

NOTE Confidence: 0.83709663

00:19:21.190 --> 00:19:24.865 is driven by a network of transcriptional

NOTE Confidence: 0.83709663

00:19:24.865 --> 00:19:28.490 feedback loops of circadian Clock genes.

NOTE Confidence: 0.83709663

00:19:28.490 --> 00:19:31.186 Um? There was a study done by Lippert

NOTE Confidence: 0.83709663

00:19:31.186 --> 00:19:32.857 who basically investigated dynamics

NOTE Confidence: 0.83709663

00:19:32.857 --> 00:19:35.635 of expression of circadian Clock genes

NOTE Confidence: 0.83709663

00:19:35.635 --> 00:19:38.349 in dermal fibroblast of patients with

NOTE Confidence: 0.83709663

00:19:38.349 --> 00:19:40.929 idiopathic hypersomnia had 10 of them

NOTE Confidence: 0.83709663

00:19:40.930 --> 00:19:43.562 in comparison to those who were healthy

NOTE Confidence: 0.83709663

00:19:43.562 --> 00:19:46.677 and they saw that there was a circadian

NOTE Confidence: 0.83709663

00:19:46.677 --> 00:19:49.375 ask ask isolation of Clock genes and

NOTE Confidence: 0.83709663

00:19:49.375 --> 00:19:52.586 basically these were so you have on the left.

NOTE Confidence: 0.83709663

00:19:52.586 --> 00:19:55.218 You have healthy controls and a jetpack.

NOTE Confidence: 0.83709663

00:19:55.220 --> 00:19:57.145 Patients with opathic hypersomnia and

NOTE Confidence: 0.83709663

00:19:57.145 --> 00:20:00.188 you see that there is a difference in.

NOTE Confidence: 0.83709663

00:20:00.190 --> 00:20:04.774 Amplitude. Are related to each of the genes,

NOTE Confidence: 0.83709663

00:20:04.780 --> 00:20:06.965 so amplitude of the rhythmically

NOTE Confidence: 0.83709663

00:20:06.965 --> 00:20:10.468 expressed genes, BML, 1P1, and P or two.

NOTE Confidence: 0.83709663

00:20:10.470 --> 00:20:13.662 It was significantly dampened an patients

NOTE Confidence: 0.83709663

00:20:13.662 --> 00:20:18.097 in A5 internal fab list of patients with IH.

NOTE Confidence: 0.83709663

00:20:18.100 --> 00:20:20.956 So that suggests that there is an abnormality

NOTE Confidence: 0.83709663

00:20:20.956 --> 00:20:23.948 in the circadian Clock in iih patients.

NOTE Confidence: 0.82421756

00:20:28.350 --> 00:20:31.262 So to kind of summarize is you know

NOTE Confidence: 0.82421756

00:20:31.262 --> 00:20:34.679 so far what I've found in literature.

NOTE Confidence: 0.82421756

00:20:34.680 --> 00:20:37.872 A lot of it is not definite and

NOTE Confidence: 0.82421756

00:20:37.872 --> 00:20:41.090 still being studied and investigated.

NOTE Confidence: 0.82421756

00:20:41.090 --> 00:20:42.502 We know that hypocretin

NOTE Confidence: 0.82421756

00:20:42.502 --> 00:20:43.914 deficiency is not present.

NOTE Confidence: 0.82421756

00:20:43.920 --> 00:20:46.310 We know super spinal fluid

NOTE Confidence: 0.82421756

00:20:46.310 --> 00:20:48.222 from patients with age.

NOTE Confidence: 0.82421756

00:20:48.230 --> 00:20:50.432 Have been shown to enhance activity

NOTE Confidence: 0.82421756

00:20:50.432 --> 00:20:52.860 of GABA a GABA A receptors.

NOTE Confidence: 0.79670715

00:20:55.960 --> 00:20:58.924 Well, the next I guess approach

NOTE Confidence: 0.79670715

00:20:58.924 --> 00:21:03.226 to look at if there is immunol

NOTE Confidence: 0.79670715

00:21:03.226 --> 00:21:06.174 kind of immunological effects.

NOTE Confidence: 0.79670715

00:21:06.180 --> 00:21:08.988 So this was a study by Donna Karan

NOTE Confidence: 0.79670715

00:21:08.988 --> 00:21:11.646 Honda and they assessed immuno

NOTE Confidence: 0.79670715

00:21:11.646 --> 00:21:14.138 immunoglobulins IgG profiles in

NOTE Confidence: 0.79670715

00:21:14.138 --> 00:21:16.963 narcolepsy with cataplexy patients who

NOTE Confidence: 0.79670715

00:21:16.963 --> 00:21:20.008 had who are positive for each other.

NOTE Confidence: 0.79670715

00:21:20.010 --> 00:21:23.150 HLA DQ B 10602 allele.

NOTE Confidence: 0.79670715

00:21:23.150 --> 00:21:25.514 Um, as well as patients with

NOTE Confidence: 0.79670715

00:21:25.514 --> 00:21:26.696 age opathic hypersomnia,

33

NOTE Confidence: 0.79670715

00:21:26.700 --> 00:21:31.364 as well as those who are healthy controls.

NOTE Confidence: 0.79670715

00:21:31.370 --> 00:21:33.815 So the distribution of serum

NOTE Confidence: 0.79670715

00:21:33.815 --> 00:21:35.771 IgG significantly differed among

NOTE Confidence: 0.79670715

00:21:35.771 --> 00:21:38.077 patients with narcolepsy type one.

NOTE Confidence: 0.79670715

00:21:38.080 --> 00:21:40.954 Those with my age and those

NOTE Confidence: 0.79670715

00:21:40.954 --> 00:21:42.870 who are healthy controls,

NOTE Confidence: 0.79670715

00:21:42.870 --> 00:21:46.694 so decreased IgG one decreased IgG 2 levels.

NOTE Confidence: 0.79670715

00:21:46.700 --> 00:21:49.718 Stable expression of IgG three an

NOTE Confidence: 0.79670715

00:21:49.718 --> 00:21:52.695 increase in proportion of IgG four

NOTE Confidence: 0.79670715

00:21:52.695 --> 00:21:55.317 was seen in narcolepsy type one.

NOTE Confidence: 0.79670715

00:21:55.320 --> 00:21:58.374 However, in contrast to that to

NOTE Confidence: 0.79670715

00:21:58.374 --> 00:22:01.150 narcolepsy type one and Type 1.

NOTE Confidence: 0.79670715

00:22:01.150 --> 00:22:03.322 In patients with idiopathic

NOTE Confidence: 0.79670715

00:22:03.322 --> 00:22:07.550 hypersomnia IgG one and I just do I

NOTE Confidence: 0.79670715

00:22:07.550 --> 00:22:10.609 did you 2 just imbalance was present.

NOTE Confidence: 0.79670715

00:22:10.610 --> 00:22:13.196 There was a decrease in IgG.

NOTE Confidence: 0.79670715

00:22:13.200 --> 00:22:15.312 Two increase in IgG,

NOTE Confidence: 0.79670715

00:22:15.312 --> 00:22:17.424 three analogy for levels.

NOTE Confidence: 0.79670715

00:22:17.430 --> 00:22:22.379 And that favors the theory of role

NOTE Confidence: 0.79670715

00:22:22.379 --> 00:22:25.371 of immunological differences between

NOTE Confidence: 0.79670715

00:22:25.371 --> 00:22:29.131 type One narcolepsy and idiopathic

NOTE Confidence: 0.79670715

00:22:29.131 --> 00:22:32.820 hypersomnia and the fact that.

NOTE Confidence: 0.79670715

00:22:32.820 --> 00:22:36.290 IgG one IgG to ratio.

NOTE Confidence: 0.79670715

00:22:36.290 --> 00:22:37.758 Energetic hypersomnia.

NOTE Confidence: 0.79670715

00:22:37.758 --> 00:22:39.960 Uh was increased,

NOTE Confidence: 0.79670715

00:22:39.960 --> 00:22:43.019 appoints out to a role of type

NOTE Confidence: 0.79670715

00:22:43.019 --> 00:22:46.169 one helper T cell involvement.

NOTE Confidence: 0.794419

00:22:50.180 --> 00:22:52.805 Well, a lot of these symptoms we

NOTE Confidence: 0.794419

00:22:52.805 --> 00:22:54.958 have already discussed to this point,

NOTE Confidence: 0.794419

00:22:54.960 --> 00:22:57.403 but guess two reviewed one last time

NOTE Confidence: 0.794419

00:22:57.403 --> 00:23:00.118 is to say well symptoms of iih,

NOTE Confidence: 0.794419

00:23:00.120 --> 00:23:02.696 what to look for when we are

NOTE Confidence: 0.794419

00:23:02.696 --> 00:23:03.800 interviewing our patients.

NOTE Confidence: 0.794419

00:23:03.800 --> 00:23:06.369 Long sleep duration more than 9 hours.

NOTE Confidence: 0.794419

00:23:06.370 --> 00:23:08.205 They've these patients will have

NOTE Confidence: 0.794419

00:23:08.205 --> 00:23:09.673 prolonged and unrefreshing naps,

NOTE Confidence: 0.794419

00:23:09.680 --> 00:23:11.880 so there tends to be no benefit an

NOTE Confidence: 0.794419

00:23:11.880 --> 00:23:14.003 you know prescribing them kind of

NOTE Confidence: 0.794419

00:23:14.003 --> 00:23:16.265 scheduled naps is there is benefit

NOTE Confidence: 0.794419

00:23:16.334 --> 00:23:18.634 with narcoleptics type one patients

NOTE Confidence: 0.794419

00:23:18.634 --> 00:23:20.934 sleep inertia and sleep drunkenness.

NOTE Confidence: 0.794419

00:23:20.940 --> 00:23:24.078 Basically the it's to mean prolonged

NOTE Confidence: 0.794419

00:23:24.078 --> 00:23:26.786 and pronounced difficulty with awakening

NOTE Confidence: 0.794419

00:23:26.786 --> 00:23:29.996 from nocturnal sleep and daytime naps.

NOTE Confidence: 0.794419

00:23:30.000 --> 00:23:33.198 Sensation of this brain fog cognitive

NOTE Confidence: 0.794419

00:23:33.198 --> 00:23:35.866 dysfunction so 79% of patients

NOTE Confidence: 0.794419

00:23:35.866 --> 00:23:38.531 with age report memory problems

NOTE Confidence: 0.794419

00:23:38.531 --> 00:23:40.130 and attention problems.

NOTE Confidence: 0.7858514

00:23:44.050 --> 00:23:46.867 Well, I guess on PSG you know roll out

NOTE Confidence: 0.7858514

00:23:46.867 --> 00:23:49.848 a sleep related breathing disorder.

NOTE Confidence: 0.7858514

00:23:49.850 --> 00:23:53.042 One thing to do. Sleep efficiency

NOTE Confidence: 0.7858514

00:23:53.042 --> 00:23:56.180 tends to be greater than 90%.

NOTE Confidence: 0.7858514

00:23:56.180 --> 00:23:58.160 They've been proposition of abnormalities

NOTE Confidence: 0.7858514

00:23:58.160 --> 00:24:00.910 in a slow wave sleep percentage,

NOTE Confidence: 0.7858514

00:24:00.910 --> 00:24:03.370 and there was a very small

NOTE Confidence: 0.7858514

00:24:03.370 --> 00:24:05.010 study that suggested increasing

NOTE Confidence: 0.7858514

00:24:05.089 --> 00:24:06.929 spindle activity in Egypt.

NOTE Confidence: 0.7858514

00:24:06.930 --> 00:24:09.378 Ethic cover somnia patients

NOTE Confidence: 0.7858514

00:24:09.378 --> 00:24:12.438 compared to those with narcolepsy.

NOTE Confidence: 0.7858514

00:24:12.440 --> 00:24:14.624 MSL T shows and mean sleep latency

NOTE Confidence: 0.7858514

00:24:14.624 --> 00:24:16.988 of equal or less than 8 minutes,

NOTE Confidence: 0.7858514

00:24:16.990 --> 00:24:19.265 no more than once or anonymous Lt.

NOTE Confidence: 0.7858514

00:24:19.270 --> 00:24:21.538 OK an I as I've mentioned before,

NOTE Confidence: 0.7858514

00:24:21.540 --> 00:24:24.740 objectively measured sleep time or.

NOTE Confidence: 0.7858514

00:24:24.740 --> 00:24:26.540 Sleep off 660 minutes.

NOTE Confidence: 0.85531336

00:24:30.330 --> 00:24:32.310 So differential diagnosis for ages,

NOTE Confidence: 0.85531336

00:24:32.310 --> 00:24:36.510 mainly narcolepsy type one and Type 2 and

NOTE Confidence: 0.85531336

00:24:36.510 --> 00:24:41.094 I think the you know there are a lot of.

NOTE Confidence: 0.85531336

00:24:41.100 --> 00:24:43.473 There's a lot of overlap in symptoms

NOTE Confidence: 0.85531336

00:24:43.473 --> 00:24:45.818 between the three of three conditions,

NOTE Confidence: 0.85531336

00:24:45.820 --> 00:24:49.188 but the biggest one to know is the

NOTE Confidence: 0.85531336

00:24:49.188 --> 00:24:52.309 cataplexy would only be present in Type 1.

NOTE Confidence: 0.85531336

00:24:52.310 --> 00:24:55.160 By the definition.

NOTE Confidence: 0.85531336

00:24:55.160 --> 00:24:57.860 So here we discuss cataplexy.

NOTE Confidence: 0.85531336

00:24:57.860 --> 00:25:00.564 Excessive daytime sleepiness is

NOTE Confidence: 0.85531336

00:25:00.564 --> 00:25:04.620 present in all three sleep paralysis.

NOTE Confidence: 0.85531336

00:25:04.620 --> 00:25:08.708 Is present mostly in type one type

NOTE Confidence: 0.85531336

00:25:08.708 --> 00:25:12.112 two and only 20% of idiopathic

NOTE Confidence: 0.85531336

00:25:12.112 --> 00:25:13.840 hypersomnia patients sleep.

NOTE Confidence: 0.85531336

00:25:13.840 --> 00:25:15.565 Hallucinations again mostly

NOTE Confidence: 0.85531336

00:25:15.565 --> 00:25:17.865 present in type one.

NOTE Confidence: 0.85531336

00:25:17.870 --> 00:25:20.174 Narcoleptic patients in about

NOTE Confidence: 0.85531336

00:25:20.174 --> 00:25:22.830 25% of patients with IH.

NOTE Confidence: 0.85531336

00:25:22.830 --> 00:25:25.950 And having all these symptoms together

NOTE Confidence: 0.85531336

00:25:26.045 --> 00:25:29.440 kind of brings you more to diagnosis

NOTE Confidence: 0.85531336

00:25:29.440 --> 00:25:33.677 of narcolepsy type one and not so much

NOTE Confidence: 0.85531336

00:25:33.677 --> 00:25:35.829 of idiopathic hypersomnia narcolepsy

NOTE Confidence: 0.85531336

00:25:35.829 --> 00:25:38.650 Type 2 fragmented nocturnal sleep,

NOTE Confidence: 0.85531336

00:25:38.650 --> 00:25:41.500 so people with narcolepsy type

NOTE Confidence: 0.85531336

00:25:41.500 --> 00:25:44.737 1 have lower sleep efficiency.

NOTE Confidence: 0.85531336

00:25:44.740 --> 00:25:47.308 But it's not typical in patients

NOTE Confidence: 0.85531336

00:25:47.308 --> 00:25:49.020 with age opathic hypersomnia,

NOTE Confidence: 0.85531336

00:25:49.020 --> 00:25:51.558 REM sleep behavior disorder may be

NOTE Confidence: 0.85531336

00:25:51.558 --> 00:25:54.580 seen in type one or collect ICS.

NOTE Confidence: 0.85531336

00:25:54.580 --> 00:25:57.155 It hasn't really been studied

NOTE Confidence: 0.85531336

00:25:57.155 --> 00:25:59.215 in those with IH.

NOTE Confidence: 0.85531336

00:25:59.220 --> 00:26:03.406 Um, sleep drunkenness is tends to be

NOTE Confidence: 0.85531336

00:26:03.406 --> 00:26:08.020 rare in narcolepsy, but common in age.

NOTE Confidence: 0.85531336

00:26:08.020 --> 00:26:09.430 Opathic hypersomnia.

NOTE Confidence: 0.85531336

00:26:09.430 --> 00:26:09.869 Um?

NOTE Confidence: 0.85531336

00:26:09.869 --> 00:26:12.064 Glow nocturnal sleep times armor

NOTE Confidence: 0.85531336

00:26:12.064 --> 00:26:15.039 would be unaware side for narcolepsy,

NOTE Confidence: 0.85531336

00:26:15.040 --> 00:26:17.050 but more common for idiopathic

NOTE Confidence: 0.85531336

00:26:17.050 --> 00:26:19.792 hypersomnia and the fact that naps in

NOTE Confidence: 0.85531336

00:26:19.792 --> 00:26:22.088 it's very subjective kind of to ask,

NOTE Confidence: 0.85531336

00:26:22.090 --> 00:26:24.316 do you feel refreshed or not?

NOTE Confidence: 0.85531336

00:26:24.320 --> 00:26:26.300 But Narcoleptics will tell you that

NOTE Confidence: 0.85531336

00:26:26.300 --> 00:26:28.923 the naps tend to be refreshing for

NOTE Confidence: 0.85531336

00:26:28.923 --> 00:26:30.983 them while they're not refreshing.

NOTE Confidence: 0.85531336

00:26:30.990 --> 00:26:33.690 For patients with idiopathic hypersomnia

NOTE Confidence: 0.85531336

00:26:33.690 --> 00:26:37.349 and they tend to take long naps.

NOTE Confidence: 0.85531336

00:26:37.350 --> 00:26:41.725 So how can you know this umbrella

NOTE Confidence: 0.85531336

00:26:41.725 --> 00:26:44.370 of differential diagnosis for

NOTE Confidence: 0.85531336

00:26:44.370 --> 00:26:46.998 hypersomnolence is is huge?

NOTE Confidence: 0.85531336

00:26:47.000 --> 00:26:49.030 You know you start with,

NOTE Confidence: 0.85531336

00:26:49.030 --> 00:26:49.420 well.

NOTE Confidence: 0.85531336

00:26:49.420 --> 00:26:51.370 Is there insufficient sleep time

NOTE Confidence: 0.85531336

00:26:51.370 --> 00:26:53.900 you consider delayed sleep phase syndrome?

NOTE Confidence: 0.85531336

00:26:53.900 --> 00:26:55.930 Hypersomnia may happen due to

NOTE Confidence: 0.85531336

00:26:55.930 --> 00:26:57.960 medical issues such as Parkinson,

NOTE Confidence: 0.85531336

00:26:57.960 --> 00:27:00.110 My atonic dystrophy and hypersomnia

NOTE Confidence: 0.85531336

00:27:00.110 --> 00:27:03.379 is can occur also due to psychiatric

NOTE Confidence: 0.85531336

00:27:03.379 --> 00:27:05.969 issues and it's interesting that.

NOTE Confidence: 0.85531336

00:27:05.970 --> 00:27:08.490 Looking at the Diagnostic and

NOTE Confidence: 0.85531336

00:27:08.490 --> 00:27:11.010 Statistical Manual of Mental Disorders,

NOTE Confidence: 0.85531336

00:27:11.010 --> 00:27:12.048 5th edition,

NOTE Confidence: 0.85531336

00:27:12.048 --> 00:27:14.643 hypersomnia is an optional clinical

NOTE Confidence: 0.85531336

00:27:14.643 --> 00:27:17.226 diagnostic criteria of several mental

NOTE Confidence: 0.85531336

00:27:17.226 --> 00:27:20.076 disorders and that would be included,

NOTE Confidence: 0.85531336

00:27:20.080 --> 00:27:22.600 including bipolar one Bipolar 2,

NOTE Confidence: 0.85531336

00:27:22.600 --> 00:27:27.500 which is more typical for bipolar 2.

NOTE Confidence: 0.85531336

00:27:27.500 --> 00:27:31.842 So patients with major depressive disorder,

NOTE Confidence: 0.85531336

00:27:31.842 --> 00:27:34.008 persistent depressive disorder,

NOTE Confidence: 0.85531336

00:27:34.008 --> 00:27:36.896 patients with schizoaffective disorder

NOTE Confidence: 0.85531336

00:27:36.896 --> 00:27:40.530 on other spectrum of schizophrenia,

NOTE Confidence: 0.85531336

00:27:40.530 --> 00:27:45.348 these patients will have this unusually

NOTE Confidence: 0.85531336

00:27:45.348 --> 00:27:48.560 high Epworth sleepiness scale.

NOTE Confidence: 0.85531336

00:27:48.560 --> 00:27:50.765 But what's important about them is this.

NOTE Confidence: 0.85531336

00:27:50.770 --> 00:27:52.230 This degree of sleepiness

NOTE Confidence: 0.85531336

00:27:52.230 --> 00:27:54.780 tends to vary from day to day.

NOTE Confidence: 0.85531336

00:27:54.780 --> 00:27:58.605 An night sleep tends to be very poor quality.

NOTE Confidence: 0.85531336

00:27:58.610 --> 00:28:01.898 Someone will report insomnia and again

NOTE Confidence: 0.85531336

00:28:01.898 --> 00:28:04.090 objective hypersomnolence is not

NOTE Confidence: 0.85531336

00:28:04.175 --> 00:28:06.877 going to be demonstrated on an SLT.

NOTE Confidence: 0.85531336

00:28:06.880 --> 00:28:09.436 And Hypersomnolence going back

NOTE Confidence: 0.85531336

00:28:09.436 --> 00:28:11.353 to Parkinson's hypersomnolence

NOTE Confidence: 0.85531336

00:28:11.353 --> 00:28:14.031 effects about observed in 16 to

NOTE Confidence: 0.85531336

00:28:14.031 --> 00:28:16.368 50% of patients with Parkinson's,

NOTE Confidence: 0.85531336

00:28:16.368 --> 00:28:19.531 and about 28% of patients who

NOTE Confidence: 0.85531336

00:28:19.531 --> 00:28:21.639 have my atonic dystrophy.

NOTE Confidence: 0.7893551

00:28:24.220 --> 00:28:26.932 Also, even viruses can produce both

NOTE Confidence: 0.7893551

00:28:26.932 --> 00:28:29.506 somebody to hypersomnolence like viral

NOTE Confidence: 0.7893551

00:28:29.506 --> 00:28:31.600 pneumonias infectious mononucleosis,

NOTE Confidence: 0.7893551

00:28:31.600 --> 00:28:34.164 hepatitis B Valley virus,

NOTE Confidence: 0.7893551

00:28:34.164 --> 00:28:36.843 Guillain Barre syndrome. Um?

NOTE Confidence: 0.7893551

00:28:36.843 --> 00:28:40.608 So the the the differential

NOTE Confidence: 0.7893551

00:28:40.608 --> 00:28:43.620 diagnosis is pretty big.

NOTE Confidence: 0.7893551

00:28:43.620 --> 00:28:46.315 And those who are loan sleepers but

NOTE Confidence: 0.7893551

00:28:46.315 --> 00:28:48.405 loan sleepers will feel refreshed

NOTE Confidence: 0.7893551

00:28:48.405 --> 00:28:50.545 after a long time sleeping.

NOTE Confidence: 0.7893551

00:28:50.550 --> 00:28:54.080 So this is was mostly kind of endorsed by the

NOTE Confidence: 0.7893551

00:28:54.162 --> 00:28:57.456 patients who have age opathic hypersomnia.

NOTE Confidence: 0.7893551

00:28:57.460 --> 00:28:59.620 So we want to ask,

NOTE Confidence: 0.7893551

00:28:59.620 --> 00:29:03.295 you know what helps you treatment wise.

NOTE Confidence: 0.7893551

00:29:03.300 --> 00:29:04.656 Um, you know,

NOTE Confidence: 0.7893551

00:29:04.656 --> 00:29:06.916 82% of patients will say,

NOTE Confidence: 0.7893551

00:29:06.920 --> 00:29:09.659 well, coffee, caffeine.

NOTE Confidence: 0.7893551

00:29:09.660 --> 00:29:10.932 It's interesting Lee,

NOTE Confidence: 0.7893551

00:29:10.932 --> 00:29:14.750 but you know 81% of patients still say that,

NOTE Confidence: 0.7893551

00:29:14.750 --> 00:29:17.195 yeah, daytime naps they feel

NOTE Confidence: 0.7893551

00:29:17.195 --> 00:29:19.151 subjectively that they help

NOTE Confidence: 0.7893551

00:29:19.151 --> 00:29:21.550 scheduling of their nocturnal sleep.

NOTE Confidence: 0.7893551

00:29:21.550 --> 00:29:24.615 Anne, it's very important with

NOTE Confidence: 0.7893551

00:29:24.615 --> 00:29:27.067 patients who have hypersomnolence

NOTE Confidence: 0.7893551

00:29:27.067 --> 00:29:30.421 to strongly advise and recommend

NOTE Confidence: 0.7893551

00:29:30.421 --> 00:29:33.726 to avoid operating heavy machinery.

NOTE Confidence: 0.7893551

00:29:33.730 --> 00:29:37.456 Due to increased risk of accidents.

NOTE Confidence: 0.7893551

00:29:37.460 --> 00:29:41.990 So um, pharmacologic treatment well?

NOTE Confidence: 0.7893551

00:29:41.990 --> 00:29:44.895 There are currently no medications

NOTE Confidence: 0.7893551

00:29:44.895 --> 00:29:47.800 that are officially approved by

NOTE Confidence: 0.7893551

00:29:47.893 --> 00:29:50.005 FDA for specific specifically

NOTE Confidence: 0.7893551

00:29:50.005 --> 00:29:52.645 for the treatment of IH.

NOTE Confidence: 0.7893551

00:29:52.650 --> 00:29:54.062 So you know what?

NOTE Confidence: 0.7893551

00:29:54.062 --> 00:29:55.474 What do we do?

NOTE Confidence: 0.7893551

00:29:55.480 --> 00:29:55.834 Well,

NOTE Confidence: 0.7893551

00:29:55.834 --> 00:29:57.958 we we treat it like hypersomnolence

NOTE Confidence: 0.7893551

00:29:57.958 --> 00:30:00.248 like we would address in Narcos.

NOTE Confidence: 0.7893551

00:30:00.250 --> 00:30:06.138 Sing so stimulance and these are very common,

NOTE Confidence: 0.7893551

00:30:06.140 --> 00:30:09.386 frequently used so we have methylphenidate,

NOTE Confidence: 0.7893551

00:30:09.390 --> 00:30:12.666 which blocks reuptake of norpin Efron

NOTE Confidence: 0.7893551

00:30:12.666 --> 00:30:15.982 dopamine into presynaptic neurons and the

NOTE Confidence: 0.7893551

00:30:15.982 --> 00:30:18.617 side effects would include irritability,

NOTE Confidence: 0.7893551

00:30:18.620 --> 00:30:21.484 insomnia, GI upset psychosis.

NOTE Confidence: 0.7893551

00:30:21.484 --> 00:30:22.200 Hypertension,

NOTE Confidence: 0.7893551

00:30:22.200 --> 00:30:25.000 palpitations and then there

NOTE Confidence: 0.7893551

00:30:25.000 --> 00:30:27.800 is suggestion feta mean.

NOTE Confidence: 0.7893551

00:30:27.800 --> 00:30:29.588 Which promotes the release of dopamine,

NOTE Confidence: 0.7893551

00:30:29.590 --> 00:30:31.114 an open a friend from their

NOTE Confidence: 0.7893551

00:30:31.114 --> 00:30:32.824 storage sites in a person optic

NOTE Confidence: 0.7893551

00:30:32.824 --> 00:30:34.399 nerve terminal and the side

NOTE Confidence: 0.7893551

00:30:34.399 --> 00:30:35.850 effects would be similar.

NOTE Confidence: 0.73495376

00:30:37.870 --> 00:30:40.230 And we have a wakefulness

NOTE Confidence: 0.73495376

00:30:40.230 --> 00:30:41.174 promoting medications,

NOTE Confidence: 0.73495376

00:30:41.180 --> 00:30:43.808 and there is Modafinil which increases

NOTE Confidence: 0.73495376

00:30:43.808 --> 00:30:47.063 the dopamine levels in the brain by

NOTE Confidence: 0.73495376

00:30:47.063 --> 00:30:49.433 binding to the dopamine transport

NOTE Confidence: 0.73495376

00:30:49.433 --> 00:30:51.110 inhibiting dopamine reuptake.

NOTE Confidence: 0.73495376

00:30:51.110 --> 00:30:53.480 And then we have armodafinil,

NOTE Confidence: 0.73495376

00:30:53.480 --> 00:30:56.504 which is our anatomy of Modafinil and

NOTE Confidence: 0.73495376

00:30:56.504 --> 00:31:00.097 both have the side effects of headaches,

NOTE Confidence: 0.73495376

00:31:00.100 --> 00:31:01.588 nausea, insomnia, nervousness.

NOTE Confidence: 0.73495376

00:31:01.588 --> 00:31:05.579 And the biggest thing to advise to your

NOTE Confidence: 0.73495376

00:31:05.579 --> 00:31:08.195 patients is must use birth control.

NOTE Confidence: 0.73495376

00:31:08.200 --> 00:31:11.035 Other than or in addition

NOTE Confidence: 0.73495376

00:31:11.035 --> 00:31:12.736 to contraceptive pills.

NOTE Confidence: 0.6580176

00:31:18.020 --> 00:31:20.715 On you other some new wakefulness

NOTE Confidence: 0.6580176

00:31:20.715 --> 00:31:23.560 promoting medications we have so nosey.

NOTE Confidence: 0.6580176

00:31:23.560 --> 00:31:25.615 Which is a dopamine opener

NOTE Confidence: 0.6580176

00:31:25.615 --> 00:31:26.848 friendly uptake inhibitor,

NOTE Confidence: 0.6580176

00:31:26.850 --> 00:31:29.496 an ad shown to improve sleepiness in

NOTE Confidence: 0.6580176

00:31:29.496 --> 00:31:32.291 narcolepsy type one and two as well

NOTE Confidence: 0.6580176

00:31:32.291 --> 00:31:34.281 as excessive daytime sleepiness in

NOTE Confidence: 0.6580176

00:31:34.281 --> 00:31:36.708 patients with obstructive sleep apnea.

NOTE Confidence: 0.6580176

00:31:36.710 --> 00:31:38.358 Side effects include headache,

NOTE Confidence: 0.6580176

00:31:38.358 --> 00:31:39.820 nausea, decreased appetite,

NOTE Confidence: 0.6580176

00:31:39.820 --> 00:31:41.920 increased anxiety, and psychosis.

NOTE Confidence: 0.6580176

00:31:41.920 --> 00:31:43.780 Contraindicated in patients who

NOTE Confidence: 0.6580176

00:31:43.780 --> 00:31:45.640 take monoamine oxidase inhibitors

NOTE Confidence: 0.6580176

00:31:45.640 --> 00:31:48.060 due to hypertensive reaction,

NOTE Confidence: 0.6580176

00:31:48.060 --> 00:31:54.576 and may be used with ocps safe to use.

NOTE Confidence: 0.6580176

00:31:54.580 --> 00:31:57.724 Another new kid on get relatively new kid

NOTE Confidence: 0.6580176

00:31:57.724 --> 00:32:01.059 on the block is Patella St Way kicks.

NOTE Confidence: 0.6580176

00:32:01.060 --> 00:32:03.085 It's an H3 inverse agonist

NOTE Confidence: 0.6580176

00:32:03.085 --> 00:32:04.300 like an antagonist,

NOTE Confidence: 0.6580176

00:32:04.300 --> 00:32:05.848 therefore increases the

NOTE Confidence: 0.6580176

00:32:05.848 --> 00:32:08.428 level of histamine in CSF.

NOTE Confidence: 0.6580176

00:32:08.430 --> 00:32:10.800 And it's indicated for the treatment

NOTE Confidence: 0.6580176

00:32:10.800 --> 00:32:12.380 of excessive daytime sleepiness

NOTE Confidence: 0.6580176

00:32:12.440 --> 00:32:14.300 and narcolepsy type one and two.

NOTE Confidence: 0.6580176

00:32:14.300 --> 00:32:16.292 What's great about it is that

NOTE Confidence: 0.6580176

00:32:16.292 --> 00:32:18.340 it's not a controlled substance,

NOTE Confidence: 0.6580176

00:32:18.340 --> 00:32:20.909 and there's a minimal risk of abuse.

NOTE Confidence: 0.6580176

00:32:20.910 --> 00:32:21.528 But again,

NOTE Confidence: 0.6580176

00:32:21.528 --> 00:32:23.691 must use birth control other than or

NOTE Confidence: 0.6580176

00:32:23.691 --> 00:32:26.048 in addition to contraceptive pills,

NOTE Confidence: 0.6580176

00:32:26.050 --> 00:32:27.880 adverse effects, insomnia, anxiety, mostly.

NOTE Confidence: 0.84702724

00:32:30.140 --> 00:32:30.990 And.

NOTE Confidence: 0.7319374

00:32:33.400 --> 00:32:37.594 New therapies are looking at treating

NOTE Confidence: 0.7319374

00:32:37.594 --> 00:32:40.390 GABA related hypersomnia essentially.

NOTE Confidence: 0.7319374

00:32:40.390 --> 00:32:43.720 Um so. I've mentioned it in

NOTE Confidence: 0.7319374

00:32:43.720 --> 00:32:46.630 the beginning of this talk.

NOTE Confidence: 0.7319374

00:32:46.630 --> 00:32:50.734 The role of flumazenil for the treatment of.

NOTE Confidence: 0.7319374

00:32:50.740 --> 00:32:53.267 Hypersomnolence and you do about the cover.

NOTE Confidence: 0.7319374

00:32:53.270 --> 00:32:56.288 Sonia and this was the study.

NOTE Confidence: 0.7319374

00:32:56.290 --> 00:33:00.385 Which looked at 153 patients which had

NOTE Confidence: 0.7319374

00:33:00.385 --> 00:33:03.680 hypersomnolence due to domestic abuse,

NOTE Confidence: 0.7319374

00:33:03.680 --> 00:33:06.180 Anya and other conditions so

NOTE Confidence: 0.7319374

00:33:06.180 --> 00:33:09.441 little it looked at evaluation of

NOTE Confidence: 0.7319374

00:33:09.441 --> 00:33:12.121 cerebrospinal fluid from patients

NOTE Confidence: 0.7319374

00:33:12.121 --> 00:33:14.801 whose hypersomnia persisted despite

NOTE Confidence: 0.7319374

00:33:14.801 --> 00:33:17.848 trying wake promoting medications.

NOTE Confidence: 0.77923536

00:33:20.220 --> 00:33:23.145 And basically you know they

NOTE Confidence: 0.77923536

00:33:23.145 --> 00:33:25.485 have increased GABA current.

NOTE Confidence: 0.91834515

00:33:27.850 --> 00:33:32.314 Sorry. Our increased garbled current.

NOTE Confidence: 0.91834515

00:33:32.314 --> 00:33:35.560 There's a issue with the GABA,

NOTE Confidence: 0.91834515

00:33:35.560 --> 00:33:39.544 a lag and and this increased activity of

NOTE Confidence: 0.91834515

00:33:39.544 --> 00:33:42.933 that current can obviously be reversed

NOTE Confidence: 0.91834515

00:33:42.933 --> 00:33:46.371 with using flumazenil and they did.

NOTE Confidence: 0.91834515

00:33:46.380 --> 00:33:48.508 Intravenous injection of flumazenil,

NOTE Confidence: 0.91834515

00:33:48.508 --> 00:33:51.168 which improved objective measures of

NOTE Confidence: 0.91834515

00:33:51.168 --> 00:33:53.949 vigilance and reduced subjective sleepiness.

NOTE Confidence: 0.8027675

00:33:57.270 --> 00:33:59.668 So as you can see, they looked

NOTE Confidence: 0.8027675

00:33:59.668 --> 00:34:01.552 at the CSF of patients with

NOTE Confidence: 0.8027675

00:34:01.552 --> 00:34:03.840 narcolepsy type one and two patients

NOTE Confidence: 0.8027675

00:34:03.840 --> 00:34:05.040 with idiopathic hypersomnia.

NOTE Confidence: 0.8027675

00:34:05.040 --> 00:34:07.480 They had a 30.

NOTE Confidence: 0.8027675

00:34:07.480 --> 00:34:09.814 Six of them are patients with

NOTE Confidence: 0.8027675

00:34:09.814 --> 00:34:11.370 obstructive sleep apnea with

NOTE Confidence: 0.8027675

00:34:11.438 --> 00:34:13.698 hypersomnolence an as well as

NOTE Confidence: 0.8027675

00:34:13.698 --> 00:34:15.480 other hypersomnolence as well.

NOTE Confidence: 0.8167983

00:34:18.270 --> 00:34:21.222 So they they gave flumazenil sublingually

NOTE Confidence: 0.8167983

00:34:21.222 --> 00:34:24.683 about 6 milligrams to these patients and

NOTE Confidence: 0.8167983

00:34:24.683 --> 00:34:27.966 the starting dose was about 6 milligrams,

NOTE Confidence: 0.8167983

00:34:27.970 --> 00:34:31.858 four times a day, and then they titrated to

NOTE Confidence: 0.8167983

00:34:31.858 --> 00:34:35.932 the effective dose or total of 12 milligrams

NOTE Confidence: 0.8167983

00:34:35.932 --> 00:34:40.032 four times per day so that those would

NOTE Confidence: 0.8167983

00:34:40.032 --> 00:34:43.492 not exist exceed 60 milligrams per day.

NOTE Confidence: 0.8167983

00:34:43.492 --> 00:34:46.454 And in between. If they still had.

NOTE Confidence: 0.8167983

00:34:46.454 --> 00:34:47.958 Issues with sleeping as

NOTE Confidence: 0.8167983

00:34:47.958 --> 00:34:49.949 they were also prescribed.

NOTE Confidence: 0.8167983

00:34:49.950 --> 00:34:52.659 Aflam adonal cream.

NOTE Confidence: 0.8167983

00:34:52.660 --> 00:34:55.880 Which would be applied to the forms

NOTE Confidence: 0.8167983

00:34:55.880 --> 00:34:59.100 at bedtime, or four times a day,

NOTE Confidence: 0.8167983

00:34:59.100 --> 00:35:02.320 if the sublingual dose was not enough.

NOTE Confidence: 0.23930006

00:35:06.070 --> 00:35:14.500 All. So 96% on 96 patients out of 153 with.

NOTE Confidence: 0.23930006

00:35:14.500 --> 00:35:16.231 Hypersomnolence reported improvement

NOTE Confidence: 0.23930006

00:35:16.231 --> 00:35:18.539 of excessive daytime sleepiness,

NOTE Confidence: 0.23930006

00:35:18.540 --> 00:35:21.420 one treated with flumazenil so

NOTE Confidence: 0.23930006

00:35:21.420 --> 00:35:23.724 prior to initiating flumazenil,

NOTE Confidence: 0.23930006

00:35:23.730 --> 00:35:27.186 the average score was a 1515.1,

NOTE Confidence: 0.23930006

00:35:27.190 --> 00:35:30.895 even though these patients were

NOTE Confidence: 0.23930006

00:35:30.895 --> 00:35:34.600 already taking wake promoting agents.

NOTE Confidence: 0.23930006

00:35:34.600 --> 00:35:37.810 An after the treatment average score

NOTE Confidence: 0.23930006

00:35:37.810 --> 00:35:41.528 dropped by about four to five to 10.3,

NOTE Confidence: 0.23930006

00:35:41.530 --> 00:35:43.890 which which is significant.

NOTE Confidence: 0.23930006

00:35:43.890 --> 00:35:46.250 Um and 59 patients.

NOTE Confidence: 0.23930006

00:35:46.250 --> 00:35:50.394 Out of these, 96 continued on taking the

NOTE Confidence: 0.23930006

00:35:50.394 --> 00:35:54.410 medication at the seven months of follow up.

NOTE Confidence: 0.23930006

00:35:54.410 --> 00:35:58.930 And the. Affect persisted.

NOTE Confidence: 0.23930006

00:35:58.930 --> 00:36:00.394 So it's interesting,

NOTE Confidence: 0.23930006

00:36:00.394 --> 00:36:02.834 72% of women reported a

NOTE Confidence: 0.23930006

00:36:02.834 --> 00:36:04.839 positive response to the drug.

NOTE Confidence: 0.23930006

00:36:04.840 --> 00:36:08.728 Whereas only 48% of men had a positive

NOTE Confidence: 0.23930006

00:36:08.728 --> 00:36:12.516 response and those who had the most

NOTE Confidence: 0.23930006

00:36:12.516 --> 00:36:15.231 significant sleep inertia were the

NOTE Confidence: 0.23930006

00:36:15.335 --> 00:36:18.954 ones whom were more likely to respond.

NOTE Confidence: 0.23930006

00:36:18.960 --> 00:36:20.532 Side effects observed,

NOTE Confidence: 0.23930006

00:36:20.532 --> 00:36:22.100 dizziness, anxiety, headache.

NOTE Confidence: 0.18428144

00:36:24.630 --> 00:36:29.352 Um? Another oh,

NOTE Confidence: 0.18428144

00:36:29.352 --> 00:36:33.384 another medication that was looked at.

NOTE Confidence: 0.18428144

00:36:33.390 --> 00:36:36.570 And the biotic clarithromycin.

NOTE Confidence: 0.18428144

00:36:36.570 --> 00:36:38.934 Because it is also to happens

NOTE Confidence: 0.18428144

00:36:38.934 --> 00:36:41.137 to be a negative allosteric

NOTE Confidence: 0.18428144

00:36:41.137 --> 00:36:44.365 modulator of the GABA a receptor.

NOTE Confidence: 0.18428144

00:36:44.370 --> 00:36:47.754 OK, so this was a two week randomized

NOTE Confidence: 0.18428144

00:36:47.754 --> 00:36:49.757 placebo controlled double blind

NOTE Confidence: 0.18428144

00:36:49.757 --> 00:36:51.905 crossover trial of clarithromycin

NOTE Confidence: 0.18428144

00:36:51.905 --> 00:36:54.932 500 milligrams which was taken with

NOTE Confidence: 0.18428144

00:36:54.932 --> 00:36:57.739 breakfast as well as lunch in patient

NOTE Confidence: 0.18428144

00:36:57.739 --> 00:36:59.304 with hypersomnolence syndromes.

NOTE Confidence: 0.18428144

00:36:59.304 --> 00:37:01.632 But they excluded those

NOTE Confidence: 0.18428144

00:37:01.632 --> 00:37:03.960 with narcolepsy Type 1.

NOTE Confidence: 0.18428144

00:37:03.960 --> 00:37:06.612 Um, and these patients had evidence

NOTE Confidence: 0.18428144

00:37:06.612 --> 00:37:08.904 of abnormal cerebral spinal fluid

NOTE Confidence: 0.18428144

00:37:08.904 --> 00:37:11.129 potentiation of GABA A receptor,

NOTE Confidence: 0.18428144

00:37:11.130 --> 00:37:13.805 and the primary outcome measure

NOTE Confidence: 0.18428144

00:37:13.805 --> 00:37:16.480 was median reaction time on

NOTE Confidence: 0.18428144

00:37:16.575 --> 00:37:19.659 psychomotor vigilance task at 2 E.

NOTE Confidence: 0.18428144

00:37:19.660 --> 00:37:21.355 At week two.

NOTE Confidence: 0.18428144

00:37:21.355 --> 00:37:24.180 And the secondary outcome was

NOTE Confidence: 0.18428144

00:37:24.180 --> 00:37:25.960 Epworth Sleepiness Scale.

NOTE Confidence: 0.18428144

00:37:25.960 --> 00:37:27.840 So subjects were randomized

NOTE Confidence: 0.18428144

00:37:27.840 --> 00:37:30.190 such as equal number received

NOTE Confidence: 0.18428144

00:37:30.190 --> 00:37:32.179 each intervention first.

NOTE Confidence: 0.18428144

00:37:32.180 --> 00:37:34.956 So 10 received clarithromycin.

NOTE Confidence: 0.18428144

00:37:34.956 --> 00:37:38.426 First an Jen received placebo.

NOTE Confidence: 0.18428144

00:37:38.430 --> 00:37:41.388 And then there was a switch.

NOTE Confidence: 0.77485985

00:37:44.900 --> 00:37:48.043 And looking at it, you'd see that

NOTE Confidence: 0.77485985

00:37:48.043 --> 00:37:51.269 with PPT there was no improvement,

NOTE Confidence: 0.77485985

00:37:51.270 --> 00:37:53.230 but it upward sleepiness

NOTE Confidence: 0.77485985

00:37:53.230 --> 00:37:55.190 scale decreased four points.

NOTE Confidence: 0.8477815

00:37:59.030 --> 00:38:02.824 So there was a benefit in 64% of patients

NOTE Confidence: 0.8477815

00:38:02.824 --> 00:38:05.356 and 38% of patients continued therapy.

NOTE Confidence: 0.8477815

00:38:05.360 --> 00:38:08.736 When I when I spoke to the lab,

NOTE Confidence: 0.8477815

00:38:08.740 --> 00:38:11.323 they basically told me that at that

NOTE Confidence: 0.8477815

00:38:11.323 --> 00:38:14.224 time at least they were about six

NOTE Confidence: 0.8477815

00:38:14.224 --> 00:38:16.798 months of continuation of therapy and

NOTE Confidence: 0.8477815

00:38:16.879 --> 00:38:19.139 adverse effects that were reported

NOTE Confidence: 0.8477815

00:38:19.139 --> 00:38:21.821 would be GI side effects, taste,

NOTE Confidence: 0.8477815

00:38:21.821 --> 00:38:24.347 perversion as well as antibiotics resistance.

NOTE Confidence: 0.11924832

00:38:26.430 --> 00:38:27.260 Sirem

NOTE Confidence: 0.884301

00:38:29.270 --> 00:38:31.920 this was a chart review.

NOTE Confidence: 0.884301

00:38:31.920 --> 00:38:34.495 AC and clinical series of

NOTE Confidence: 0.884301

00:38:34.495 --> 00:38:36.555 treatment of refractory patients.

NOTE Confidence: 0.884301

00:38:36.560 --> 00:38:39.650 So they had 46 H patients,

NOTE Confidence: 0.884301

00:38:39.650 --> 00:38:41.970 247 patients with narcolepsy

NOTE Confidence: 0.884301

00:38:41.970 --> 00:38:46.090 type one and they showed that it

NOTE Confidence: 0.884301

00:38:46.090 --> 00:38:48.250 actually decreased essm between

NOTE Confidence: 0.884301

00:38:48.250 --> 00:38:52.250 three to four and a half points.

NOTE Confidence: 0.884301

00:38:52.250 --> 00:38:55.022 But the mean those in Egypt hypersomnia

NOTE Confidence: 0.884301

00:38:55.022 --> 00:38:57.418 patients was 4.3 grams per night,

NOTE Confidence: 0.884301

00:38:57.420 --> 00:39:00.619 which is lower than the ones given

57

00:39:00.619 --> 00:39:03.699 to patients with narcolepsy Type 1.

00:39:03.700 --> 00:39:04.660 And of course,

00:39:04.660 --> 00:39:06.900 the biggest things to console and discuss

00:39:06.964 --> 00:39:09.538 with your patience is respiratory depression.

00:39:09.540 --> 00:39:12.460 You know chance of abuse of this drug,

00:39:12.460 --> 00:39:13.460 respiratory depression?

00:39:13.460 --> 00:39:16.460 Um, as well as a central

00:39:16.460 --> 00:39:18.420 nervous system depression.

00:39:18.420 --> 00:39:19.516 Side effects.

00:39:19.516 --> 00:39:22.804 While most side effects would be

00:39:22.804 --> 00:39:25.878 patients don't like the taste of it,

00:39:25.880 --> 00:39:28.876 nausha is probably the most common one.

00:39:28.880 --> 00:39:29.740 Dizziness, headache.

00:39:35.060 --> 00:39:37.783 So now circling back to where we

00:39:37.783 --> 00:39:39.990 started from the current day.

00:39:39.990 --> 00:39:42.486 A lot of treatment options were

NOTE Confidence: 0.82953537

00:39:42.486 --> 00:39:45.012 discussed with this patient and she

NOTE Confidence: 0.82953537

00:39:45.012 --> 00:39:46.977 is more reluctant to worthless,

NOTE Confidence: 0.82953537

00:39:46.980 --> 00:39:51.148 wasn't more left and to try new things.

NOTE Confidence: 0.82953537

00:39:51.150 --> 00:39:54.366 She was on armodafinil 150 milligrams,

NOTE Confidence: 0.82953537

00:39:54.370 --> 00:39:58.528 which it took at 7:30 AM.

NOTE Confidence: 0.82953537

00:39:58.530 --> 00:40:01.134 She's reported some residual.

NOTE Confidence: 0.82953537

00:40:01.134 --> 00:40:03.087 Sleepiness and reported

NOTE Confidence: 0.82953537

00:40:03.087 --> 00:40:05.920 having some insomnia symptoms.

NOTE Confidence: 0.82953537

00:40:05.920 --> 00:40:07.850 Um, trying different doses was

NOTE Confidence: 0.82953537

00:40:07.850 --> 00:40:10.130 about the same effect for her,

NOTE Confidence: 0.82953537

00:40:10.130 --> 00:40:12.188 but her essm range between 9:00

NOTE Confidence: 0.82953537

00:40:12.188 --> 00:40:14.813 and 12:00 and for her that meant

NOTE Confidence: 0.82953537

00:40:14.813 --> 00:40:16.773 being functional during the day

NOTE Confidence: 0.82953537

00:40:16.773 --> 00:40:19.649 and being able to carry on through

NOTE Confidence: 0.82953537

00:40:19.649 --> 00:40:20.858 her daily activities.

NOTE Confidence: 0.82953537

00:40:20.860 --> 00:40:21.620 Thank you.

NOTE Confidence: 0.8401172

00:40:30.560 --> 00:40:32.495 Great, thank you so much for

NOTE Confidence: 0.8401172

00:40:32.495 --> 00:40:33.464 that presentation Eliana.

NOTE Confidence: 0.8401172

00:40:33.470 --> 00:40:37.754 I just want to open it up to questions.

NOTE Confidence: 0.8401172

00:40:37.760 --> 00:40:40.178 And I think I'd love to

NOTE Confidence: 0.8401172

00:40:40.178 --> 00:40:41.790 hear about anybody else.

NOTE Confidence: 0.8401172

00:40:41.790 --> 00:40:44.443 Is kind of experiences with the practical

NOTE Confidence: 0.8401172

00:40:44.443 --> 00:40:47.029 approval of some of these medications.

NOTE Confidence: 0.8401172

00:40:47.030 --> 00:40:49.790 You know, there are these specific

NOTE Confidence: 0.8401172

00:40:49.790 --> 00:40:52.122 com pounding pharmacies that are

NOTE Confidence: 0.8401172

00:40:52.122 --> 00:40:54.202 needed to get these formulations

NOTE Confidence: 0.8401172

00:40:54.202 --> 00:40:56.560 of medications and I know some

NOTE Confidence: 0.8401172

00:40:56.560 --> 00:40:58.716 of us have tried to do this,

NOTE Confidence: 0.8401172

00:40:58.720 --> 00:41:01.920 but I invite anybody to kind of share

NOTE Confidence: 0.8401172

00:41:01.920 --> 00:41:04.864 your own anecdotes about how that's

NOTE Confidence: 0.8401172

00:41:04.864 --> 00:41:08.470 worked and what the efficacy has been.

NOTE Confidence: 0.8401172

00:41:08.470 --> 00:41:10.010 With that and then ask,

NOTE Confidence: 0.8401172

00:41:10.010 --> 00:41:11.540 ask any questions to Eliana.

NOTE Confidence: 0.6846112

00:41:26.320 --> 00:41:30.860 Hello Andy Petroff I'm a

NOTE Confidence: 0.6846112

00:41:30.860 --> 00:41:33.584 neurologist and epileptologist.

NOTE Confidence: 0.6846112

00:41:33.590 --> 00:41:37.209 The flumazenil, at least you can have

NOTE Confidence: 0.6846112

00:41:37.209 --> 00:41:40.660 there been any pet studies on it?

NOTE Confidence: 0.6846112

00:41:40.660 --> 00:41:43.999 'cause there is a ligand and it's

NOTE Confidence: 0.6846112

00:41:43.999 --> 00:41:47.730 available here and variety of other places.

NOTE Confidence: 0.6846112

00:41:47.730 --> 00:41:50.700 So are there any differences

NOTE Confidence: 0.6846112

00:41:50.700 --> 00:41:53.670 with the hypersomnia in terms

NOTE Confidence: 0.6846112

00:41:53.776 --> 00:41:56.440 of the flumazenil binding?

NOTE Confidence: 0.6846112

00:41:56.440 --> 00:41:58.690 The related question, of course,

NOTE Confidence: 0.6846112

00:41:58.690 --> 00:42:00.880 is that flumazenil preferentially binds

NOTE Confidence: 0.6846112

00:42:00.880 --> 00:42:03.620 to microglia engliah rather than neurons,

NOTE Confidence: 0.6846112

00:42:03.620 --> 00:42:05.870 so it isn't very specific

NOTE Confidence: 0.6846112

00:42:05.870 --> 00:42:07.220 for Gabaergic neurons.

NOTE Confidence: 0.88410556

00:42:08.960 --> 00:42:11.207 I'm not familiar with the pet studies.

NOTE Confidence: 0.88410556

00:42:11.210 --> 00:42:13.910 I did not look at those when I was doing

NOTE Confidence: 0.88410556

00:42:13.981 --> 00:42:18.770 my literature review, and honestly. Um?

NOTE Confidence: 0.88410556

00:42:18.770 --> 00:42:21.400 I mean, I would my assumption would be

NOTE Confidence: 0.88410556

00:42:21.400 --> 00:42:23.804 that it had to be at least. Similarly,

NOTE Confidence: 0.88410556

00:42:23.804 --> 00:42:26.960 I don't know if you can add on to that.

NOTE Confidence: 0.79947734

00:42:29.780 --> 00:42:31.952 Well, as I said,

NOTE Confidence: 0.79947734

00:42:31.952 --> 00:42:34.124 the other related question,

NOTE Confidence: 0.79947734

00:42:34.130 --> 00:42:37.214 did the Emory people discussed the

NOTE Confidence: 0.79947734

00:42:37.214 --> 00:42:39.939 molecular weight of this endogenous

NOTE Confidence: 0.79947734

00:42:39.939 --> 00:42:43.377 pro GABA a receptor function agent?

NOTE Confidence: 0.79947734

00:42:43.380 --> 00:42:45.556 Is that a protein?

NOTE Confidence: 0.79947734

00:42:45.556 --> 00:42:48.820 Is it more than 600 Daltons,

NOTE Confidence: 0.79947734

00:42:48.820 --> 00:42:52.078 or is it a small molecule?

NOTE Confidence: 0.87445056

00:42:54.740 --> 00:42:57.076 I would have to review that again actually.

NOTE Confidence: 0.81758577

00:42:58.170 --> 00:43:02.220 Right and the? Has there been

NOTE Confidence: 0.81758577

00:43:02.220 --> 00:43:06.867 any work using the new histamine

NOTE Confidence: 0.81758577

00:43:06.867 --> 00:43:10.467 promoting agent or inverse

NOTE Confidence: 0.81758577

00:43:10.467 --> 00:43:14.920 agonist of histamine in this?

NOTE Confidence: 0.81758577

00:43:14.920 --> 00:43:16.472 Idiopathic hypersomnia hasn't been

NOTE Confidence: 0.81758577

00:43:16.472 --> 00:43:18.412 used as the beneficial effect.

NOTE Confidence: 0.81758577

00:43:18.420 --> 00:43:20.370 I, from my knowledge, as

NOTE Confidence: 0.82777745

00:43:20.370 --> 00:43:22.698 far as that is, you know,

NOTE Confidence: 0.82777745

00:43:22.700 --> 00:43:25.804 we tried to use it and not collapse.

NOTE Confidence: 0.82777745

00:43:25.810 --> 00:43:28.456 It has some effect, but I don't

NOTE Confidence: 0.82777745

00:43:28.456 --> 00:43:31.989 think we know for sure effective it

NOTE Confidence: 0.82777745

00:43:31.989 --> 00:43:34.150 in idiopathic hypersomnia. Yeah,

NOTE Confidence: 0.7986588

00:43:34.150 --> 00:43:35.890 I don't believe we're

NOTE Confidence: 0.7986588

00:43:35.890 --> 00:43:37.630 talking bout Petola sent.

NOTE Confidence: 0.7986588

00:43:37.630 --> 00:43:41.638 I think I don't believe that that was

63

NOTE Confidence: 0.7986588

00:43:41.638 --> 00:43:44.809 this approved for age specifically.

NOTE Confidence: 0.7986588

00:43:44.810 --> 00:43:46.748 Although I don't know if anyone

NOTE Confidence: 0.7986588

00:43:46.748 --> 00:43:48.629 else has had experience using it,

NOTE Confidence: 0.7986588

00:43:48.630 --> 00:43:50.694 I have not used it in patients other

NOTE Confidence: 0.7986588

00:43:50.694 --> 00:43:52.758 than those with narcolepsy personally.

NOTE Confidence: 0.54014516

00:43:57.370 --> 00:44:01.140 Thank you very nice talken.

NOTE Confidence: 0.54014516

00:44:01.140 --> 00:44:04.218 Not really aware of these newer

NOTE Confidence: 0.54014516

00:44:04.218 --> 00:44:06.270 developments and I appreciate

NOTE Confidence: 0.54014516

00:44:06.361 --> 00:44:08.546 the review and the update.

NOTE Confidence: 0.80647475

00:44:09.210 --> 00:44:10.710 Thank you yeah. What

NOTE Confidence: 0.80647475

00:44:10.710 --> 00:44:11.832 do you think?

NOTE Confidence: 0.80647475

00:44:11.832 --> 00:44:14.450 Doctor Montaivo about the diagnosis of IH?

NOTE Confidence: 0.80647475

00:44:14.450 --> 00:44:15.942 I've suspected personally that

NOTE Confidence: 0.80647475

00:44:15.942 --> 00:44:17.434 we're probably missing this,

NOTE Confidence: 0.80647475

00:44:17.440 --> 00:44:19.360 and in some patients where

NOTE Confidence: 0.80647475

00:44:19.360 --> 00:44:21.930 we get an MSL T in it,

NOTE Confidence: 0.80647475

00:44:21.930 --> 00:44:23.795 you know sometimes shows a

NOTE Confidence: 0.80647475

00:44:23.795 --> 00:44:25.287 short mean sleep latency.

NOTE Confidence: 0.80647475

00:44:25.290 --> 00:44:27.918 But if we don't see the store and then

NOTE Confidence: 0.80647475

00:44:27.918 --> 00:44:30.074 we have an alternative explanation

NOTE Confidence: 0.80647475

00:44:30.074 --> 00:44:32.762 for a short mean sleep latency,

NOTE Confidence: 0.80647475

00:44:32.770 --> 00:44:35.020 and sometimes we suspect sleep deprivation,

NOTE Confidence: 0.80647475

00:44:35.020 --> 00:44:38.476 or if we don't have actigraphy.

NOTE Confidence: 0.80647475

00:44:38.480 --> 00:44:41.540 We chalk it up to to not having had

NOTE Confidence: 0.80647475

00:44:41.540 --> 00:44:44.179 sufficient sleep leading up to the study.

NOTE Confidence: 0.80647475

00:44:44.180 --> 00:44:46.310 Do you think we're missing this,

NOTE Confidence: 0.80647475

00:44:46.310 --> 00:44:49.158 or is it truly quite a rare diagnosis?

NOTE Confidence: 0.80647475

00:44:49.160 --> 00:44:49.870 I think

NOTE Confidence: 0.85622454

00:44:49.870 --> 00:44:52.206 it's not as rare. I think we just

NOTE Confidence: 0.85622454

00:44:52.206 --> 00:44:54.500 kind of looking for narcolepsy.

NOTE Confidence: 0.85622454

00:44:54.500 --> 00:44:56.774 And if we don't see the

NOTE Confidence: 0.85622454

00:44:56.774 --> 00:44:59.499 evidence of it on our testing.

NOTE Confidence: 0.85622454

00:44:59.500 --> 00:45:02.034 Then you know we either just saying,

NOTE Confidence: 0.85622454

00:45:02.040 --> 00:45:03.876 well, you don't have narcolepsy or

NOTE Confidence: 0.85622454

00:45:03.876 --> 00:45:06.655 we kind of don't think too often to

NOTE Confidence: 0.85622454

00:45:06.655 --> 00:45:08.515 consider idiopathic hypersomnia you know

NOTE Confidence: 0.85622454

00:45:08.515 --> 00:45:11.120 we started thinking about other things.

NOTE Confidence: 0.85622454

00:45:11.120 --> 00:45:12.935 Could this be medications or

NOTE Confidence: 0.85622454

00:45:12.935 --> 00:45:14.750 the use of illicit drugs?

NOTE Confidence: 0.85622454

00:45:14.750 --> 00:45:16.560 Or some kind of psychiatric

NOTE Confidence: 0.85622454

00:45:16.560 --> 00:45:17.284 comorbid disorder?

NOTE Confidence: 0.85622454

00:45:17.290 --> 00:45:19.733 And I guess a lot of these

NOTE Confidence: 0.85622454

00:45:19.733 --> 00:45:21.767 people having this issue do

NOTE Confidence: 0.85622454

00:45:21.767 --> 00:45:24.037 present with depression as well.

NOTE Confidence: 0.85622454

00:45:24.040 --> 00:45:26.920 And psychiatric issues.

NOTE Confidence: 0.85622454

00:45:26.920 --> 00:45:27.958 Yeah yeah, very

NOTE Confidence: 0.85116893

00:45:27.960 --> 00:45:28.998 common for that.

NOTE Confidence: 0.85116893

00:45:28.998 --> 00:45:31.420 And in a narcolepsy to see depression,

NOTE Confidence: 0.85116893

00:45:31.420 --> 00:45:35.384 right? Or a great well if there's

NOTE Confidence: 0.85116893

00:45:35.384 --> 00:45:37.242 no other questions, I think well,

NOTE Confidence: 0.85116893

00:45:37.242 --> 00:45:39.780 well and there and thank you so much.

NOTE Confidence: 0.85116893

00:45:39.780 --> 00:45:44.163 I just want to let people know what the.

NOTE Confidence: 0.85116893

00:45:44.170 --> 00:45:46.168 That talk is for next week,

NOTE Confidence: 0.85116893

00:45:46.170 --> 00:45:47.835 so December 9th we're going

NOTE Confidence: 0.85116893

00:45:47.835 --> 00:45:49.500 to have our next joint,

NOTE Confidence: 0.85116893

00:45:49.500 --> 00:45:50.382 Harvard Yale Conference,

NOTE Confidence: 0.85116893

00:45:50.382 --> 00:45:53.260 and it's going to be on the cost of

NOTE Confidence: 0.85116893

00:45:53.260 --> 00:45:55.160 insufficient sleep with Janet Mulligan,

NOTE Confidence: 0.85116893

00:45:55.160 --> 00:45:57.020 who is a professor of neurology

NOTE Confidence: 0.85116893

00:45:57.020 --> 00:45:59.038 at Harvard Medical School in Beth

NOTE Confidence: 0.85116893

00:45:59.038 --> 00:46:00.486 Israel Deaconess Medical Center.

NOTE Confidence: 0.85116893

00:46:00.490 --> 00:46:02.488 So please join us for that.

NOTE Confidence: 0.85116893

00:46:02.490 --> 00:46:04.488 That is our next to last

NOTE Confidence: 0.85116893

00:46:04.488 --> 00:46:05.820 talk for the semester,

NOTE Confidence: 0.85116893

00:46:05.820 --> 00:46:08.808 which I feel like has just flown by then.

NOTE Confidence: 0.85116893

00:46:08.810 --> 00:46:10.808 Thank you everyone and have a

NOTE Confidence: 0.8631892

00:46:10.810 --> 00:46:12.480 great rest of the afternoon.

NOTE Confidence: 0.8631892

00:46:12.480 --> 00:46:13.808 Thank you. Bye bye.

NOTE Confidence: 0.9217543

00:46:14.950 --> 00:46:16.540 Thank you bye.