

WEBVTT

NOTE duration:"00:57:54"

NOTE recognizability:0.866

NOTE language:en-us

NOTE Confidence: 0.778075575

00:00:51.350 --> 00:00:53.330 Welcome to your healthcare.

NOTE Confidence: 0.778075575

00:00:53.330 --> 00:00:55.310 I'm doctor Amit Lahav,

NOTE Confidence: 0.778075575

00:00:55.310 --> 00:00:58.160 and in this show we discussed

NOTE Confidence: 0.778075575

00:00:58.160 --> 00:01:00.620 different types of medical aspects

NOTE Confidence: 0.778075575

00:01:00.620 --> 00:01:03.710 and different type of professions in

NOTE Confidence: 0.778075575

00:01:03.710 --> 00:01:06.334 the field of medicine. Anesthesia.

NOTE Confidence: 0.778075575

00:01:06.334 --> 00:01:09.358 What types of forms of anesthesia?

NOTE Confidence: 0.778075575

00:01:09.360 --> 00:01:10.815 Different procedures, surgeries.

NOTE Confidence: 0.778075575

00:01:10.815 --> 00:01:13.240 Even going to the dentist,

NOTE Confidence: 0.778075575

00:01:13.240 --> 00:01:17.160 you receive some form of an anesthetist.

NOTE Confidence: 0.778075575

00:01:17.160 --> 00:01:19.008 What do you know about the anesthesia

NOTE Confidence: 0.778075575

00:01:19.008 --> 00:01:20.638 that you need to prepare for?

NOTE Confidence: 0.778075575

00:01:20.640 --> 00:01:22.176 How do you get the best

NOTE Confidence: 0.778075575

00:01:22.176 --> 00:01:23.200 out of the anesthesia?
NOTE Confidence: 0.778075575

00:01:23.200 --> 00:01:25.960 What are different forms of anesthesia?
NOTE Confidence: 0.778075575

00:01:25.960 --> 00:01:28.768 Today we are privileged to have
NOTE Confidence: 0.778075575

00:01:28.768 --> 00:01:31.360 with us Doctor Brian Kerner,
NOTE Confidence: 0.778075575

00:01:31.360 --> 00:01:33.360 Director of Regional Anesthesia,
NOTE Confidence: 0.778075575

00:01:33.360 --> 00:01:35.186 Bridgeport Hospital, Assistant Professor,
NOTE Confidence: 0.778075575

00:01:35.186 --> 00:01:36.838 Yale School of Medicine,
NOTE Confidence: 0.778075575

00:01:36.840 --> 00:01:38.028 Department of Anesthesiology,
NOTE Confidence: 0.778075575

00:01:38.028 --> 00:01:40.800 who will enlighten us with all his
NOTE Confidence: 0.778075575

00:01:40.871 --> 00:01:43.595 knowledge regarding the field of anesthesia.
NOTE Confidence: 0.778075575

00:01:43.600 --> 00:01:44.878 What do you need to know?
NOTE Confidence: 0.778075575

00:01:44.880 --> 00:01:47.834 How do you prepare for these procedures
NOTE Confidence: 0.778075575

00:01:47.834 --> 00:01:50.318 with the anesthesia you may require?
NOTE Confidence: 0.778075575

00:01:50.320 --> 00:01:51.072 Stay tuned.
NOTE Confidence: 0.778075575

00:01:51.072 --> 00:01:52.200 Don't fall asleep,
NOTE Confidence: 0.778075575

00:01:52.200 --> 00:01:53.748 because we've got a lot coming

NOTE Confidence: 0.778075575

00:01:53.748 --> 00:01:55.440 for the field of anesthesia.

NOTE Confidence: 0.778075575

00:01:55.440 --> 00:01:56.800 I'm Doctor Amit Lahav.

NOTE Confidence: 0.778075575

00:01:56.800 --> 00:01:58.160 You're watching your healthcare.

NOTE Confidence: 0.778075575

00:01:58.160 --> 00:01:59.040 We'll be right back.

NOTE Confidence: 0.84330683

00:02:25.460 --> 00:02:28.100 Welcome back to Your Healthcare.

NOTE Confidence: 0.84330683

00:02:28.100 --> 00:02:29.612 I'm Doctor Amit Lahav.

NOTE Confidence: 0.84330683

00:02:29.612 --> 00:02:31.124 And today we'll discuss

NOTE Confidence: 0.84330683

00:02:31.124 --> 00:02:32.900 the topic of anesthesia.

NOTE Confidence: 0.84330683

00:02:32.900 --> 00:02:34.335 If we can go to the presentation,

NOTE Confidence: 0.84330683

00:02:34.340 --> 00:02:37.358 please. So anesthesia,

NOTE Confidence: 0.84330683

00:02:37.358 --> 00:02:40.359 it's a big topic but a lot to know about.

NOTE Confidence: 0.84330683

00:02:40.360 --> 00:02:42.439 And again, we are privileged today to

NOTE Confidence: 0.84330683

00:02:42.439 --> 00:02:44.640 have with us doctor Brian Koerner,

NOTE Confidence: 0.84330683

00:02:44.640 --> 00:02:46.620 who will speak to us about

NOTE Confidence: 0.84330683

00:02:46.620 --> 00:02:48.420 anesthesia and the different forms

NOTE Confidence: 0.84330683

00:02:48.420 --> 00:02:50.520 of anesthesia and anesthetic agents.
NOTE Confidence: 0.786468088333333

00:02:52.640 --> 00:02:55.880 So anesthesia, as just a definition,
NOTE Confidence: 0.786468088333333

00:02:55.880 --> 00:02:58.576 is a state of controlled temporary loss of
NOTE Confidence: 0.786468088333333

00:02:58.576 --> 00:03:01.426 sensation or awareness that is induced for
NOTE Confidence: 0.786468088333333

00:03:01.426 --> 00:03:03.490 medical purposes like procedure, surgery.
NOTE Confidence: 0.786468088333333

00:03:03.490 --> 00:03:06.080 Like I said, even at the dentist,
NOTE Confidence: 0.786468088333333

00:03:06.080 --> 00:03:08.636 it may include some or all
NOTE Confidence: 0.786468088333333

00:03:08.636 --> 00:03:10.737 form of anesthesia, analgesia,
NOTE Confidence: 0.786468088333333

00:03:10.737 --> 00:03:12.371 paralysis, amnesia,
NOTE Confidence: 0.786468088333333

00:03:12.371 --> 00:03:17.273 and perhaps a form of unconsciousness.
NOTE Confidence: 0.786468088333333

00:03:17.280 --> 00:03:19.380 Anesthesia works by blocking signals
NOTE Confidence: 0.786468088333333

00:03:19.380 --> 00:03:22.320 in the nervous system up to your
NOTE Confidence: 0.786468088333333

00:03:22.320 --> 00:03:24.240 brain through your spinal cord.
NOTE Confidence: 0.786468088333333

00:03:24.240 --> 00:03:26.440 The nervous system is made-up of the brain,
NOTE Confidence: 0.786468088333333

00:03:26.440 --> 00:03:28.300 spinal cord, and the nerves
NOTE Confidence: 0.786468088333333

00:03:28.300 --> 00:03:30.160 that go to your extremities.

NOTE Confidence: 0.786468088333333
00:03:30.160 --> 00:03:32.284 Messages from the body travel through
NOTE Confidence: 0.786468088333333
00:03:32.284 --> 00:03:34.840 the nerves and spinal cord to the brain.
NOTE Confidence: 0.786468088333333
00:03:34.840 --> 00:03:37.225 Anesthesia blocks pain messages from
NOTE Confidence: 0.786468088333333
00:03:37.225 --> 00:03:41.034 getting to the brain and thereby you can
NOTE Confidence: 0.786468088333333
00:03:41.034 --> 00:03:44.156 have these type of procedures in surgery.
NOTE Confidence: 0.786468088333333
00:03:44.160 --> 00:03:46.464 Anesthesia is a way to control
NOTE Confidence: 0.786468088333333
00:03:46.464 --> 00:03:49.208 pain during surgery or procedure by
NOTE Confidence: 0.786468088333333
00:03:49.208 --> 00:03:51.476 using medicine called anesthetics.
NOTE Confidence: 0.786468088333333
00:03:51.480 --> 00:03:53.556 It can help control your breathing,
NOTE Confidence: 0.786468088333333
00:03:53.560 --> 00:03:55.480 blood pressure, blood flow,
NOTE Confidence: 0.786468088333333
00:03:55.480 --> 00:03:57.400 heart rate and rhythm.
NOTE Confidence: 0.786468088333333
00:03:57.400 --> 00:04:00.584 And these things can be controlled by your
NOTE Confidence: 0.786468088333333
00:04:00.584 --> 00:04:02.600 anesthesiologist or what we call CRNA.
NOTE Confidence: 0.883604595555556
00:04:05.000 --> 00:04:05.975 Well, what are some of
NOTE Confidence: 0.883604595555556
00:04:05.975 --> 00:04:06.755 the types of anesthesia?
NOTE Confidence: 0.883604595555556

00:04:06.760 --> 00:04:08.290 We'll get into more detail
NOTE Confidence: 0.883604595555556

00:04:08.290 --> 00:04:10.240 as we go into the show,
NOTE Confidence: 0.883604595555556

00:04:10.240 --> 00:04:11.959 but just to break it down a little bit,
NOTE Confidence: 0.883604595555556

00:04:11.960 --> 00:04:13.736 there's local anesthesia,
NOTE Confidence: 0.883604595555556

00:04:13.736 --> 00:04:14.920 regional anesthesia,
NOTE Confidence: 0.883604595555556

00:04:14.920 --> 00:04:16.400 and then general anesthesia.
NOTE Confidence: 0.908710592608696

00:04:18.880 --> 00:04:20.032 For the local anesthesia,
NOTE Confidence: 0.908710592608696

00:04:20.032 --> 00:04:22.450 it numbs a small part of the body
NOTE Confidence: 0.908710592608696

00:04:22.450 --> 00:04:24.030 from minor procedures like things
NOTE Confidence: 0.908710592608696

00:04:24.030 --> 00:04:26.078 for the hand or sometimes toes.
NOTE Confidence: 0.908710592608696

00:04:26.080 --> 00:04:27.862 For instance, you may be awake
NOTE Confidence: 0.908710592608696

00:04:27.862 --> 00:04:30.048 during the procedure, or you may also
NOTE Confidence: 0.908710592608696

00:04:30.048 --> 00:04:32.600 get a sedative and be more asleep.
NOTE Confidence: 0.908710592608696

00:04:32.600 --> 00:04:34.016 Regional anesthesia blocks pain
NOTE Confidence: 0.908710592608696

00:04:34.016 --> 00:04:36.520 to a larger part of your body,
NOTE Confidence: 0.908710592608696

00:04:36.520 --> 00:04:38.515 like your legs or your whole arm,

NOTE Confidence: 0.908710592608696
00:04:38.520 --> 00:04:39.832 for instance.
NOTE Confidence: 0.908710592608696
00:04:39.832 --> 00:04:41.800 Epidural spinal anesthesia,
NOTE Confidence: 0.908710592608696
00:04:41.800 --> 00:04:43.705 and we'll make the differentiation
NOTE Confidence: 0.908710592608696
00:04:43.705 --> 00:04:46.239 on this with Doctor Kerner later on,
NOTE Confidence: 0.908710592608696
00:04:46.240 --> 00:04:48.200 is a shot of anesthetic near the
NOTE Confidence: 0.908710592608696
00:04:48.200 --> 00:04:50.038 spinal cord and the nerve roots.
NOTE Confidence: 0.908710592608696
00:04:50.040 --> 00:04:52.140 It blocks pain from an entire region
NOTE Confidence: 0.908710592608696
00:04:52.140 --> 00:04:55.560 of the body such as the belly, hips or both,
NOTE Confidence: 0.908710592608696
00:04:55.560 --> 00:04:58.200 lower extremities such as your legs.
NOTE Confidence: 0.908710592608696
00:04:58.200 --> 00:05:00.440 And finally this general anesthesia.
NOTE Confidence: 0.908710592608696
00:05:00.440 --> 00:05:02.057 This is the one that most people
NOTE Confidence: 0.908710592608696
00:05:02.057 --> 00:05:03.988 are aware of where you have sort of
NOTE Confidence: 0.908710592608696
00:05:03.988 --> 00:05:05.640 the tube down helps you breathe,
NOTE Confidence: 0.908710592608696
00:05:05.640 --> 00:05:07.920 you're on a ventilator and you're
NOTE Confidence: 0.908710592608696
00:05:07.920 --> 00:05:09.875 completely out for whatever the
NOTE Confidence: 0.908710592608696

00:05:09.875 --> 00:05:12.113 procedure may be or the surgery
NOTE Confidence: 0.908710592608696

00:05:12.113 --> 00:05:13.232 that you're undertaking.
NOTE Confidence: 0.908710592608696

00:05:13.240 --> 00:05:14.725 So local anesthesia here showing
NOTE Confidence: 0.908710592608696

00:05:14.725 --> 00:05:16.919 is even things like at the dentist,
NOTE Confidence: 0.908710592608696

00:05:16.920 --> 00:05:18.775 you get a little bit injection for
NOTE Confidence: 0.908710592608696

00:05:18.775 --> 00:05:20.751 a nerve root to decrease the pain
NOTE Confidence: 0.908710592608696

00:05:20.751 --> 00:05:21.594 in your mouth.
NOTE Confidence: 0.908710592608696

00:05:21.600 --> 00:05:23.718 If you have like hand procedures,
NOTE Confidence: 0.908710592608696

00:05:23.720 --> 00:05:25.460 sometimes things like carpal
NOTE Confidence: 0.908710592608696

00:05:25.460 --> 00:05:27.200 tunnel or toe procedures,
NOTE Confidence: 0.908710592608696

00:05:27.200 --> 00:05:28.680 this is a local anesthesia.
NOTE Confidence: 0.908710592608696

00:05:28.680 --> 00:05:30.336 And now this very small area
NOTE Confidence: 0.908710592608696

00:05:30.336 --> 00:05:32.120 that needs to be worked on,
NOTE Confidence: 0.85871344

00:05:34.240 --> 00:05:35.960 moving on to regional anesthesia,
NOTE Confidence: 0.85871344

00:05:35.960 --> 00:05:38.200 again it's a bigger area.
NOTE Confidence: 0.85871344

00:05:38.200 --> 00:05:40.276 There's also things called nerve blocks.

NOTE Confidence: 0.85871344

00:05:40.280 --> 00:05:41.416 We'll speak with Doctor

NOTE Confidence: 0.85871344

00:05:41.416 --> 00:05:42.836 Kerner about this as well.

NOTE Confidence: 0.85871344

00:05:42.840 --> 00:05:45.234 And nerve blocks help decrease pain

NOTE Confidence: 0.85871344

00:05:45.234 --> 00:05:47.822 in a certain larger area of the

NOTE Confidence: 0.85871344

00:05:47.822 --> 00:05:50.320 body such as your knee or your arm,

NOTE Confidence: 0.85871344

00:05:50.320 --> 00:05:51.280 for instance.

NOTE Confidence: 0.85871344

00:05:51.280 --> 00:05:53.680 And Speaking of nerve blocks,

NOTE Confidence: 0.85871344

00:05:53.680 --> 00:05:55.640 different type of nerve blocks,

NOTE Confidence: 0.85871344

00:05:55.640 --> 00:05:58.304 some that go into your neck to arm the

NOTE Confidence: 0.85871344

00:05:58.304 --> 00:06:00.468 whole shoulder and upper extremity

NOTE Confidence: 0.85871344

00:06:00.468 --> 00:06:02.718 for things like shoulder procedures

NOTE Confidence: 0.85871344

00:06:02.718 --> 00:06:05.468 or elbow procedures in your leg to

NOTE Confidence: 0.85871344

00:06:05.468 --> 00:06:07.190 numb things like your lower extremity

NOTE Confidence: 0.85871344

00:06:07.253 --> 00:06:09.077 from your knee down for instance.

NOTE Confidence: 0.85871344

00:06:09.080 --> 00:06:12.432 So these blocks help with pain and they

NOTE Confidence: 0.85871344

00:06:12.432 --> 00:06:15.542 have become really a forefront of pain
NOTE Confidence: 0.85871344

00:06:15.542 --> 00:06:17.852 management for even big procedures
NOTE Confidence: 0.85871344

00:06:17.852 --> 00:06:20.800 such as total joint replacements.
NOTE Confidence: 0.85871344

00:06:20.800 --> 00:06:23.488 Then we look at things like
NOTE Confidence: 0.85871344

00:06:23.488 --> 00:06:24.832 epidural spinal anesthesia,
NOTE Confidence: 0.85871344

00:06:24.840 --> 00:06:26.556 we'll make the differentiation on this.
NOTE Confidence: 0.85871344

00:06:26.560 --> 00:06:29.296 And really the indication here is where the
NOTE Confidence: 0.85871344

00:06:29.296 --> 00:06:31.480 needle really goes and it's in your back,
NOTE Confidence: 0.85871344

00:06:31.480 --> 00:06:33.881 in your spine and it helps numb
NOTE Confidence: 0.85871344

00:06:33.881 --> 00:06:35.919 a larger portion of your body,
NOTE Confidence: 0.85871344

00:06:35.920 --> 00:06:38.146 really kind of from your lower
NOTE Confidence: 0.85871344

00:06:38.146 --> 00:06:39.640 extremities even up to your belly.
NOTE Confidence: 0.85871344

00:06:39.640 --> 00:06:42.636 Things like pregnancy or delivering a baby,
NOTE Confidence: 0.85871344

00:06:42.640 --> 00:06:44.908 as well as procedures even again like
NOTE Confidence: 0.85871344

00:06:44.908 --> 00:06:46.880 jaw replacements that can numb the hip,
NOTE Confidence: 0.85871344

00:06:46.880 --> 00:06:47.780 the knee,

NOTE Confidence: 0.85871344

00:06:47.780 --> 00:06:50.480 any procedures in the lower extremity.

NOTE Confidence: 0.85871344

00:06:50.480 --> 00:06:51.758 And then finally,

NOTE Confidence: 0.85871344

00:06:51.758 --> 00:06:53.888 general anesthesia in general means

NOTE Confidence: 0.85871344

00:06:53.888 --> 00:06:56.008 that you are out, completely out,

NOTE Confidence: 0.85871344

00:06:56.008 --> 00:06:58.276 You're not even breathing on your own.

NOTE Confidence: 0.85871344

00:06:58.280 --> 00:06:59.954 There's a tube that goes down

NOTE Confidence: 0.85871344

00:06:59.954 --> 00:07:01.454 your throat and there's actually

NOTE Confidence: 0.85871344

00:07:01.454 --> 00:07:03.440 different versions of this as well.

NOTE Confidence: 0.85871344

00:07:03.440 --> 00:07:05.965 But general anesthesia can be

NOTE Confidence: 0.85871344

00:07:05.965 --> 00:07:08.112 even done for facial procedures

NOTE Confidence: 0.85871344

00:07:08.112 --> 00:07:10.640 where the tube is done not go down

NOTE Confidence: 0.85871344

00:07:10.709 --> 00:07:12.719 your your throat from your mouth,

NOTE Confidence: 0.85871344

00:07:12.720 --> 00:07:15.036 it actually goes from your nose.

NOTE Confidence: 0.85871344

00:07:15.040 --> 00:07:15.964 But again,

NOTE Confidence: 0.85871344

00:07:15.964 --> 00:07:17.350 general anesthesia essentially

NOTE Confidence: 0.85871344

00:07:17.350 --> 00:07:18.274 numbs everything.
NOTE Confidence: 0.85871344

00:07:18.280 --> 00:07:19.918 You are out for the procedure.
NOTE Confidence: 0.937241165714286

00:07:22.280 --> 00:07:24.905 So what are what determines really the
NOTE Confidence: 0.937241165714286

00:07:24.905 --> 00:07:27.280 type of anesthesia that you will use?
NOTE Confidence: 0.937241165714286

00:07:27.280 --> 00:07:29.716 Well, your past and current health,
NOTE Confidence: 0.937241165714286

00:07:29.720 --> 00:07:31.725 your family history, other surgeries
NOTE Confidence: 0.937241165714286

00:07:31.725 --> 00:07:34.400 you may have had health problems,
NOTE Confidence: 0.937241165714286

00:07:34.400 --> 00:07:37.130 heart disease, diabetes can indicate
NOTE Confidence: 0.937241165714286

00:07:37.130 --> 00:07:39.671 the type of anesthesia example.
NOTE Confidence: 0.937241165714286

00:07:39.671 --> 00:07:41.426 You may need general anesthesia
NOTE Confidence: 0.937241165714286

00:07:41.426 --> 00:07:43.564 to ensure your comfort and safety
NOTE Confidence: 0.937241165714286

00:07:43.564 --> 00:07:45.239 during certain types of bigger,
NOTE Confidence: 0.937241165714286

00:07:45.240 --> 00:07:46.232 larger procedures.
NOTE Confidence: 0.937241165714286

00:07:46.232 --> 00:07:50.200 The results of tests such as blood tests,
NOTE Confidence: 0.937241165714286

00:07:50.200 --> 00:07:54.520 EKG and so forth can also indicate the type
NOTE Confidence: 0.937241165714286

00:07:54.520 --> 00:07:57.718 procedure that you may or may not need.

NOTE Confidence: 0.937241165714286
00:07:57.720 --> 00:07:59.477 Well, how should you prepare for anesthesia?
NOTE Confidence: 0.937241165714286
00:07:59.480 --> 00:08:01.240 We'll discuss this really at
NOTE Confidence: 0.937241165714286
00:08:01.240 --> 00:08:03.000 at length with Doctor Kerner.
NOTE Confidence: 0.937241165714286
00:08:03.000 --> 00:08:04.680 You know you got to avoid certain
NOTE Confidence: 0.937241165714286
00:08:04.680 --> 00:08:06.318 food and drinks a certain amount
NOTE Confidence: 0.937241165714286
00:08:06.318 --> 00:08:07.758 of hours before the procedure.
NOTE Confidence: 0.937241165714286
00:08:07.760 --> 00:08:09.360 Smoking is always a risk,
NOTE Confidence: 0.937241165714286
00:08:09.360 --> 00:08:11.080 not just for wound healing,
NOTE Confidence: 0.937241165714286
00:08:11.080 --> 00:08:12.904 but also sometimes for the type
NOTE Confidence: 0.937241165714286
00:08:12.904 --> 00:08:14.640 of anesthesia you may receive.
NOTE Confidence: 0.937241165714286
00:08:14.640 --> 00:08:16.920 You need to stop taking different
NOTE Confidence: 0.937241165714286
00:08:16.920 --> 00:08:18.440 type of herbal supplements.
NOTE Confidence: 0.937241165714286
00:08:18.440 --> 00:08:20.108 Different medications also have
NOTE Confidence: 0.937241165714286
00:08:20.108 --> 00:08:22.193 to be stopped before surgery.
NOTE Confidence: 0.946358996666667
00:08:24.720 --> 00:08:25.599 Certain blood pressure,
NOTE Confidence: 0.946358996666667

00:08:25.599 --> 00:08:27.357 not all but certain blood pressures.
NOTE Confidence: 0.946358996666667

00:08:27.360 --> 00:08:29.110 Also, these type of medications
NOTE Confidence: 0.946358996666667

00:08:29.110 --> 00:08:31.608 need to be stopped before the type
NOTE Confidence: 0.946358996666667

00:08:31.608 --> 00:08:33.318 of anesthesia you may receive.
NOTE Confidence: 0.946358996666667

00:08:33.320 --> 00:08:37.008 So it's important to prepare for the right
NOTE Confidence: 0.946358996666667

00:08:37.008 --> 00:08:40.119 anesthesia for your procedure or surgery.
NOTE Confidence: 0.946358996666667

00:08:40.120 --> 00:08:42.598 Some potential side effects of anesthesia,
NOTE Confidence: 0.946358996666667

00:08:42.600 --> 00:08:44.875 things like back pain or muscle pain,
NOTE Confidence: 0.946358996666667

00:08:44.880 --> 00:08:47.260 chills, difficulty urinating, fatigue,
NOTE Confidence: 0.946358996666667

00:08:47.260 --> 00:08:49.640 something headache or itching,
NOTE Confidence: 0.946358996666667

00:08:49.640 --> 00:08:53.152 nausea and vomiting are just some few side
NOTE Confidence: 0.946358996666667

00:08:53.152 --> 00:08:55.288 effects that can occur with anesthesia
NOTE Confidence: 0.946358996666667

00:08:55.288 --> 00:08:57.120 and obviously these are minimal.
NOTE Confidence: 0.946358996666667

00:08:57.120 --> 00:09:00.256 We try to minimize all these type of
NOTE Confidence: 0.946358996666667

00:09:00.256 --> 00:09:02.650 side effects and give you the best
NOTE Confidence: 0.946358996666667

00:09:02.650 --> 00:09:04.698 opportunity to have the best anesthesia

NOTE Confidence: 0.946358996666667
00:09:04.698 --> 00:09:07.267 you can with minimal side effects and
NOTE Confidence: 0.946358996666667
00:09:07.267 --> 00:09:09.877 the best benefits of that anesthesia.
NOTE Confidence: 0.946358996666667
00:09:09.880 --> 00:09:11.920 So who is at risk for
NOTE Confidence: 0.946358996666667
00:09:11.920 --> 00:09:12.600 anesthesia complication?
NOTE Confidence: 0.946358996666667
00:09:12.600 --> 00:09:14.280 Well, the older you are,
NOTE Confidence: 0.946358996666667
00:09:14.280 --> 00:09:15.799 the more medical conditions you may have.
NOTE Confidence: 0.946358996666667
00:09:15.800 --> 00:09:17.735 So advanced age, diabetes or
NOTE Confidence: 0.946358996666667
00:09:17.735 --> 00:09:20.080 kidney disease always plays a role.
NOTE Confidence: 0.946358996666667
00:09:20.080 --> 00:09:22.005 There's a lot of fluid shifts and
NOTE Confidence: 0.946358996666667
00:09:22.005 --> 00:09:23.424 different medications that go through
NOTE Confidence: 0.946358996666667
00:09:23.424 --> 00:09:25.314 your kidneys that can affect your kidneys.
NOTE Confidence: 0.946358996666667
00:09:25.320 --> 00:09:28.354 And as well, the liver family history,
NOTE Confidence: 0.946358996666667
00:09:28.354 --> 00:09:30.182 something called malignant hyperthermia
NOTE Confidence: 0.946358996666667
00:09:30.182 --> 00:09:33.556 and we can discuss this a little bit later.
NOTE Confidence: 0.946358996666667
00:09:33.560 --> 00:09:34.200 Heart disease,
NOTE Confidence: 0.946358996666667

00:09:34.200 --> 00:09:36.440 high blood pressure or history of strokes,
NOTE Confidence: 0.946358996666667

00:09:36.440 --> 00:09:38.760 for instance, can indicate really
NOTE Confidence: 0.946358996666667

00:09:38.760 --> 00:09:41.080 a higher risk for anesthesia,
NOTE Confidence: 0.946358996666667

00:09:41.080 --> 00:09:42.288 lung disease,
NOTE Confidence: 0.946358996666667

00:09:42.288 --> 00:09:43.496 difficulty breathing,
NOTE Confidence: 0.946358996666667

00:09:43.496 --> 00:09:46.516 COPD or obstructive lung disease,
NOTE Confidence: 0.946358996666667

00:09:46.520 --> 00:09:47.576 emphysema, obesity,
NOTE Confidence: 0.946358996666667

00:09:47.576 --> 00:09:51.800 there's more weight on your chest or lungs.
NOTE Confidence: 0.946358996666667

00:09:51.800 --> 00:09:53.760 Higher body mass index or what we
NOTE Confidence: 0.946358996666667

00:09:53.760 --> 00:09:56.612 call a BMI can also raise some risks
NOTE Confidence: 0.946358996666667

00:09:56.612 --> 00:09:59.382 for certain type of anesthesia if
NOTE Confidence: 0.946358996666667

00:09:59.382 --> 00:10:01.674 you're on any type of neuroleptic
NOTE Confidence: 0.946358996666667

00:10:01.674 --> 00:10:02.892 or neurological medications.
NOTE Confidence: 0.946358996666667

00:10:02.892 --> 00:10:04.248 Seizures, sleep apnea,
NOTE Confidence: 0.946358996666667

00:10:04.248 --> 00:10:07.360 and again smoking creeps up into this,
NOTE Confidence: 0.946358996666667

00:10:07.360 --> 00:10:10.832 as well as some of the risks that

NOTE Confidence: 0.946358996666667
00:10:10.832 --> 00:10:12.827 anesthesiologist has to assess
NOTE Confidence: 0.946358996666667
00:10:12.827 --> 00:10:14.915 before giving you anesthesia.
NOTE Confidence: 0.946358996666667
00:10:14.920 --> 00:10:15.388 Now,
NOTE Confidence: 0.946358996666667
00:10:15.388 --> 00:10:18.196 we spoke briefly on malignant hyperthermia.
NOTE Confidence: 0.946358996666667
00:10:18.200 --> 00:10:19.800 This tends to be rare,
NOTE Confidence: 0.946358996666667
00:10:19.800 --> 00:10:21.944 but it's terrible if it happens and has
NOTE Confidence: 0.946358996666667
00:10:21.944 --> 00:10:24.400 to be really approached very quickly.
NOTE Confidence: 0.946358996666667
00:10:24.400 --> 00:10:26.752 It's a severe reaction to certain
NOTE Confidence: 0.946358996666667
00:10:26.752 --> 00:10:28.320 drugs used for anesthesia.
NOTE Confidence: 0.946358996666667
00:10:28.320 --> 00:10:30.399 Again, this tends to be pretty rare,
NOTE Confidence: 0.946358996666667
00:10:30.400 --> 00:10:32.878 but the anesthesiologist is always ready.
NOTE Confidence: 0.946358996666667
00:10:32.880 --> 00:10:35.598 It's a severe reaction which typically
NOTE Confidence: 0.946358996666667
00:10:35.598 --> 00:10:38.172 includes dangerously high body temperature,
NOTE Confidence: 0.946358996666667
00:10:38.172 --> 00:10:40.596 rigid muscle or spasm,
NOTE Confidence: 0.946358996666667
00:10:40.600 --> 00:10:43.198 fast heart rate and other symptoms.
NOTE Confidence: 0.946358996666667

00:10:43.200 --> 00:10:45.198 And this needs to be properly
NOTE Confidence: 0.946358996666667

00:10:45.198 --> 00:10:46.197 treated very quickly.
NOTE Confidence: 0.946358996666667

00:10:46.200 --> 00:10:47.940 And that's why sometimes there's
NOTE Confidence: 0.946358996666667

00:10:47.940 --> 00:10:50.240 carts around the operating room just
NOTE Confidence: 0.946358996666667

00:10:50.240 --> 00:10:52.640 for these type of rare occasions.
NOTE Confidence: 0.946358996666667

00:10:52.640 --> 00:10:54.770 But the anesthesiologist is the one
NOTE Confidence: 0.946358996666667

00:10:54.770 --> 00:10:56.518 that monitors you throughout the
NOTE Confidence: 0.946358996666667

00:10:56.518 --> 00:10:58.144 procedure and make sure that you
NOTE Confidence: 0.946358996666667

00:10:58.144 --> 00:11:00.093 are safe and comfortable to whatever
NOTE Confidence: 0.946358996666667

00:11:00.093 --> 00:11:02.235 procedure or surgery you may have.
NOTE Confidence: 0.946358996666667

00:11:02.240 --> 00:11:04.184 And this really comes down to
NOTE Confidence: 0.946358996666667

00:11:04.184 --> 00:11:05.480 monitoring you during anesthesia.
NOTE Confidence: 0.946358996666667

00:11:05.480 --> 00:11:07.316 You know what are the anesthesiologists
NOTE Confidence: 0.946358996666667

00:11:07.316 --> 00:11:09.399 looks at not just blood pressure,
NOTE Confidence: 0.946358996666667

00:11:09.400 --> 00:11:11.136 breathing, but everything else.
NOTE Confidence: 0.946358996666667

00:11:11.136 --> 00:11:13.306 You they literally monitor you

NOTE Confidence: 0.946358996666667
00:11:13.306 --> 00:11:14.758 throughout the entire time.
NOTE Confidence: 0.946358996666667
00:11:14.760 --> 00:11:16.640 Somebody's always looking after you
NOTE Confidence: 0.946358996666667
00:11:16.640 --> 00:11:18.768 all the time to make sure again you
NOTE Confidence: 0.946358996666667
00:11:18.768 --> 00:11:20.878 are safe throughout the procedure.
NOTE Confidence: 0.946358996666667
00:11:20.880 --> 00:11:23.918 So that brings us up to anesthesia.
NOTE Confidence: 0.946358996666667
00:11:23.920 --> 00:11:25.594 And what I like to do is we're going
NOTE Confidence: 0.946358996666667
00:11:25.594 --> 00:11:27.412 to take a very short break and we're
NOTE Confidence: 0.946358996666667
00:11:27.412 --> 00:11:28.998 going to come back and introduce
NOTE Confidence: 0.946358996666667
00:11:29.000 --> 00:11:32.366 Doctor Brian Kerner again Director of
NOTE Confidence: 0.946358996666667
00:11:32.366 --> 00:11:34.610 Regional Anesthesia and Bridgeport
NOTE Confidence: 0.946358996666667
00:11:34.697 --> 00:11:36.957 Hospitals as well as Clinical
NOTE Confidence: 0.965593794444444
00:11:36.960 --> 00:11:38.960 Assistant Professor at the School
NOTE Confidence: 0.965593794444444
00:11:38.960 --> 00:11:41.168 of Medicine at Yale. Stay tuned,
NOTE Confidence: 0.965593794444444
00:11:41.168 --> 00:11:42.992 we'll be right back and we'll
NOTE Confidence: 0.965593794444444
00:11:42.992 --> 00:11:44.880 enlighten you more about anesthesia.
NOTE Confidence: 0.828588388

00:12:15.690 --> 00:12:18.250 Welcome back to your Healthcare.
NOTE Confidence: 0.828588388

00:12:18.250 --> 00:12:19.662 I'm Doctor Amit Lahab.
NOTE Confidence: 0.828588388

00:12:19.662 --> 00:12:22.425 And again, we're privileged today to have
NOTE Confidence: 0.828588388

00:12:22.425 --> 00:12:25.374 with us one of my colleagues and friends
NOTE Confidence: 0.828588388

00:12:25.374 --> 00:12:27.289 from Bridgeport Hospital system in Yale,
NOTE Confidence: 0.828588388

00:12:27.290 --> 00:12:31.118 New Haven Health Doctor Brian Kerner.
NOTE Confidence: 0.828588388

00:12:31.120 --> 00:12:32.605 Doctor Kerner, thank you very
NOTE Confidence: 0.828588388

00:12:32.605 --> 00:12:34.440 much for being with us here.
NOTE Confidence: 0.828588388

00:12:34.440 --> 00:12:36.799 You know, as director of regional anesthesia,
NOTE Confidence: 0.828588388

00:12:36.800 --> 00:12:39.125 Bridgeport Hospital affiliated with Yale
NOTE Confidence: 0.828588388

00:12:39.125 --> 00:12:41.184 School of Medicine assistant professor,
NOTE Confidence: 0.828588388

00:12:41.184 --> 00:12:43.840 really it's a privilege to have you here.
NOTE Confidence: 0.828588388

00:12:43.840 --> 00:12:46.117 And I think it's a really important topic of,
NOTE Confidence: 0.828588388

00:12:46.120 --> 00:12:48.040 you know, individuals out there really,
NOTE Confidence: 0.828588388

00:12:48.040 --> 00:12:49.916 you know, getting some sort of anesthesia,
NOTE Confidence: 0.828588388

00:12:49.920 --> 00:12:50.718 but you know,

NOTE Confidence: 0.828588388

00:12:50.718 --> 00:12:52.314 not really knowing what you're getting,

NOTE Confidence: 0.828588388

00:12:52.320 --> 00:12:53.320 how to prepare for it,

NOTE Confidence: 0.828588388

00:12:53.320 --> 00:12:55.156 some of the history of anesthesia.

NOTE Confidence: 0.828588388

00:12:55.160 --> 00:12:55.940 So let's begin.

NOTE Confidence: 0.828588388

00:12:55.940 --> 00:12:56.200 Actually,

NOTE Confidence: 0.828588388

00:12:56.200 --> 00:12:57.760 a little bit of your background.

NOTE Confidence: 0.9069919925

00:12:58.120 --> 00:12:59.362 Sure. Well, I'll start by saying

NOTE Confidence: 0.9069919925

00:12:59.362 --> 00:13:00.559 it's a pleasure to be here.

NOTE Confidence: 0.9069919925

00:13:00.560 --> 00:13:01.554 Thank you so much for having me.

NOTE Confidence: 0.9069919925

00:13:01.560 --> 00:13:03.927 I'm excited to be here and sort of teach

NOTE Confidence: 0.9069919925

00:13:03.927 --> 00:13:06.636 the audience a bit about what anesthesia is.

NOTE Confidence: 0.9069919925

00:13:06.640 --> 00:13:08.632 I think there's a lot of

NOTE Confidence: 0.9069919925

00:13:08.632 --> 00:13:09.960 misconceptions out there and,

NOTE Confidence: 0.9069919925

00:13:09.960 --> 00:13:11.836 you know, beliefs about what we do.

NOTE Confidence: 0.9069919925

00:13:11.840 --> 00:13:12.764 So it'll be great to clear

NOTE Confidence: 0.9069919925

00:13:12.764 --> 00:13:13.799 a few of those things up.
NOTE Confidence: 0.9069919925

00:13:13.800 --> 00:13:16.620 So thank you for having me, my background.
NOTE Confidence: 0.9069919925

00:13:16.620 --> 00:13:19.320 I grew up in the Northeast.
NOTE Confidence: 0.9069919925

00:13:19.320 --> 00:13:21.480 I have a family at home.
NOTE Confidence: 0.9069919925

00:13:21.480 --> 00:13:23.640 I have two young girls,
NOTE Confidence: 0.9069919925

00:13:23.640 --> 00:13:25.160 soon to have a third.
NOTE Confidence: 0.9069919925

00:13:25.160 --> 00:13:26.810 I did my medical training down
NOTE Confidence: 0.9069919925

00:13:26.810 --> 00:13:28.314 in South Florida, the Southeast.
NOTE Confidence: 0.9069919925

00:13:28.314 --> 00:13:31.465 Then I spent a year and a half in
NOTE Confidence: 0.9069919925

00:13:31.465 --> 00:13:32.965 Seattle doing specialized training,
NOTE Confidence: 0.9069919925

00:13:32.965 --> 00:13:34.840 what's known as regional anesthesia.
NOTE Confidence: 0.9069919925

00:13:34.840 --> 00:13:35.872 That's really my passion.
NOTE Confidence: 0.9069919925

00:13:35.872 --> 00:13:38.200 And then we came back to the Northeast,
NOTE Confidence: 0.9069919925

00:13:38.200 --> 00:13:40.114 where I settled into a position
NOTE Confidence: 0.9069919925

00:13:40.114 --> 00:13:42.297 with Yale School of Medicine and
NOTE Confidence: 0.9069919925

00:13:42.297 --> 00:13:44.397 now mainly at Bridgeport Hospital,

NOTE Confidence: 0.9069919925

00:13:44.400 --> 00:13:45.800 Milford Hospital on Park Ave.

NOTE Confidence: 0.9069919925

00:13:45.800 --> 00:13:46.520 Medical Center.

NOTE Confidence: 0.901123297272727

00:13:47.040 --> 00:13:48.996 So you actually have experience throughout

NOTE Confidence: 0.901123297272727

00:13:48.996 --> 00:13:51.500 I should say the whole continent going

NOTE Confidence: 0.901123297272727

00:13:51.500 --> 00:13:54.474 from the northeast to the South to

NOTE Confidence: 0.901123297272727

00:13:54.474 --> 00:13:56.838 the northwest back to the northeast,

NOTE Confidence: 0.901123297272727

00:13:56.840 --> 00:13:58.865 which actually makes it a a kind of a

NOTE Confidence: 0.901123297272727

00:13:58.865 --> 00:14:01.053 more complete experience of even what's

NOTE Confidence: 0.901123297272727

00:14:01.053 --> 00:14:02.958 done throughout the continental USA.

NOTE Confidence: 0.82388814

00:14:03.360 --> 00:14:04.992 Absolutely. There are different

NOTE Confidence: 0.82388814

00:14:04.992 --> 00:14:06.684 cultures you know in medicine and it

NOTE Confidence: 0.82388814

00:14:06.684 --> 00:14:08.360 has been great to experience that.

NOTE Confidence: 0.82388814

00:14:08.360 --> 00:14:10.440 So I feel privileged to have an opportunity

NOTE Confidence: 0.82388814

00:14:10.440 --> 00:14:12.312 to have done that and use those skills

NOTE Confidence: 0.82388814

00:14:12.312 --> 00:14:13.560 that I've learned along the way,

NOTE Confidence: 0.82388814

00:14:13.560 --> 00:14:14.916 you know for patients every day.

NOTE Confidence: 0.893871943666667

00:14:15.320 --> 00:14:17.063 And again some of your interest is

NOTE Confidence: 0.893871943666667

00:14:17.063 --> 00:14:18.764 actually in the in regional anesthesia

NOTE Confidence: 0.893871943666667

00:14:18.764 --> 00:14:20.857 and blocks and I've had the privilege

NOTE Confidence: 0.893871943666667

00:14:20.913 --> 00:14:22.621 of working with you also in the

NOTE Confidence: 0.893871943666667

00:14:22.621 --> 00:14:24.260 operating room on different blocks

NOTE Confidence: 0.893871943666667

00:14:24.260 --> 00:14:26.960 for joint replacements which is proven

NOTE Confidence: 0.893871943666667

00:14:26.960 --> 00:14:29.238 actually very efficient very well.

NOTE Confidence: 0.893871943666667

00:14:29.240 --> 00:14:32.032 And that's how you sort of even move

NOTE Confidence: 0.893871943666667

00:14:32.032 --> 00:14:34.015 these patients through from staying in

NOTE Confidence: 0.893871943666667

00:14:34.015 --> 00:14:36.069 the hospital to same day type of surgery

NOTE Confidence: 0.893871943666667

00:14:36.069 --> 00:14:38.078 even for very big type of procedures.

NOTE Confidence: 0.893871943666667

00:14:38.080 --> 00:14:40.492 So the regional part of anesthesia

NOTE Confidence: 0.893871943666667

00:14:40.492 --> 00:14:42.880 has become really very important,

NOTE Confidence: 0.893871943666667

00:14:42.880 --> 00:14:44.386 you know part of of really

NOTE Confidence: 0.893871943666667

00:14:44.386 --> 00:14:45.280 any surgeon's practice.

NOTE Confidence: 0.791966426

00:14:45.640 --> 00:14:47.400 Absolutely, I it's something I'm

NOTE Confidence: 0.791966426

00:14:47.400 --> 00:14:49.160 that I'm very passionate about.

NOTE Confidence: 0.791966426

00:14:49.160 --> 00:14:51.284 Now, regional anesthesia of course having

NOTE Confidence: 0.791966426

00:14:51.284 --> 00:14:53.501 doing some extra training in that and

NOTE Confidence: 0.791966426

00:14:53.501 --> 00:14:55.237 practice it every day like you said

NOTE Confidence: 0.791966426

00:14:55.296 --> 00:14:57.196 with joint procedures like yourself.

NOTE Confidence: 0.791966426

00:14:57.200 --> 00:14:58.796 But there are two reasons why we

NOTE Confidence: 0.791966426

00:14:58.796 --> 00:15:00.600 would do a regional anesthetic.

NOTE Confidence: 0.791966426

00:15:00.600 --> 00:15:02.917 One would be for pain control afterwards,

NOTE Confidence: 0.791966426

00:15:02.920 --> 00:15:05.111 so you'd receive a full general anesthetic

NOTE Confidence: 0.791966426

00:15:05.111 --> 00:15:07.372 and then this is for pain relief for

NOTE Confidence: 0.791966426

00:15:07.372 --> 00:15:09.360 a period of time after the surgery.

NOTE Confidence: 0.791966426

00:15:09.360 --> 00:15:11.502 But another reason we do regional

NOTE Confidence: 0.791966426

00:15:11.502 --> 00:15:13.639 anesthesia and we will touch more

NOTE Confidence: 0.791966426

00:15:13.640 --> 00:15:15.416 on this along the way is we can

NOTE Confidence: 0.791966426

00:15:15.416 --> 00:15:17.518 avoid a general anesthetic entirely.
NOTE Confidence: 0.791966426

00:15:17.520 --> 00:15:19.396 So there are patients who really are,
NOTE Confidence: 0.791966426

00:15:19.400 --> 00:15:21.596 it's contraindicator really not safe to
NOTE Confidence: 0.791966426

00:15:21.596 --> 00:15:24.600 be doing a full general anesthetic on.
NOTE Confidence: 0.791966426

00:15:24.600 --> 00:15:26.720 So we can just do a regional anesthetic,
NOTE Confidence: 0.791966426

00:15:26.720 --> 00:15:27.710 either a spinal,
NOTE Confidence: 0.791966426

00:15:27.710 --> 00:15:30.020 an epidural or a peripheral neuroblock and
NOTE Confidence: 0.791966426

00:15:30.080 --> 00:15:32.600 we can avoid general anesthesia all together,
NOTE Confidence: 0.791966426

00:15:32.600 --> 00:15:34.567 which can be much safer and people
NOTE Confidence: 0.791966426

00:15:34.567 --> 00:15:36.679 typically feel a lot better afterwards.
NOTE Confidence: 0.95812108

00:15:36.880 --> 00:15:38.920 So let's actually go into your,
NOTE Confidence: 0.95812108

00:15:38.920 --> 00:15:41.520 your first slide of really
NOTE Confidence: 0.95812108

00:15:41.520 --> 00:15:43.080 what is anesthesia,
NOTE Confidence: 0.95812108

00:15:43.080 --> 00:15:44.611 if we can go right the back. Yes.
NOTE Confidence: 0.95812108

00:15:44.611 --> 00:15:46.648 So let's talk a little bit about
NOTE Confidence: 0.95812108

00:15:46.648 --> 00:15:48.199 just starting with the basics.

NOTE Confidence: 0.95812108

00:15:48.200 --> 00:15:49.199 What is anesthesia?

NOTE Confidence: 0.839212664

00:15:49.280 --> 00:15:51.240 Great. Well, like I said,

NOTE Confidence: 0.839212664

00:15:51.240 --> 00:15:52.137 we started talking.

NOTE Confidence: 0.839212664

00:15:52.137 --> 00:15:54.230 I think there's a lot of misconceptions

NOTE Confidence: 0.839212664

00:15:54.287 --> 00:15:55.757 about there about what we do.

NOTE Confidence: 0.839212664

00:15:55.760 --> 00:15:57.363 And for those who haven't seen it

NOTE Confidence: 0.839212664

00:15:57.363 --> 00:15:59.280 in the life of an anesthesiologist,

NOTE Confidence: 0.839212664

00:15:59.280 --> 00:16:00.996 it's actually pretty wild to see

NOTE Confidence: 0.839212664

00:16:00.996 --> 00:16:02.677 the patient go through this process

NOTE Confidence: 0.839212664

00:16:02.677 --> 00:16:04.589 of being in the pre op area fully

NOTE Confidence: 0.839212664

00:16:04.649 --> 00:16:06.275 asleep or unconscious and then wake

NOTE Confidence: 0.839212664

00:16:06.275 --> 00:16:08.190 up as if nothing had happened.

NOTE Confidence: 0.839212664

00:16:08.190 --> 00:16:10.680 So it's good to talk about.

NOTE Confidence: 0.839212664

00:16:10.680 --> 00:16:12.740 I'd like to sort of tell the story of how

NOTE Confidence: 0.839212664

00:16:12.790 --> 00:16:14.799 a patient comes into the operating room,

NOTE Confidence: 0.839212664

00:16:14.800 --> 00:16:15.506 their experience.
NOTE Confidence: 0.839212664

00:16:15.506 --> 00:16:16.918 So for the audience,
NOTE Confidence: 0.839212664

00:16:16.920 --> 00:16:18.798 typically you've spoken to your surgeon
NOTE Confidence: 0.839212664

00:16:18.798 --> 00:16:21.039 maybe a few times before coming in.
NOTE Confidence: 0.839212664

00:16:21.040 --> 00:16:22.840 You know preparation has been made,
NOTE Confidence: 0.839212664

00:16:22.840 --> 00:16:24.750 but typically you haven't spoken
NOTE Confidence: 0.839212664

00:16:24.750 --> 00:16:26.278 to your anesthesiologist before.
NOTE Confidence: 0.839212664

00:16:26.280 --> 00:16:28.206 So you sort of learn what the plan will
NOTE Confidence: 0.839212664

00:16:28.206 --> 00:16:30.152 be and we'll talk about most common
NOTE Confidence: 0.839212664

00:16:30.152 --> 00:16:32.015 surgeries where you do receive that
NOTE Confidence: 0.839212664

00:16:32.015 --> 00:16:34.079 general anesthetic that you talked about,
NOTE Confidence: 0.839212664

00:16:34.080 --> 00:16:35.946 where you're fully asleep or unconscious
NOTE Confidence: 0.839212664

00:16:35.946 --> 00:16:38.638 and then we put that breathing device in.
NOTE Confidence: 0.839212664

00:16:38.640 --> 00:16:41.314 So typically, you get to the operating
NOTE Confidence: 0.839212664

00:16:41.314 --> 00:16:43.516 room around 6:30-ish in the morning,
NOTE Confidence: 0.839212664

00:16:43.516 --> 00:16:44.952 pretty early for scheduled

NOTE Confidence: 0.839212664

00:16:44.952 --> 00:16:46.297 surgery time of 730.

NOTE Confidence: 0.839212664

00:16:46.297 --> 00:16:47.211 You'll arrive,

NOTE Confidence: 0.839212664

00:16:47.211 --> 00:16:49.953 you'll change into a hospital gown,

NOTE Confidence: 0.839212664

00:16:49.960 --> 00:16:51.920 You'll speak to nursing staff.

NOTE Confidence: 0.839212664

00:16:51.920 --> 00:16:53.340 You'll typically get an intravenous

NOTE Confidence: 0.839212664

00:16:53.340 --> 00:16:55.396 line and then you'll speak to the

NOTE Confidence: 0.839212664

00:16:55.396 --> 00:16:56.560 anesthesiologist at some point.

NOTE Confidence: 0.839212664

00:16:56.560 --> 00:16:58.102 And that's when we'll talk about

NOTE Confidence: 0.839212664

00:16:58.102 --> 00:16:59.864 what our plan is and, you know,

NOTE Confidence: 0.839212664

00:16:59.864 --> 00:17:00.560 agree on that.

NOTE Confidence: 0.839212664

00:17:00.560 --> 00:17:01.721 For this procedure,

NOTE Confidence: 0.839212664

00:17:01.721 --> 00:17:03.656 we need a general anesthetic

NOTE Confidence: 0.839212664

00:17:03.656 --> 00:17:05.838 where typically I will say you're

NOTE Confidence: 0.839212664

00:17:05.838 --> 00:17:07.518 asleep for the entire procedure.

NOTE Confidence: 0.839212664

00:17:07.520 --> 00:17:08.756 We'll get into the, you know,

NOTE Confidence: 0.839212664

00:17:08.760 --> 00:17:11.060 specifics of of that.
NOTE Confidence: 0.839212664

00:17:11.060 --> 00:17:13.360 It's not technically sleep,
NOTE Confidence: 0.839212664

00:17:13.360 --> 00:17:14.480 and we'll describe how we
NOTE Confidence: 0.839212664

00:17:14.480 --> 00:17:15.600 put a breathing device in.
NOTE Confidence: 0.839212664

00:17:15.600 --> 00:17:17.160 You may walk up with a sore throat,
NOTE Confidence: 0.839212664

00:17:17.160 --> 00:17:19.720 talk about a few risks,
NOTE Confidence: 0.839212664

00:17:19.720 --> 00:17:21.520 then we'll make sure the operating
NOTE Confidence: 0.839212664

00:17:21.520 --> 00:17:23.825 room is ready at that 7:30 or
NOTE Confidence: 0.839212664

00:17:23.825 --> 00:17:25.555 operating room start comes around,
NOTE Confidence: 0.839212664

00:17:25.560 --> 00:17:26.916 we'll start rolling the patient back.
NOTE Confidence: 0.839212664

00:17:26.920 --> 00:17:29.594 Now when we think about general anesthesia,
NOTE Confidence: 0.839212664

00:17:29.600 --> 00:17:31.824 I want you to think about a few
NOTE Confidence: 0.839212664

00:17:31.824 --> 00:17:33.360 different goals that we have
NOTE Confidence: 0.839212664

00:17:33.360 --> 00:17:34.880 anytime we do an anesthetic,
NOTE Confidence: 0.839212664

00:17:34.880 --> 00:17:38.800 amnesia or inability to form new memories,
NOTE Confidence: 0.839212664

00:17:38.800 --> 00:17:40.624 analgesia or pain control,

NOTE Confidence: 0.839212664

00:17:40.624 --> 00:17:42.448 hopefully of minimal to

NOTE Confidence: 0.839212664

00:17:42.448 --> 00:17:43.801 no pain unconsciousness.

NOTE Confidence: 0.839212664

00:17:43.801 --> 00:17:46.006 So essentially you're unaware of

NOTE Confidence: 0.839212664

00:17:46.006 --> 00:17:47.770 anything that's happening during

NOTE Confidence: 0.839212664

00:17:47.824 --> 00:17:49.759 the procedure and muscle relaxation.

NOTE Confidence: 0.839212664

00:17:49.760 --> 00:17:51.326 So essentially you're not moving while

NOTE Confidence: 0.839212664

00:17:51.326 --> 00:17:52.880 the surgeons are trying to operate.

NOTE Confidence: 0.839212664

00:17:52.880 --> 00:17:54.679 So we'll think about those four things,

NOTE Confidence: 0.839212664

00:17:54.680 --> 00:17:56.532 amnesia, analgesia,

NOTE Confidence: 0.839212664

00:17:56.532 --> 00:18:00.236 unconsciousness and muscle relaxation.

NOTE Confidence: 0.839212664

00:18:00.240 --> 00:18:01.998 So typically we go back to,

NOTE Confidence: 0.839212664

00:18:02.000 --> 00:18:02.486 you know,

NOTE Confidence: 0.839212664

00:18:02.486 --> 00:18:04.187 a story of a patient going through

NOTE Confidence: 0.839212664

00:18:04.187 --> 00:18:05.239 the operating room.

NOTE Confidence: 0.839212664

00:18:05.240 --> 00:18:07.208 We start rolling you back and

NOTE Confidence: 0.839212664

00:18:07.208 --> 00:18:09.280 I may administer a medication
NOTE Confidence: 0.839212664

00:18:09.280 --> 00:18:10.354 called the benzodiazepine,
NOTE Confidence: 0.839212664

00:18:10.354 --> 00:18:12.144 at which point you become
NOTE Confidence: 0.839212664

00:18:12.144 --> 00:18:13.918 a little bit more relaxed,
NOTE Confidence: 0.839212664

00:18:13.920 --> 00:18:14.860 you know,
NOTE Confidence: 0.839212664

00:18:14.860 --> 00:18:17.959 the nerves go away less anxious and
NOTE Confidence: 0.839212664

00:18:17.959 --> 00:18:19.912 that gives some of the amnesia portion
NOTE Confidence: 0.839212664

00:18:19.912 --> 00:18:22.037 of things we call anterograde amnesia.
NOTE Confidence: 0.839212664

00:18:22.040 --> 00:18:23.375 So you don't really remember
NOTE Confidence: 0.839212664

00:18:23.375 --> 00:18:25.240 much after that with a low dose.
NOTE Confidence: 0.839212664

00:18:25.240 --> 00:18:26.184 You may remember things,
NOTE Confidence: 0.839212664

00:18:26.184 --> 00:18:28.119 but it may become a little bit fuzzy.
NOTE Confidence: 0.839212664

00:18:28.120 --> 00:18:29.555 We get you into the operating room,
NOTE Confidence: 0.839212664

00:18:29.560 --> 00:18:31.837 we move you over to the operating room bed,
NOTE Confidence: 0.839212664

00:18:31.840 --> 00:18:33.200 we put our monitors on.
NOTE Confidence: 0.895860902666667

00:18:33.200 --> 00:18:35.080 That typically includes a blood

NOTE Confidence: 0.895860902666667
00:18:35.080 --> 00:18:36.960 pressure cuff pulse oximeter to
NOTE Confidence: 0.895860902666667
00:18:37.027 --> 00:18:38.997 measure your blood oxygen levels.
NOTE Confidence: 0.895860902666667
00:18:39.000 --> 00:18:41.198 An EKG would measure your heart throughout
NOTE Confidence: 0.895860902666667
00:18:41.198 --> 00:18:43.226 and we'll typically do a pause at that
NOTE Confidence: 0.895860902666667
00:18:43.226 --> 00:18:45.179 point and make sure we have the correct
NOTE Confidence: 0.895860902666667
00:18:45.179 --> 00:18:46.850 patient doing the correct procedure.
NOTE Confidence: 0.895860902666667
00:18:46.850 --> 00:18:48.065 Absolutely make sure
NOTE Confidence: 0.895860902666667
00:18:48.065 --> 00:18:49.280 everything's remained safe.
NOTE Confidence: 0.895860902666667
00:18:49.280 --> 00:18:51.930 Now we'll put an oxygen mask on to fill your
NOTE Confidence: 0.895860902666667
00:18:51.990 --> 00:18:54.518 lungs up with oxygen and then we're ready.
NOTE Confidence: 0.895860902666667
00:18:54.520 --> 00:18:55.936 We're at that point.
NOTE Confidence: 0.895860902666667
00:18:55.936 --> 00:18:57.376 I'll administer a fairly
NOTE Confidence: 0.895860902666667
00:18:57.376 --> 00:18:58.880 large dose of medication,
NOTE Confidence: 0.895860902666667
00:18:58.880 --> 00:19:00.320 typically propofol along
NOTE Confidence: 0.895860902666667
00:19:00.320 --> 00:19:02.240 with a pain medication.
NOTE Confidence: 0.895860902666667

00:19:02.240 --> 00:19:04.000 And it's like I said,
NOTE Confidence: 0.895860902666667

00:19:04.000 --> 00:19:05.715 it's pretty wild to see if you
NOTE Confidence: 0.895860902666667

00:19:05.715 --> 00:19:07.793 haven't seen it within 10 seconds to
NOTE Confidence: 0.895860902666667

00:19:07.793 --> 00:19:09.393 30 seconds you're completely out,
NOTE Confidence: 0.895860902666667

00:19:09.400 --> 00:19:11.560 so unconscious your body goes limp
NOTE Confidence: 0.895860902666667

00:19:11.560 --> 00:19:14.248 and like you said you lose the
NOTE Confidence: 0.895860902666667

00:19:14.248 --> 00:19:16.198 ability to breathe for yourself.
NOTE Confidence: 0.895860902666667

00:19:16.200 --> 00:19:17.352 Now this works.
NOTE Confidence: 0.895860902666667

00:19:17.352 --> 00:19:19.272 Propofol typically works with bonding
NOTE Confidence: 0.895860902666667

00:19:19.272 --> 00:19:21.437 to different receptors in the brain.
NOTE Confidence: 0.895860902666667

00:19:21.440 --> 00:19:23.888 GABA A receptors we we call
NOTE Confidence: 0.895860902666667

00:19:23.888 --> 00:19:25.520 them so an inhibitory,
NOTE Confidence: 0.895860902666667

00:19:25.520 --> 00:19:26.840 so everything sort of
NOTE Confidence: 0.895860902666667

00:19:26.840 --> 00:19:28.160 relaxes and is negative.
NOTE Confidence: 0.895860902666667

00:19:28.160 --> 00:19:30.240 So these these brain waves that you have,
NOTE Confidence: 0.895860902666667

00:19:30.240 --> 00:19:31.362 the electrical activity,

NOTE Confidence: 0.895860902666667
00:19:31.362 --> 00:19:34.680 they slow down or they become more organized.
NOTE Confidence: 0.895860902666667
00:19:34.680 --> 00:19:35.648 Now once you're unconscious,
NOTE Confidence: 0.895860902666667
00:19:35.648 --> 00:19:37.878 we make sure we can help breathe for you.
NOTE Confidence: 0.895860902666667
00:19:37.880 --> 00:19:39.362 I'll give you a few breaths
NOTE Confidence: 0.895860902666667
00:19:39.362 --> 00:19:40.680 with the device we have,
NOTE Confidence: 0.895860902666667
00:19:40.680 --> 00:19:42.876 similar to what we have here.
NOTE Confidence: 0.895860902666667
00:19:42.880 --> 00:19:43.560 And once we do that,
NOTE Confidence: 0.895860902666667
00:19:43.560 --> 00:19:44.812 we give another medication.
NOTE Confidence: 0.895860902666667
00:19:44.812 --> 00:19:46.282 It's a muscle relaxant,
NOTE Confidence: 0.895860902666667
00:19:46.282 --> 00:19:48.808 A paralytic that allows us to
NOTE Confidence: 0.895860902666667
00:19:48.808 --> 00:19:50.543 essentially get that breathing
NOTE Confidence: 0.895860902666667
00:19:50.543 --> 00:19:52.610 device in easier and allows you to
NOTE Confidence: 0.895860902666667
00:19:52.610 --> 00:19:54.559 do your pre surgery as you need to.
NOTE Confidence: 0.895860902666667
00:19:54.560 --> 00:19:56.040 So we've talked about a few different things.
NOTE Confidence: 0.895860902666667
00:19:56.040 --> 00:19:56.457 Amnesia,
NOTE Confidence: 0.895860902666667

00:19:56.457 --> 00:19:58.959 the benzodiazepine allows you to not
NOTE Confidence: 0.895860902666667

00:19:58.959 --> 00:20:00.959 start making memories after that.
NOTE Confidence: 0.895860902666667

00:20:00.960 --> 00:20:02.520 Unconsciousness and pain control
NOTE Confidence: 0.895860902666667

00:20:02.520 --> 00:20:04.470 the propofol and other medications
NOTE Confidence: 0.895860902666667

00:20:04.470 --> 00:20:06.197 we've given during that point.
NOTE Confidence: 0.895860902666667

00:20:06.200 --> 00:20:06.440 So these
NOTE Confidence: 0.937693574

00:20:06.440 --> 00:20:08.080 medications help also with pain.
NOTE Confidence: 0.937693574

00:20:08.080 --> 00:20:10.376 So you don't feel anything from the
NOTE Confidence: 0.937693574

00:20:10.376 --> 00:20:12.120 procedure or the surgery. Absolutely.
NOTE Confidence: 0.937693574

00:20:12.120 --> 00:20:14.358 And you don't remember anything absolutely.
NOTE Confidence: 0.8018727633333333

00:20:14.360 --> 00:20:16.520 Now the unconsciousness is one thing,
NOTE Confidence: 0.8018727633333333

00:20:16.520 --> 00:20:17.990 but we also want you don't want
NOTE Confidence: 0.8018727633333333

00:20:17.990 --> 00:20:19.778 you to react to the painful stimuli
NOTE Confidence: 0.8018727633333333

00:20:19.778 --> 00:20:21.440 that you have during the procedure.
NOTE Confidence: 0.8018727633333333

00:20:21.440 --> 00:20:23.760 So typically what a surgeon
NOTE Confidence: 0.8018727633333333

00:20:23.760 --> 00:20:26.080 does is stimulating and painful.

NOTE Confidence: 0.801872763333333
00:20:26.080 --> 00:20:27.249 So we don't, we don't want to
NOTE Confidence: 0.801872763333333
00:20:27.249 --> 00:20:28.478 see a raise in blood pressure
NOTE Confidence: 0.801872763333333
00:20:28.478 --> 00:20:29.840 or raise in heart rate etcetera.
NOTE Confidence: 0.801872763333333
00:20:29.840 --> 00:20:31.829 Those are sort of the tools we use to
NOTE Confidence: 0.801872763333333
00:20:31.829 --> 00:20:33.999 make sure that you're fully anesthetized.
NOTE Confidence: 0.801872763333333
00:20:34.000 --> 00:20:36.376 So at this point we've spoken
NOTE Confidence: 0.801872763333333
00:20:36.376 --> 00:20:38.920 about those goals of anesthesia.
NOTE Confidence: 0.801872763333333
00:20:38.920 --> 00:20:40.512 But I want to dive a little bit
NOTE Confidence: 0.801872763333333
00:20:40.512 --> 00:20:41.680 more into the unconsciousness
NOTE Confidence: 0.801872763333333
00:20:41.680 --> 00:20:44.168 portion of things and and how it's
NOTE Confidence: 0.801872763333333
00:20:44.168 --> 00:20:46.280 different from a normal sleep cycle.
NOTE Confidence: 0.801872763333333
00:20:46.280 --> 00:20:48.280 You know, typically when a patient comes in,
NOTE Confidence: 0.801872763333333
00:20:48.280 --> 00:20:49.800 I will tell them and they'll ask me,
NOTE Confidence: 0.801872763333333
00:20:49.800 --> 00:20:52.040 will I be asleep for the entire procedure.
NOTE Confidence: 0.801872763333333
00:20:52.040 --> 00:20:54.030 And while I say yes, you will,
NOTE Confidence: 0.801872763333333

00:20:54.030 --> 00:20:56.520 it's quite different from normal sleep.
NOTE Confidence: 0.8018727633333333

00:20:56.520 --> 00:21:00.251 So the way that the brain functions
NOTE Confidence: 0.8018727633333333

00:21:00.251 --> 00:21:02.232 essentially is electrical activity.
NOTE Confidence: 0.8018727633333333

00:21:02.232 --> 00:21:05.424 And these medications that we give it
NOTE Confidence: 0.8018727633333333

00:21:05.424 --> 00:21:07.369 inhibits the ability of electrical,
NOTE Confidence: 0.8018727633333333

00:21:07.369 --> 00:21:08.981 electrical activity to communicate
NOTE Confidence: 0.8018727633333333

00:21:08.981 --> 00:21:11.600 one part of the brain to the other.
NOTE Confidence: 0.8018727633333333

00:21:11.600 --> 00:21:13.315 That's the language that the brain speaks.
NOTE Confidence: 0.8018727633333333

00:21:13.320 --> 00:21:14.358 It's electrical activity.
NOTE Confidence: 0.8018727633333333

00:21:14.358 --> 00:21:16.434 Now once the brain can't speak
NOTE Confidence: 0.8018727633333333

00:21:16.434 --> 00:21:17.877 one part to the other,
NOTE Confidence: 0.8018727633333333

00:21:17.880 --> 00:21:19.638 that's when we're not aware anymore.
NOTE Confidence: 0.8018727633333333

00:21:19.640 --> 00:21:22.398 And that's exactly what these medications do.
NOTE Confidence: 0.8018727633333333

00:21:22.400 --> 00:21:24.920 Now let's talk about normal sleep.
NOTE Confidence: 0.8018727633333333

00:21:24.920 --> 00:21:26.120 Everyone's heard of this R.E.M.
NOTE Confidence: 0.8018727633333333

00:21:26.120 --> 00:21:27.556 cycle, non R.E.M. cycle.

NOTE Confidence: 0.801872763333333
00:21:27.556 --> 00:21:28.992 That's that's typical terms
NOTE Confidence: 0.801872763333333
00:21:28.992 --> 00:21:30.877 that most have have heard of.
NOTE Confidence: 0.801872763333333
00:21:30.880 --> 00:21:33.040 R.E.M., R.E.M. is rapid eye movement.
NOTE Confidence: 0.801872763333333
00:21:33.040 --> 00:21:34.958 So during this period there's an extreme
NOTE Confidence: 0.801872763333333
00:21:34.958 --> 00:21:36.760 amount of brain activity happening.
NOTE Confidence: 0.801872763333333
00:21:36.760 --> 00:21:38.839 If we look at an EEG electroencephalogram
NOTE Confidence: 0.801872763333333
00:21:38.839 --> 00:21:40.853 and we look at the brain waves
NOTE Confidence: 0.801872763333333
00:21:40.853 --> 00:21:43.140 of a patient under, you know,
NOTE Confidence: 0.801872763333333
00:21:43.140 --> 00:21:44.360 under sleep,
NOTE Confidence: 0.801872763333333
00:21:44.360 --> 00:21:46.131 it looks very similar to an awake
NOTE Confidence: 0.801872763333333
00:21:46.131 --> 00:21:46.637 patient actually.
NOTE Confidence: 0.801872763333333
00:21:46.640 --> 00:21:48.120 So you're still forming memories,
NOTE Confidence: 0.801872763333333
00:21:48.120 --> 00:21:49.077 you're still essentially
NOTE Confidence: 0.801872763333333
00:21:49.077 --> 00:21:50.353 processing everything that has
NOTE Confidence: 0.801872763333333
00:21:50.353 --> 00:21:51.520 happened throughout the day.
NOTE Confidence: 0.801872763333333

00:21:51.520 --> 00:21:52.660 You're still hearing things,
NOTE Confidence: 0.8018727633333333

00:21:52.660 --> 00:21:53.800 you're still sensing things.
NOTE Confidence: 0.8018727633333333

00:21:53.800 --> 00:21:56.117 None of that happens during an anesthetic.
NOTE Confidence: 0.8018727633333333

00:21:56.120 --> 00:21:57.912 You're essentially unconscious and
NOTE Confidence: 0.8018727633333333

00:21:57.912 --> 00:22:01.700 it's it's more similar to a a coma like
NOTE Confidence: 0.8018727633333333

00:22:01.700 --> 00:22:04.600 state similar to to death versus sleep.
NOTE Confidence: 0.8018727633333333

00:22:04.600 --> 00:22:07.200 Now if I were to say to a patient all
NOTE Confidence: 0.8018727633333333

00:22:07.200 --> 00:22:09.720 of that when they came in for a surgery,
NOTE Confidence: 0.8018727633333333

00:22:09.720 --> 00:22:12.800 you know you're in a cult reversible
NOTE Confidence: 0.8018727633333333

00:22:12.800 --> 00:22:14.288 medication induced unconsciousness coma,
NOTE Confidence: 0.8018727633333333

00:22:14.288 --> 00:22:16.112 half the patients would walk right
NOTE Confidence: 0.8018727633333333

00:22:16.112 --> 00:22:17.717 out the door of that moment.
NOTE Confidence: 0.8018727633333333

00:22:17.720 --> 00:22:19.435 So while it's simpler to say you're
NOTE Confidence: 0.8018727633333333

00:22:19.435 --> 00:22:21.235 sleeping and it's one way to look at it,
NOTE Confidence: 0.8018727633333333

00:22:21.240 --> 00:22:22.760 it's quite different from sleep.
NOTE Confidence: 0.810584705454546

00:22:23.760 --> 00:22:26.288 So it it's it's do you can you

NOTE Confidence: 0.810584705454546
00:22:26.288 --> 00:22:28.128 dream and then remember anything
NOTE Confidence: 0.810584705454546
00:22:28.128 --> 00:22:30.552 from that or the essentially these
NOTE Confidence: 0.810584705454546
00:22:30.552 --> 00:22:31.972 medications like you go down,
NOTE Confidence: 0.810584705454546
00:22:31.972 --> 00:22:32.992 you have anesthesia and the
NOTE Confidence: 0.810584705454546
00:22:32.992 --> 00:22:34.304 last thing you remember is going
NOTE Confidence: 0.810584705454546
00:22:34.304 --> 00:22:35.384 into the operating room and
NOTE Confidence: 0.810584705454546
00:22:35.384 --> 00:22:36.720 when you come out it's all done.
NOTE Confidence: 0.790210014
00:22:37.480 --> 00:22:38.504 That's a good question.
NOTE Confidence: 0.790210014
00:22:38.504 --> 00:22:40.040 Typically you don't dream under anesthesia.
NOTE Confidence: 0.790210014
00:22:40.040 --> 00:22:42.176 So the the like I said the language
NOTE Confidence: 0.790210014
00:22:42.176 --> 00:22:44.192 that the brain speak is this
NOTE Confidence: 0.790210014
00:22:44.192 --> 00:22:45.957 electrical activity and once you
NOTE Confidence: 0.790210014
00:22:45.957 --> 00:22:47.488 block those electrical activity
NOTE Confidence: 0.790210014
00:22:47.488 --> 00:22:49.720 in the gates that allow them,
NOTE Confidence: 0.790210014
00:22:49.720 --> 00:22:50.472 the brain isn't communicating
NOTE Confidence: 0.790210014

00:22:50.472 --> 00:22:51.840 with the other part of the brain.

NOTE Confidence: 0.790210014

00:22:51.840 --> 00:22:53.598 So you're not forming these thoughts.

NOTE Confidence: 0.875436552666667

00:22:53.840 --> 00:22:55.864 So there's literally a a block of time

NOTE Confidence: 0.875436552666667

00:22:55.864 --> 00:22:57.876 that you just you can't account for.

NOTE Confidence: 0.875436552666667

00:22:57.880 --> 00:22:59.560 You were there all of a sudden you

NOTE Confidence: 0.875436552666667

00:22:59.560 --> 00:23:01.416 wake up in recovery room and it just

NOTE Confidence: 0.875436552666667

00:23:01.416 --> 00:23:02.356 something happened in the middle.

NOTE Confidence: 0.875436552666667

00:23:02.360 --> 00:23:04.635 You obviously had a procedure or surgery

NOTE Confidence: 0.875436552666667

00:23:04.635 --> 00:23:06.960 or something like that and then you just,

NOTE Confidence: 0.875436552666667

00:23:06.960 --> 00:23:08.376 you don't have that time period

NOTE Confidence: 0.875436552666667

00:23:08.376 --> 00:23:09.680 sort of in your brain.

NOTE Confidence: 0.875436552666667

00:23:09.680 --> 00:23:10.920 It's, it's a gap, right.

NOTE Confidence: 0.85667655

00:23:11.160 --> 00:23:13.020 It's pretty amazing to have somebody

NOTE Confidence: 0.85667655

00:23:13.020 --> 00:23:15.400 you know undergo A surgical procedure,

NOTE Confidence: 0.85667655

00:23:15.400 --> 00:23:17.158 an invasive procedure and then wake

NOTE Confidence: 0.85667655

00:23:17.158 --> 00:23:18.941 up hopefully paying for your minimal

NOTE Confidence: 0.85667655

00:23:18.941 --> 00:23:20.873 pain as if nothing had ever happened.

NOTE Confidence: 0.77450307625

00:23:21.080 --> 00:23:22.772 And you were mentioning also one

NOTE Confidence: 0.77450307625

00:23:22.772 --> 00:23:24.249 of the medications that I'll

NOTE Confidence: 0.77450307625

00:23:24.249 --> 00:23:25.719 use really widely is propofol.

NOTE Confidence: 0.77450307625

00:23:25.720 --> 00:23:27.855 Propofol is like a Milky white kind

NOTE Confidence: 0.77450307625

00:23:27.855 --> 00:23:29.776 of substance that you give through

NOTE Confidence: 0.77450307625

00:23:29.776 --> 00:23:31.870 your intravenous or your IV and that

NOTE Confidence: 0.77450307625

00:23:31.870 --> 00:23:33.400 actually kind of knocks you out.

NOTE Confidence: 0.77450307625

00:23:33.400 --> 00:23:35.000 You said, you know, 10 to 30 seconds.

NOTE Confidence: 0.77450307625

00:23:35.000 --> 00:23:37.024 I don't think I've seen any of the

NOTE Confidence: 0.77450307625

00:23:37.024 --> 00:23:38.636 patients make it to even 10 seconds.

NOTE Confidence: 0.77450307625

00:23:38.640 --> 00:23:39.906 You're completely out.

NOTE Confidence: 0.77450307625

00:23:39.906 --> 00:23:43.180 Something is a little bit burned when it

NOTE Confidence: 0.77450307625

00:23:43.180 --> 00:23:45.754 goes in and it's very quick as it goes in,

NOTE Confidence: 0.77450307625

00:23:45.760 --> 00:23:48.600 but it makes you kind of very comfortable.

NOTE Confidence: 0.77450307625

00:23:48.600 --> 00:23:49.784 Some people, you know,
NOTE Confidence: 0.77450307625

00:23:49.784 --> 00:23:52.005 relate that also you know the Michael
NOTE Confidence: 0.77450307625

00:23:52.005 --> 00:23:53.985 Jackson story where he went to
NOTE Confidence: 0.77450307625

00:23:53.985 --> 00:23:55.635 sleep using this type of medication,
NOTE Confidence: 0.77450307625

00:23:55.640 --> 00:23:58.475 which is really he was getting anesthesia.
NOTE Confidence: 0.77450307625

00:23:58.480 --> 00:24:00.080 There's no dreams, nothing else.
NOTE Confidence: 0.77450307625

00:24:00.080 --> 00:24:01.574 And it's it suppresses your breathing
NOTE Confidence: 0.77450307625

00:24:01.574 --> 00:24:03.960 and you can if it's not controlled by
NOTE Confidence: 0.77450307625

00:24:03.960 --> 00:24:05.635 someone with professional like yourself,
NOTE Confidence: 0.77450307625

00:24:05.640 --> 00:24:07.464 it it's really dangerous.
NOTE Confidence: 0.77450307625

00:24:07.464 --> 00:24:10.720 But it works extremely well for things
NOTE Confidence: 0.77450307625

00:24:10.720 --> 00:24:12.906 like even colonoscopies, endoscopies,
NOTE Confidence: 0.77450307625

00:24:12.906 --> 00:24:16.164 I mean gentle anesthesia, you utilize it.
NOTE Confidence: 0.77450307625

00:24:16.164 --> 00:24:17.914 Is it short acting, long acting,
NOTE Confidence: 0.77450307625

00:24:17.914 --> 00:24:19.713 like how long do you get from,
NOTE Confidence: 0.77450307625

00:24:19.720 --> 00:24:21.757 you know, one shot of this stuff?

NOTE Confidence: 0.863638465714286
00:24:22.280 --> 00:24:23.792 It's relatively short acting.
NOTE Confidence: 0.863638465714286
00:24:23.792 --> 00:24:26.060 Typically if we give one of
NOTE Confidence: 0.863638465714286
00:24:26.129 --> 00:24:28.117 those large bolus medications,
NOTE Confidence: 0.863638465714286
00:24:28.120 --> 00:24:30.136 you know both doses of medications
NOTE Confidence: 0.863638465714286
00:24:30.136 --> 00:24:32.200 typically within 5 to 10 minutes,
NOTE Confidence: 0.863638465714286
00:24:32.200 --> 00:24:33.676 you're starting to really wake up.
NOTE Confidence: 0.863638465714286
00:24:33.680 --> 00:24:35.280 Now it depends how long
NOTE Confidence: 0.863638465714286
00:24:35.280 --> 00:24:36.560 we've run that medication.
NOTE Confidence: 0.863638465714286
00:24:36.560 --> 00:24:38.016 Once you're under anesthesia,
NOTE Confidence: 0.863638465714286
00:24:38.016 --> 00:24:40.200 we keep you in this unconscious
NOTE Confidence: 0.863638465714286
00:24:40.260 --> 00:24:42.808 state either with prop fall or other
NOTE Confidence: 0.863638465714286
00:24:42.808 --> 00:24:44.968 medications through your IV or anesthesia,
NOTE Confidence: 0.863638465714286
00:24:44.968 --> 00:24:47.188 anesthesia, gases and the typically
NOTE Confidence: 0.863638465714286
00:24:47.188 --> 00:24:49.280 the longer you run those,
NOTE Confidence: 0.863638465714286
00:24:49.280 --> 00:24:51.236 so the longer the surgical procedure,
NOTE Confidence: 0.863638465714286

00:24:51.240 --> 00:24:53.039 the longer that stays in your system.
NOTE Confidence: 0.863638465714286

00:24:53.040 --> 00:24:54.680 So you know with experience,
NOTE Confidence: 0.863638465714286

00:24:54.680 --> 00:24:56.630 with you know taking all
NOTE Confidence: 0.863638465714286

00:24:56.630 --> 00:24:57.800 factors into account,
NOTE Confidence: 0.863638465714286

00:24:57.800 --> 00:24:59.276 we stop those medications at the
NOTE Confidence: 0.863638465714286

00:24:59.276 --> 00:25:00.679 appropriate time and you're ready to
NOTE Confidence: 0.863638465714286

00:25:00.679 --> 00:25:02.159 wake up at the end of the procedure.
NOTE Confidence: 0.680146001666667

00:25:02.320 --> 00:25:03.199 There's always communication
NOTE Confidence: 0.680146001666667

00:25:03.199 --> 00:25:04.720 with the surgeon, you know,
NOTE Confidence: 0.680146001666667

00:25:04.720 --> 00:25:06.478 in the procedure and so forth.
NOTE Confidence: 0.680146001666667

00:25:06.478 --> 00:25:07.808 And you brought something here
NOTE Confidence: 0.680146001666667

00:25:07.808 --> 00:25:09.317 also because you say you kind of,
NOTE Confidence: 0.680146001666667

00:25:09.320 --> 00:25:10.360 you bagged the patient, right.
NOTE Confidence: 0.680146001666667

00:25:10.360 --> 00:25:12.117 You kind of pushed some oxygen in
NOTE Confidence: 0.680146001666667

00:25:12.117 --> 00:25:13.759 before you you put the tube in.
NOTE Confidence: 0.680146001666667

00:25:13.760 --> 00:25:15.200 Could we go through some of the stuff

NOTE Confidence: 0.680146001666667
00:25:15.200 --> 00:25:16.838 to use for a general anesthesia here?
NOTE Confidence: 0.95317553
00:25:16.960 --> 00:25:19.759 Sure. Let's see,
NOTE Confidence: 0.95317553
00:25:19.760 --> 00:25:21.475 this here is called an AMBU bag.
NOTE Confidence: 0.95317553
00:25:21.480 --> 00:25:23.832 It's it's essentially a device where when
NOTE Confidence: 0.95317553
00:25:23.832 --> 00:25:26.000 you squeeze this green portion here,
NOTE Confidence: 0.95317553
00:25:26.000 --> 00:25:27.477 it allows us to breathe the patient.
NOTE Confidence: 0.95317553
00:25:27.480 --> 00:25:29.595 So we we put a mask on and if
NOTE Confidence: 0.95317553
00:25:29.595 --> 00:25:31.837 long as we're squeezing that bag,
NOTE Confidence: 0.95317553
00:25:31.840 --> 00:25:34.234 we're what we called ventilating the patient.
NOTE Confidence: 0.95317553
00:25:34.240 --> 00:25:36.248 So moving air in and out and oxygen
NOTE Confidence: 0.95317553
00:25:36.248 --> 00:25:38.525 is and carbon dioxide of the main
NOTE Confidence: 0.95317553
00:25:38.525 --> 00:25:40.680 medications that we want to move. Again,
NOTE Confidence: 0.847404717272727
00:25:40.680 --> 00:25:42.640 this is, it's a bag that you can
NOTE Confidence: 0.847404717272727
00:25:42.640 --> 00:25:44.144 squeeze it in, in this air that's
NOTE Confidence: 0.847404717272727
00:25:44.144 --> 00:25:45.320 going to come from one side.
NOTE Confidence: 0.847404717272727

00:25:45.320 --> 00:25:46.600 So you help the patient sort of
NOTE Confidence: 0.847404717272727

00:25:46.600 --> 00:25:47.920 breathe when you do that exactly,
NOTE Confidence: 0.847404717272727

00:25:47.920 --> 00:25:50.400 you also have a face mask right there.
NOTE Confidence: 0.906749918571429

00:25:50.440 --> 00:25:52.132 Too many patients will remember the
NOTE Confidence: 0.906749918571429

00:25:52.132 --> 00:25:54.810 last thing is the face mask going on and
NOTE Confidence: 0.906749918571429

00:25:54.810 --> 00:25:56.520 then typically counting back from 10.
NOTE Confidence: 0.906749918571429

00:25:56.520 --> 00:25:58.854 Now this device here is probably
NOTE Confidence: 0.906749918571429

00:25:58.854 --> 00:26:00.905 the most critical device we
NOTE Confidence: 0.906749918571429

00:26:00.905 --> 00:26:02.597 have in an anesthesiologist.
NOTE Confidence: 0.906749918571429

00:26:02.600 --> 00:26:04.756 If everything around this were to fail,
NOTE Confidence: 0.906749918571429

00:26:04.760 --> 00:26:06.365 electricity goes out for whatever
NOTE Confidence: 0.906749918571429

00:26:06.365 --> 00:26:08.335 reason our ventilator and we don't
NOTE Confidence: 0.906749918571429

00:26:08.335 --> 00:26:10.159 use this for the entire procedures.
NOTE Confidence: 0.906749918571429

00:26:10.160 --> 00:26:12.278 Patients are placed on ventilators with
NOTE Confidence: 0.906749918571429

00:26:12.278 --> 00:26:14.440 with which assist with ventilation.
NOTE Confidence: 0.906749918571429

00:26:14.440 --> 00:26:15.905 But if everything fails this

NOTE Confidence: 0.906749918571429

00:26:15.905 --> 00:26:17.680 device will save a patient's life.

NOTE Confidence: 0.906749918571429

00:26:17.680 --> 00:26:19.755 So it's it's critical having

NOTE Confidence: 0.906749918571429

00:26:19.755 --> 00:26:21.000 any anesthetizing location,

NOTE Confidence: 0.906749918571429

00:26:21.000 --> 00:26:22.840 it's it's absolutely critical.

NOTE Confidence: 0.8690691632

00:26:23.400 --> 00:26:25.140 So that that's then you manually

NOTE Confidence: 0.8690691632

00:26:25.140 --> 00:26:26.891 help the patient breathe until the

NOTE Confidence: 0.8690691632

00:26:26.891 --> 00:26:28.505 anesthesia comes out and they're and

NOTE Confidence: 0.8690691632

00:26:28.505 --> 00:26:30.677 get in control of their own breathing.

NOTE Confidence: 0.923399945384615

00:26:30.680 --> 00:26:31.366 Absolutely, yes.

NOTE Confidence: 0.923399945384615

00:26:31.366 --> 00:26:34.110 Now a few of the other things which

NOTE Confidence: 0.923399945384615

00:26:34.183 --> 00:26:36.572 we brought today we have the our

NOTE Confidence: 0.923399945384615

00:26:36.572 --> 00:26:39.320 endotracheal tube, this is a large one.

NOTE Confidence: 0.923399945384615

00:26:39.320 --> 00:26:42.245 So we could see on the television

NOTE Confidence: 0.923399945384615

00:26:42.245 --> 00:26:43.920 typically it's a little bit

NOTE Confidence: 0.923399945384615

00:26:43.920 --> 00:26:45.786 smaller than this and this,

NOTE Confidence: 0.923399945384615

00:26:45.786 --> 00:26:47.598 once you're under anesthesia,
NOTE Confidence: 0.923399945384615

00:26:47.600 --> 00:26:49.160 once you're unconscious,
NOTE Confidence: 0.923399945384615

00:26:49.160 --> 00:26:51.657 once you have some analgesia,
NOTE Confidence: 0.923399945384615

00:26:51.657 --> 00:26:54.159 so pain control and you're relaxed.
NOTE Confidence: 0.923399945384615

00:26:54.160 --> 00:26:55.965 We would place this essentially
NOTE Confidence: 0.923399945384615

00:26:55.965 --> 00:26:58.489 down into the trachea and we use
NOTE Confidence: 0.923399945384615

00:26:58.489 --> 00:27:00.439 another device here which we have,
NOTE Confidence: 0.923399945384615

00:27:00.440 --> 00:27:02.360 it's called a laryngoscope.
NOTE Confidence: 0.923399945384615

00:27:02.360 --> 00:27:04.796 It went essentially has a light on the end.
NOTE Confidence: 0.923399945384615

00:27:04.800 --> 00:27:06.326 It's so we can see into the
NOTE Confidence: 0.923399945384615

00:27:06.326 --> 00:27:07.839 patient's mouth as we're doing that.
NOTE Confidence: 0.853010052727273

00:27:07.960 --> 00:27:09.304 And you got to look kind of
NOTE Confidence: 0.853010052727273

00:27:09.304 --> 00:27:10.467 down the throat exactly because
NOTE Confidence: 0.853010052727273

00:27:10.467 --> 00:27:11.807 if the tube essentially you
NOTE Confidence: 0.853010052727273

00:27:11.807 --> 00:27:13.199 know there's two pipes there,
NOTE Confidence: 0.853010052727273

00:27:13.200 --> 00:27:14.300 one is your esophagus,

NOTE Confidence: 0.853010052727273

00:27:14.300 --> 00:27:15.675 one is your your trachea.

NOTE Confidence: 0.853010052727273

00:27:15.680 --> 00:27:16.880 One obviously goes to the stomach,

NOTE Confidence: 0.853010052727273

00:27:16.880 --> 00:27:17.798 the other goes to the lungs.

NOTE Confidence: 0.853010052727273

00:27:17.800 --> 00:27:19.384 So you want to make sure this tube

NOTE Confidence: 0.853010052727273

00:27:19.384 --> 00:27:21.199 goes in the right place to the lungs,

NOTE Confidence: 0.853010052727273

00:27:21.200 --> 00:27:22.091 otherwise you're pumping

NOTE Confidence: 0.853010052727273

00:27:22.091 --> 00:27:23.279 air into the stomach.

NOTE Confidence: 0.937579589375

00:27:23.280 --> 00:27:24.351 Absolutely. That's critical.

NOTE Confidence: 0.937579589375

00:27:24.351 --> 00:27:26.850 It's something that you know you do

NOTE Confidence: 0.937579589375

00:27:26.915 --> 00:27:28.685 thousands of time through training

NOTE Confidence: 0.937579589375

00:27:28.685 --> 00:27:30.288 and become pretty comfortable with.

NOTE Confidence: 0.937579589375

00:27:30.288 --> 00:27:32.412 So, right, That has to be in

NOTE Confidence: 0.937579589375

00:27:32.412 --> 00:27:33.935 the correct place and the and

NOTE Confidence: 0.937579589375

00:27:33.935 --> 00:27:34.960 the device you're holding there,

NOTE Confidence: 0.937579589375

00:27:34.960 --> 00:27:37.480 it's called a laryngeal mascara way.

NOTE Confidence: 0.937579589375

00:27:37.480 --> 00:27:39.244 It's it's a much less invasive
NOTE Confidence: 0.937579589375

00:27:39.244 --> 00:27:41.410 way of helping a patient breathe
NOTE Confidence: 0.937579589375

00:27:41.410 --> 00:27:42.799 during the procedure.
NOTE Confidence: 0.937579589375

00:27:42.800 --> 00:27:44.025 So this essentially just sits
NOTE Confidence: 0.937579589375

00:27:44.025 --> 00:27:45.600 in the back of your mouth,
NOTE Confidence: 0.937579589375

00:27:45.600 --> 00:27:47.315 holds the tongue off the back of
NOTE Confidence: 0.937579589375

00:27:47.315 --> 00:27:49.416 your throat and allows us to use
NOTE Confidence: 0.937579589375

00:27:49.416 --> 00:27:51.051 our ventilator without putting that
NOTE Confidence: 0.937579589375

00:27:51.051 --> 00:27:52.559 stimulating endotracheal tube down
NOTE Confidence: 0.848720746363636

00:27:52.840 --> 00:27:54.905 South. Essentially the the tube
NOTE Confidence: 0.848720746363636

00:27:54.905 --> 00:27:57.400 goes down further into your your,
NOTE Confidence: 0.848720746363636

00:27:57.400 --> 00:27:58.920 your breathing tube essentially your
NOTE Confidence: 0.848720746363636

00:27:58.920 --> 00:28:00.939 trachea where this kind of sits more
NOTE Confidence: 0.848720746363636

00:28:00.939 --> 00:28:02.715 just in the back part of your mouth.
NOTE Confidence: 0.848720746363636

00:28:02.720 --> 00:28:05.600 So patients who have let's say
NOTE Confidence: 0.848720746363636

00:28:05.600 --> 00:28:07.766 significant sleep apnea or sort

NOTE Confidence: 0.848720746363636
00:28:07.766 --> 00:28:10.307 of very let's say obese here with
NOTE Confidence: 0.848720746363636
00:28:10.307 --> 00:28:12.918 short stocking necks for instance,
NOTE Confidence: 0.848720746363636
00:28:12.920 --> 00:28:14.165 that you're you're afraid that
NOTE Confidence: 0.848720746363636
00:28:14.165 --> 00:28:16.203 the tongue is going to go back and
NOTE Confidence: 0.848720746363636
00:28:16.203 --> 00:28:17.679 it's going to hurt their breathing.
NOTE Confidence: 0.848720746363636
00:28:17.680 --> 00:28:19.942 This is when you potentially use
NOTE Confidence: 0.848720746363636
00:28:19.942 --> 00:28:21.566 something like this to kind of go back
NOTE Confidence: 0.848720746363636
00:28:21.566 --> 00:28:23.487 in the back of the throat to move that
NOTE Confidence: 0.848720746363636
00:28:23.487 --> 00:28:24.959 tongue forward and help them breathe
NOTE Confidence: 0.895757203333333
00:28:24.960 --> 00:28:26.016 better. Exactly.
NOTE Confidence: 0.895757203333333
00:28:26.016 --> 00:28:29.712 That's sort of a a secondary indication.
NOTE Confidence: 0.895757203333333
00:28:29.720 --> 00:28:31.058 One would be we use that
NOTE Confidence: 0.895757203333333
00:28:31.058 --> 00:28:32.680 just to be less stimulating.
NOTE Confidence: 0.895757203333333
00:28:32.680 --> 00:28:35.560 But two, if we ever had
NOTE Confidence: 0.895757203333333
00:28:35.560 --> 00:28:37.000 trouble ventilating that,
NOTE Confidence: 0.895757203333333

00:28:37.000 --> 00:28:38.836 that can be a rescue device.
NOTE Confidence: 0.8957572033333333

00:28:38.840 --> 00:28:40.226 So it allows us to better
NOTE Confidence: 0.8957572033333333

00:28:40.226 --> 00:28:41.400 ventilate the patient. Exactly.
NOTE Confidence: 0.887182214285715

00:28:41.760 --> 00:28:43.363 And then I always hear you also
NOTE Confidence: 0.887182214285715

00:28:43.363 --> 00:28:45.043 when you know when you put some
NOTE Confidence: 0.887182214285715

00:28:45.043 --> 00:28:46.760 oxygen and and use this face mask,
NOTE Confidence: 0.887182214285715

00:28:46.760 --> 00:28:48.200 as you sort of put it on your face,
NOTE Confidence: 0.887182214285715

00:28:48.200 --> 00:28:50.828 you say it may smell like a little like
NOTE Confidence: 0.887182214285715

00:28:50.828 --> 00:28:52.873 plastic and that's OK that's normal, sure.
NOTE Confidence: 0.887182214285715

00:28:52.873 --> 00:28:54.820 But you have oxygen flowing through.
NOTE Confidence: 0.887182214285715

00:28:54.820 --> 00:28:56.504 Absolutely. And and the oxygen
NOTE Confidence: 0.887182214285715

00:28:56.504 --> 00:28:58.160 that you're kind of giving through,
NOTE Confidence: 0.887182214285715

00:28:58.160 --> 00:29:00.160 obviously it's not forced oxygen,
NOTE Confidence: 0.887182214285715

00:29:00.160 --> 00:29:01.880 it's just a little bit higher level of
NOTE Confidence: 0.887182214285715

00:29:01.880 --> 00:29:03.520 oxygen to kind of expand your lungs,
NOTE Confidence: 0.887182214285715

00:29:03.520 --> 00:29:05.062 making sure that you're getting that

NOTE Confidence: 0.887182214285715
00:29:05.062 --> 00:29:06.520 oxygen through your body and your,
NOTE Confidence: 0.887182214285715
00:29:06.520 --> 00:29:07.840 your red blood cells, right.
NOTE Confidence: 0.940030868333333
00:29:07.840 --> 00:29:11.518 So typically when we're breathing fresh,
NOTE Confidence: 0.940030868333333
00:29:11.520 --> 00:29:12.940 you know air here,
NOTE Confidence: 0.940030868333333
00:29:12.940 --> 00:29:15.146 the oxygen percentage is about 21%.
NOTE Confidence: 0.940030868333333
00:29:15.146 --> 00:29:18.554 Now when you get to that unconscious state,
NOTE Confidence: 0.940030868333333
00:29:18.560 --> 00:29:20.541 there's typically a period of which we
NOTE Confidence: 0.940030868333333
00:29:20.541 --> 00:29:22.920 call apnea or you're no longer breathing.
NOTE Confidence: 0.940030868333333
00:29:22.920 --> 00:29:25.456 Now in order to extend that safe time
NOTE Confidence: 0.940030868333333
00:29:25.456 --> 00:29:28.237 that you can be APNIC or not breathing,
NOTE Confidence: 0.940030868333333
00:29:28.240 --> 00:29:30.880 if we can get the amount of oxygen
NOTE Confidence: 0.940030868333333
00:29:30.880 --> 00:29:33.312 in your lungs to 100% versus 21%,
NOTE Confidence: 0.940030868333333
00:29:33.312 --> 00:29:35.664 that extends that up to 10 minutes
NOTE Confidence: 0.940030868333333
00:29:35.664 --> 00:29:38.196 or so in a normal healthy patient.
NOTE Confidence: 0.940030868333333
00:29:38.200 --> 00:29:39.768 So just in case we did run
NOTE Confidence: 0.940030868333333

00:29:39.768 --> 00:29:41.120 into any kind of trouble,
NOTE Confidence: 0.940030868333333

00:29:41.120 --> 00:29:42.440 it extends that period of time.
NOTE Confidence: 0.940030868333333

00:29:42.440 --> 00:29:43.952 That's why it's so important that
NOTE Confidence: 0.940030868333333

00:29:43.952 --> 00:29:45.729 we hold that oxygen mask over your
NOTE Confidence: 0.940030868333333

00:29:45.729 --> 00:29:47.157 face as you're going to sleep.
NOTE Confidence: 0.850629834

00:29:47.720 --> 00:29:49.200 So just out of curiosity,
NOTE Confidence: 0.850629834

00:29:49.200 --> 00:29:50.376 if let's say you're a swimmer
NOTE Confidence: 0.850629834

00:29:50.376 --> 00:29:51.522 and you want to, you know,
NOTE Confidence: 0.850629834

00:29:51.522 --> 00:29:52.608 go in the pools from the
NOTE Confidence: 0.850629834

00:29:52.608 --> 00:29:53.478 whole length of the pool,
NOTE Confidence: 0.850629834

00:29:53.480 --> 00:29:55.746 if you actually take 100% oxygen beforehand,
NOTE Confidence: 0.850629834

00:29:55.746 --> 00:29:57.504 you can literally hold your breath
NOTE Confidence: 0.850629834

00:29:57.504 --> 00:29:59.311 a lot longer because you're getting
NOTE Confidence: 0.850629834

00:29:59.311 --> 00:30:01.429 more supply of oxygen to your lungs
NOTE Confidence: 0.850629834

00:30:01.429 --> 00:30:02.720 than your breathing fresh air.
NOTE Confidence: 0.9225378025

00:30:03.240 --> 00:30:05.600 It's a great question and a great comment.

NOTE Confidence: 0.9225378025

00:30:05.600 --> 00:30:07.680 Yes. Typically your oxygen levels

NOTE Confidence: 0.9225378025

00:30:07.680 --> 00:30:09.760 will stay higher for longer,

NOTE Confidence: 0.9225378025

00:30:09.760 --> 00:30:11.780 but typically it's actually the

NOTE Confidence: 0.9225378025

00:30:11.780 --> 00:30:13.800 carbon dioxide which causes people

NOTE Confidence: 0.9225378025

00:30:13.869 --> 00:30:15.628 to pass out eventually. Once,

NOTE Confidence: 0.9225378025

00:30:15.628 --> 00:30:17.716 once you're not breathing or ventilating,

NOTE Confidence: 0.9225378025

00:30:17.720 --> 00:30:19.640 you're moving two different gases,

NOTE Confidence: 0.9225378025

00:30:19.640 --> 00:30:21.168 oxygen and carbon dioxide.

NOTE Confidence: 0.9225378025

00:30:21.168 --> 00:30:24.040 So once that carbon dioxide level goes up,

NOTE Confidence: 0.9225378025

00:30:24.040 --> 00:30:25.234 that's when you pass out and

NOTE Confidence: 0.9225378025

00:30:25.234 --> 00:30:26.638 that's when you were on to trouble.

NOTE Confidence: 0.934645955555556

00:30:27.400 --> 00:30:28.092 Understood, understood.

NOTE Confidence: 0.934645955555556

00:30:28.092 --> 00:30:31.370 And if we can go actually to the next

NOTE Confidence: 0.934645955555556

00:30:31.370 --> 00:30:33.920 slide on the levels of anesthesia,

NOTE Confidence: 0.934645955555556

00:30:33.920 --> 00:30:35.144 let's kind of talk about some

NOTE Confidence: 0.934645955555556

00:30:35.144 --> 00:30:38.640 of that as well. Sure. So
NOTE Confidence: 0.895004878

00:30:38.640 --> 00:30:40.000 we talked about general anesthesia,
NOTE Confidence: 0.895004878

00:30:40.000 --> 00:30:42.674 right and we briefly touched on regional
NOTE Confidence: 0.895004878

00:30:42.674 --> 00:30:45.158 anesthesia which we will touch on later.
NOTE Confidence: 0.895004878

00:30:45.160 --> 00:30:47.656 But regional anesthesia essentially
NOTE Confidence: 0.895004878

00:30:47.656 --> 00:30:49.918 blocks the pain sensation and may not
NOTE Confidence: 0.895004878

00:30:49.918 --> 00:30:52.289 allow you may you may not be able to
NOTE Confidence: 0.895004878

00:30:52.289 --> 00:30:54.200 move or full full muscle relaxation.
NOTE Confidence: 0.895004878

00:30:54.200 --> 00:30:56.008 Now because of that we may may not
NOTE Confidence: 0.895004878

00:30:56.008 --> 00:30:57.839 need a full general anesthetic.
NOTE Confidence: 0.895004878

00:30:57.840 --> 00:31:00.729 We may not need you to be in completely
NOTE Confidence: 0.895004878

00:31:00.729 --> 00:31:02.968 unconscious or use IV medications to
NOTE Confidence: 0.895004878

00:31:02.968 --> 00:31:05.520 accomplish those other things like analgesia.
NOTE Confidence: 0.895004878

00:31:05.520 --> 00:31:08.789 So we can do procedures under less
NOTE Confidence: 0.895004878

00:31:08.789 --> 00:31:11.810 full body anesthesia than if we
NOTE Confidence: 0.895004878

00:31:11.810 --> 00:31:14.360 hadn't done that regional anesthesia.

NOTE Confidence: 0.895004878

00:31:14.360 --> 00:31:16.159 So, so that's a big benefit there.

NOTE Confidence: 0.895004878

00:31:16.160 --> 00:31:17.660 Now there are procedures where

NOTE Confidence: 0.895004878

00:31:17.660 --> 00:31:19.160 we actually want you relatively

NOTE Confidence: 0.895004878

00:31:19.212 --> 00:31:20.520 awake during the procedure.

NOTE Confidence: 0.895004878

00:31:20.520 --> 00:31:22.440 I know that sounds you know,

NOTE Confidence: 0.895004878

00:31:22.440 --> 00:31:23.184 scary for some,

NOTE Confidence: 0.895004878

00:31:23.184 --> 00:31:24.672 but it's actually a safer way

NOTE Confidence: 0.895004878

00:31:24.672 --> 00:31:26.120 of doing some procedures.

NOTE Confidence: 0.895004878

00:31:26.120 --> 00:31:28.038 First, we can talk about a cataract,

NOTE Confidence: 0.895004878

00:31:28.040 --> 00:31:30.576 I mean that's a pretty much as minimally

NOTE Confidence: 0.895004878

00:31:30.576 --> 00:31:32.411 invasive surgery as we get that

NOTE Confidence: 0.895004878

00:31:32.411 --> 00:31:34.115 either we give very little sedation,

NOTE Confidence: 0.895004878

00:31:34.120 --> 00:31:36.145 minimal sedation where you can

NOTE Confidence: 0.895004878

00:31:36.145 --> 00:31:38.251 talk to us or no sedation,

NOTE Confidence: 0.895004878

00:31:38.251 --> 00:31:40.033 some patients are fine with that.

NOTE Confidence: 0.895004878

00:31:40.040 --> 00:31:41.370 It's just not necessary for
NOTE Confidence: 0.895004878

00:31:41.370 --> 00:31:42.434 that type of procedure.
NOTE Confidence: 0.895004878

00:31:42.440 --> 00:31:44.400 So we don't give more than needed.
NOTE Confidence: 0.895004878

00:31:44.400 --> 00:31:46.280 Now there are other procedures
NOTE Confidence: 0.895004878

00:31:46.280 --> 00:31:48.568 which are more invasive and a
NOTE Confidence: 0.895004878

00:31:48.568 --> 00:31:51.024 few examples would be a carotid.
NOTE Confidence: 0.895004878

00:31:51.024 --> 00:31:53.496 So sometimes the the blood vessels
NOTE Confidence: 0.895004878

00:31:53.496 --> 00:31:55.548 in the neck have some blockages
NOTE Confidence: 0.895004878

00:31:55.548 --> 00:31:57.791 which need to be cleaned out and you
NOTE Confidence: 0.895004878

00:31:57.791 --> 00:31:59.555 go to a vascular surgeon for that.
NOTE Confidence: 0.895004878

00:31:59.560 --> 00:32:01.380 Now in order to monitor that that
NOTE Confidence: 0.895004878

00:32:01.380 --> 00:32:02.991 patient isn't having a stroke or
NOTE Confidence: 0.895004878

00:32:02.991 --> 00:32:04.291 decreased blood flow to their
NOTE Confidence: 0.895004878

00:32:04.291 --> 00:32:05.440 brain during that period,
NOTE Confidence: 0.895004878

00:32:05.440 --> 00:32:07.000 we actually want them relatively awake.
NOTE Confidence: 0.895004878

00:32:07.000 --> 00:32:08.380 So they can sometimes they'll be

NOTE Confidence: 0.895004878

00:32:08.380 --> 00:32:10.240 squeezing a ball or something like that,

NOTE Confidence: 0.895004878

00:32:10.240 --> 00:32:12.232 or we say something and we hear the

NOTE Confidence: 0.895004878

00:32:12.232 --> 00:32:13.977 squeak and we know that their brain

NOTE Confidence: 0.895004878

00:32:13.977 --> 00:32:16.218 on that side of the body isn't having

NOTE Confidence: 0.895004878

00:32:16.218 --> 00:32:17.873 ischemia or diffuse blood flow.

NOTE Confidence: 0.895004878

00:32:17.880 --> 00:32:18.600 So in that's the case,

NOTE Confidence: 0.895004878

00:32:18.600 --> 00:32:20.560 we don't want a full general anesthetic.

NOTE Confidence: 0.895004878

00:32:20.560 --> 00:32:22.228 We want something like a moderate

NOTE Confidence: 0.895004878

00:32:22.228 --> 00:32:23.760 sedation where you're more relaxed,

NOTE Confidence: 0.895004878

00:32:23.760 --> 00:32:24.424 you're calm,

NOTE Confidence: 0.895004878

00:32:24.424 --> 00:32:27.080 but you're able to kind of follow commands.

NOTE Confidence: 0.895004878

00:32:27.080 --> 00:32:30.132 And then like I certain eye surgeries

NOTE Confidence: 0.895004878

00:32:30.132 --> 00:32:31.440 or face surgeries,

NOTE Confidence: 0.895004878

00:32:31.440 --> 00:32:32.912 they want you to be able to smile

NOTE Confidence: 0.895004878

00:32:32.912 --> 00:32:33.960 or lift your eyebrows.

NOTE Confidence: 0.895004878

00:32:33.960 --> 00:32:35.738 They want to make sure they're not
NOTE Confidence: 0.895004878

00:32:35.738 --> 00:32:37.297 affecting any of the nerve crucial
NOTE Confidence: 0.895004878

00:32:37.297 --> 00:32:39.040 nerves in your face or they want
NOTE Confidence: 0.895004878

00:32:39.090 --> 00:32:40.763 to make sure it looks like it's
NOTE Confidence: 0.895004878

00:32:40.763 --> 00:32:41.712 supposed to look so.
NOTE Confidence: 0.895004878

00:32:41.712 --> 00:32:43.568 So those are sort of examples why we
NOTE Confidence: 0.895004878

00:32:43.568 --> 00:32:45.320 wouldn't need a full general anesthetic.
NOTE Confidence: 0.895004878

00:32:45.320 --> 00:32:47.678 We typically call that Mac monitor,
NOTE Confidence: 0.895004878

00:32:47.680 --> 00:32:48.648 anesthesia care.
NOTE Confidence: 0.895004878

00:32:48.648 --> 00:32:52.036 So it's a wide range of sedation
NOTE Confidence: 0.895004878

00:32:52.040 --> 00:32:53.720 where were there were involved,
NOTE Confidence: 0.895004878

00:32:53.720 --> 00:32:55.316 but it's not that full general anesthetic.
NOTE Confidence: 0.888435536666667

00:32:55.720 --> 00:32:56.952 So again, we want to make a
NOTE Confidence: 0.888435536666667

00:32:56.952 --> 00:32:58.047 little bit of the distinction
NOTE Confidence: 0.888435536666667

00:32:58.047 --> 00:32:59.595 also that you know you're awake,
NOTE Confidence: 0.888435536666667

00:32:59.600 --> 00:33:00.906 but it doesn't mean you remember

NOTE Confidence: 0.888435536666667
00:33:00.906 --> 00:33:03.000 also everything that's going on.
NOTE Confidence: 0.888435536666667
00:33:03.000 --> 00:33:04.320 So you're awake,
NOTE Confidence: 0.888435536666667
00:33:04.320 --> 00:33:06.440 you're not feeling the procedure,
NOTE Confidence: 0.888435536666667
00:33:06.440 --> 00:33:09.680 you're able to kind of just not be asleep,
NOTE Confidence: 0.888435536666667
00:33:09.680 --> 00:33:11.042 but you also may not remember
NOTE Confidence: 0.888435536666667
00:33:11.042 --> 00:33:12.359 part of the procedure as well.
NOTE Confidence: 0.888435536666667
00:33:12.360 --> 00:33:14.598 And that's really where your expertise
NOTE Confidence: 0.888435536666667
00:33:14.598 --> 00:33:16.496 come into like kind of making sure
NOTE Confidence: 0.888435536666667
00:33:16.496 --> 00:33:18.320 that you get more of one versus the
NOTE Confidence: 0.888435536666667
00:33:18.320 --> 00:33:19.835 other depending on whatever procedure
NOTE Confidence: 0.80809207
00:33:19.840 --> 00:33:22.114 or surgery you have, right. The exactly.
NOTE Confidence: 0.80809207
00:33:22.114 --> 00:33:24.010 And those can be some of the more
NOTE Confidence: 0.80809207
00:33:24.065 --> 00:33:25.870 challenging cases actually for an
NOTE Confidence: 0.80809207
00:33:25.870 --> 00:33:27.675 anesthesiologist sometimes if we are
NOTE Confidence: 0.80809207
00:33:27.728 --> 00:33:29.522 able to fully control your breathing
NOTE Confidence: 0.80809207

00:33:29.522 --> 00:33:31.938 with a breathing tube and a ventilator,

NOTE Confidence: 0.80809207

00:33:31.938 --> 00:33:34.780 it's a little simpler than I having

NOTE Confidence: 0.80809207

00:33:34.862 --> 00:33:37.466 to also worry about or be concerned

NOTE Confidence: 0.80809207

00:33:37.466 --> 00:33:38.994 about an unprotected airway.

NOTE Confidence: 0.80809207

00:33:39.000 --> 00:33:40.460 So essentially a patient during

NOTE Confidence: 0.80809207

00:33:40.460 --> 00:33:42.160 sedation is breathing on their own.

NOTE Confidence: 0.80809207

00:33:42.160 --> 00:33:43.240 We're we're we're not,

NOTE Confidence: 0.80809207

00:33:43.240 --> 00:33:45.560 we don't have any support in their mouth.

NOTE Confidence: 0.80809207

00:33:45.560 --> 00:33:46.745 So it's challenging,

NOTE Confidence: 0.80809207

00:33:46.745 --> 00:33:49.510 but it's an exciting part of our

NOTE Confidence: 0.80809207

00:33:49.594 --> 00:33:51.456 profession and it's just a wide

NOTE Confidence: 0.80809207

00:33:51.456 --> 00:33:52.680 variety of things that we do.

NOTE Confidence: 0.756541156666667

00:33:53.200 --> 00:33:54.900 And that's also in different

NOTE Confidence: 0.756541156666667

00:33:54.900 --> 00:33:55.497 procedures, surgeries.

NOTE Confidence: 0.756541156666667

00:33:55.497 --> 00:33:57.810 You some see the patient kind of go a

NOTE Confidence: 0.756541156666667

00:33:57.873 --> 00:33:59.861 little bit deeper into sleep and you

NOTE Confidence: 0.756541156666667
00:33:59.861 --> 00:34:02.440 actually kind of bring them back out again,
NOTE Confidence: 0.756541156666667
00:34:02.440 --> 00:34:03.600 they may not remember anything,
NOTE Confidence: 0.756541156666667
00:34:03.600 --> 00:34:05.480 but you just want them to breathe a
NOTE Confidence: 0.756541156666667
00:34:05.480 --> 00:34:07.152 little bit more on their own rather
NOTE Confidence: 0.756541156666667
00:34:07.152 --> 00:34:09.119 than sort of kind of stop breathing.
NOTE Confidence: 0.756541156666667
00:34:09.120 --> 00:34:11.016 So you adjust these medications as
NOTE Confidence: 0.756541156666667
00:34:11.016 --> 00:34:12.800 appropriately and every patient's different.
NOTE Confidence: 0.756541156666667
00:34:12.800 --> 00:34:13.775 You know, again,
NOTE Confidence: 0.756541156666667
00:34:13.775 --> 00:34:15.075 you're monitoring blood pressure,
NOTE Confidence: 0.756541156666667
00:34:15.080 --> 00:34:16.624 you're monitoring pulse oxometry,
NOTE Confidence: 0.756541156666667
00:34:16.624 --> 00:34:19.278 you know, how much oxygen to have blood.
NOTE Confidence: 0.756541156666667
00:34:19.280 --> 00:34:20.920 I mean you, you have all these monitors,
NOTE Confidence: 0.756541156666667
00:34:20.920 --> 00:34:23.160 you look like a NASA and an expectation,
NOTE Confidence: 0.756541156666667
00:34:23.160 --> 00:34:24.917 but everything is there for a reason.
NOTE Confidence: 0.81443361
00:34:25.560 --> 00:34:26.805 Absolutely. You know,
NOTE Confidence: 0.81443361

00:34:26.805 --> 00:34:29.295 it's it's the monitoring which has
NOTE Confidence: 0.81443361

00:34:29.295 --> 00:34:31.958 really made anaesthesia a safe practice.
NOTE Confidence: 0.81443361

00:34:31.960 --> 00:34:33.200 Let's talk about you know,
NOTE Confidence: 0.81443361

00:34:33.200 --> 00:34:35.874 50 years ago and we didn't have
NOTE Confidence: 0.81443361

00:34:35.880 --> 00:34:37.506 nearly the amount of monitoring that
NOTE Confidence: 0.81443361

00:34:37.506 --> 00:34:39.163 we have now and anesthesia really
NOTE Confidence: 0.81443361

00:34:39.163 --> 00:34:41.720 is a was a much unsafe for practice.
NOTE Confidence: 0.81443361

00:34:41.720 --> 00:34:43.520 Anesthesia is extremely safe these days.
NOTE Confidence: 0.81443361

00:34:43.520 --> 00:34:46.796 I mean we do you know millions of anesthetics
NOTE Confidence: 0.81443361

00:34:46.796 --> 00:34:48.720 and patients typically do very well.
NOTE Confidence: 0.847095199090909

00:34:49.080 --> 00:34:51.030 So actually if you bring really
NOTE Confidence: 0.847095199090909

00:34:51.030 --> 00:34:53.120 the the history of anesthesia,
NOTE Confidence: 0.847095199090909

00:34:53.120 --> 00:34:54.792 why don't we talk a little bit kind
NOTE Confidence: 0.847095199090909

00:34:54.792 --> 00:34:56.560 of the the history of anesthesia.
NOTE Confidence: 0.847095199090909

00:34:56.560 --> 00:34:58.642 I think that's really interesting of
NOTE Confidence: 0.847095199090909

00:34:58.642 --> 00:35:01.239 kind of how things have changed over,

NOTE Confidence: 0.847095199090909
00:35:01.240 --> 00:35:03.796 you know, decades of providing anesthesia,
NOTE Confidence: 0.796918027142857
00:35:04.160 --> 00:35:06.477 right. So actually it's not even decades,
NOTE Confidence: 0.796918027142857
00:35:06.480 --> 00:35:08.240 centuries and millennia people
NOTE Confidence: 0.796918027142857
00:35:08.240 --> 00:35:10.000 providing anesthesia for patients.
NOTE Confidence: 0.796918027142857
00:35:10.000 --> 00:35:13.056 So you know we have records back to
NOTE Confidence: 0.796918027142857
00:35:13.056 --> 00:35:15.972 the 4000 BC where people are using
NOTE Confidence: 0.796918027142857
00:35:15.972 --> 00:35:19.379 things like opium and and alcohol and
NOTE Confidence: 0.796918027142857
00:35:19.379 --> 00:35:22.017 different herbal supplements to to
NOTE Confidence: 0.796918027142857
00:35:22.017 --> 00:35:24.759 help patients who need medical work.
NOTE Confidence: 0.796918027142857
00:35:24.760 --> 00:35:27.360 Now I will say during that period it
NOTE Confidence: 0.796918027142857
00:35:27.360 --> 00:35:29.546 was pretty barbaric and and painful
NOTE Confidence: 0.796918027142857
00:35:29.546 --> 00:35:31.358 and you know they don't nearly,
NOTE Confidence: 0.796918027142857
00:35:31.360 --> 00:35:33.439 they didn't nearly have the technology or
NOTE Confidence: 0.796918027142857
00:35:33.439 --> 00:35:35.000 medical advancements that we have today.
NOTE Confidence: 0.796918027142857
00:35:35.000 --> 00:35:37.282 But the fact is patient need people
NOTE Confidence: 0.796918027142857

00:35:37.282 --> 00:35:39.591 needed help from physicians and sometimes

NOTE Confidence: 0.796918027142857

00:35:39.591 --> 00:35:42.168 those were painful and but but there

NOTE Confidence: 0.796918027142857

00:35:42.168 --> 00:35:44.240 was sort of the practice of anesthesia

NOTE Confidence: 0.796918027142857

00:35:44.298 --> 00:35:46.116 for for millennia at this point.

NOTE Confidence: 0.796918027142857

00:35:46.120 --> 00:35:48.773 Now it isn't probably till the mid

NOTE Confidence: 0.796918027142857

00:35:48.773 --> 00:35:52.071 1800s where we can think of the birth

NOTE Confidence: 0.796918027142857

00:35:52.071 --> 00:35:54.571 of modern anesthesia and we could

NOTE Confidence: 0.796918027142857

00:35:54.571 --> 00:35:56.788 think of that essentially ether,

NOTE Confidence: 0.796918027142857

00:35:56.788 --> 00:36:00.076 the ether diethyl ether is a

NOTE Confidence: 0.796918027142857

00:36:00.080 --> 00:36:01.740 medication and essentially was used

NOTE Confidence: 0.796918027142857

00:36:01.740 --> 00:36:04.600 in the 1800s as a recreational drug.

NOTE Confidence: 0.796918027142857

00:36:04.600 --> 00:36:06.088 So there were what were known

NOTE Confidence: 0.796918027142857

00:36:06.088 --> 00:36:06.832 as ether parties.

NOTE Confidence: 0.796918027142857

00:36:06.840 --> 00:36:08.780 People would get together and

NOTE Confidence: 0.796918027142857

00:36:08.780 --> 00:36:11.292 use ether and have a, you know,

NOTE Confidence: 0.796918027142857

00:36:11.292 --> 00:36:12.436 have a good time.

NOTE Confidence: 0.796918027142857
00:36:12.440 --> 00:36:14.665 But what doctors were noticing
NOTE Confidence: 0.796918027142857
00:36:14.665 --> 00:36:16.000 was that patients,
NOTE Confidence: 0.796918027142857
00:36:16.000 --> 00:36:17.360 people were hurting themselves
NOTE Confidence: 0.796918027142857
00:36:17.360 --> 00:36:18.720 and not noticing it.
NOTE Confidence: 0.796918027142857
00:36:18.720 --> 00:36:20.430 So they weren't experiencing any pain
NOTE Confidence: 0.796918027142857
00:36:20.430 --> 00:36:22.406 and then they wouldn't notice that they
NOTE Confidence: 0.796918027142857
00:36:22.406 --> 00:36:24.233 had an injury until the following day.
NOTE Confidence: 0.796918027142857
00:36:24.240 --> 00:36:26.556 So that's really when physicians starts
NOTE Confidence: 0.796918027142857
00:36:26.556 --> 00:36:29.662 thinking maybe we can use this for a
NOTE Confidence: 0.796918027142857
00:36:29.662 --> 00:36:31.527 surgical procedures where they're only
NOTE Confidence: 0.796918027142857
00:36:31.527 --> 00:36:34.460 using alcohol or you know, you know,
NOTE Confidence: 0.796918027142857
00:36:34.460 --> 00:36:37.280 hold a piece of wood really tight.
NOTE Confidence: 0.796918027142857
00:36:37.280 --> 00:36:37.704 You know,
NOTE Confidence: 0.796918027142857
00:36:37.704 --> 00:36:38.976 maybe we can use this to
NOTE Confidence: 0.796918027142857
00:36:38.976 --> 00:36:39.800 our advantage and one,
NOTE Confidence: 0.796918027142857

00:36:39.800 --> 00:36:41.996 make people more comfortable, but two,
NOTE Confidence: 0.796918027142857

00:36:42.000 --> 00:36:44.240 do cervical procedures that had
NOTE Confidence: 0.796918027142857

00:36:44.240 --> 00:36:46.480 never been performed before before.
NOTE Confidence: 0.796918027142857

00:36:46.480 --> 00:36:49.198 Now ether is not used anymore,
NOTE Confidence: 0.796918027142857

00:36:49.200 --> 00:36:52.600 but derivatives of ether are used every day.
NOTE Confidence: 0.796918027142857

00:36:52.600 --> 00:36:54.920 We use medications like suvoflourine,
NOTE Confidence: 0.796918027142857

00:36:54.920 --> 00:36:55.800 desflourine, ISO,
NOTE Confidence: 0.796918027142857

00:36:55.800 --> 00:36:56.240 fluorine,
NOTE Confidence: 0.796918027142857

00:36:56.240 --> 00:36:58.880 and they're all derivatives of ether,
NOTE Confidence: 0.796918027142857

00:36:58.880 --> 00:36:59.560 diethyl ether,
NOTE Confidence: 0.796918027142857

00:36:59.560 --> 00:37:01.260 and those are medications that
NOTE Confidence: 0.796918027142857

00:37:01.260 --> 00:37:02.280 keep people asleep.
NOTE Confidence: 0.896673974545455

00:37:03.160 --> 00:37:05.001 So that's really more for the gentle
NOTE Confidence: 0.896673974545455

00:37:05.001 --> 00:37:06.320 anesthesia type of treatment,
NOTE Confidence: 0.919735701428571

00:37:06.400 --> 00:37:07.484 right? Absolutely.
NOTE Confidence: 0.919735701428571

00:37:07.484 --> 00:37:10.194 Now around this time period.

NOTE Confidence: 0.919735701428571
00:37:10.200 --> 00:37:13.312 Additionally, cocaine was being
NOTE Confidence: 0.919735701428571
00:37:13.312 --> 00:37:14.560 used for medical procedures.
NOTE Confidence: 0.919735701428571
00:37:14.560 --> 00:37:17.182 So essentially what happened was it
NOTE Confidence: 0.919735701428571
00:37:17.182 --> 00:37:19.840 landed on the tongue of a physician and
NOTE Confidence: 0.919735701428571
00:37:19.840 --> 00:37:21.400 they realized their tongue went numb.
NOTE Confidence: 0.919735701428571
00:37:21.400 --> 00:37:23.641 So the thought was how can we use this
NOTE Confidence: 0.919735701428571
00:37:23.641 --> 00:37:25.958 to numb different parts of the body?
NOTE Confidence: 0.919735701428571
00:37:25.960 --> 00:37:28.634 Now we typically don't use cocaine anymore.
NOTE Confidence: 0.919735701428571
00:37:28.640 --> 00:37:31.720 Sometimes it is used for high
NOTE Confidence: 0.919735701428571
00:37:31.720 --> 00:37:33.320 procedures and things like that.
NOTE Confidence: 0.919735701428571
00:37:33.320 --> 00:37:35.259 But for obvious reasons we use medications
NOTE Confidence: 0.919735701428571
00:37:35.259 --> 00:37:37.079 that are very similar to cocaine.
NOTE Confidence: 0.919735701428571
00:37:37.080 --> 00:37:39.240 So we use lidocaine, bupivacaine,
NOTE Confidence: 0.919735701428571
00:37:39.240 --> 00:37:40.566 ropivacaine, Med pivacaine.
NOTE Confidence: 0.919735701428571
00:37:40.566 --> 00:37:43.218 These are all local anesthetics which
NOTE Confidence: 0.919735701428571

00:37:43.218 --> 00:37:45.518 function in a very similar way to that.
NOTE Confidence: 0.919735701428571

00:37:45.520 --> 00:37:47.200 Propofol works in the brain,
NOTE Confidence: 0.919735701428571

00:37:47.200 --> 00:37:49.120 but they only work on certain ports of
NOTE Confidence: 0.919735701428571

00:37:49.120 --> 00:37:50.758 either your central nervous system,
NOTE Confidence: 0.919735701428571

00:37:50.760 --> 00:37:52.360 your spinal cord or your
NOTE Confidence: 0.919735701428571

00:37:52.360 --> 00:37:53.320 peripheral nervous system.
NOTE Confidence: 0.919735701428571

00:37:53.320 --> 00:37:54.640 Let's say the nerves will
NOTE Confidence: 0.919735701428571

00:37:54.640 --> 00:37:55.960 go down to your leg.
NOTE Confidence: 0.919735701428571

00:37:55.960 --> 00:37:57.610 The way that those function is
NOTE Confidence: 0.919735701428571

00:37:57.610 --> 00:37:59.280 they work on these proteins,
NOTE Confidence: 0.919735701428571

00:37:59.280 --> 00:38:01.881 so they bind to proteins on nerves and they
NOTE Confidence: 0.919735701428571

00:38:01.881 --> 00:38:04.280 form an electrical electrical blockade.
NOTE Confidence: 0.919735701428571

00:38:04.280 --> 00:38:07.082 So no longer can that electrical
NOTE Confidence: 0.919735701428571

00:38:07.082 --> 00:38:08.950 system pass through rendering
NOTE Confidence: 0.919735701428571

00:38:09.025 --> 00:38:11.359 you not able to feel sensation,
NOTE Confidence: 0.919735701428571

00:38:11.360 --> 00:38:13.680 pain or move that part of your body.

NOTE Confidence: 0.919735701428571
00:38:13.680 --> 00:38:15.840 So like we've talked about that's
NOTE Confidence: 0.919735701428571
00:38:15.840 --> 00:38:17.972 extremely useful for us, for example,
NOTE Confidence: 0.919735701428571
00:38:17.972 --> 00:38:19.356 joint procedures like yourself,
NOTE Confidence: 0.919735701428571
00:38:19.360 --> 00:38:20.830 a total neuarthroplasty.
NOTE Confidence: 0.919735701428571
00:38:20.830 --> 00:38:23.280 We're using a combination of
NOTE Confidence: 0.919735701428571
00:38:23.280 --> 00:38:25.080 regional aesthetic techniques.
NOTE Confidence: 0.919735701428571
00:38:25.080 --> 00:38:27.600 We're using typically a spinal anesthetic.
NOTE Confidence: 0.919735701428571
00:38:27.600 --> 00:38:29.700 We're inject numbing medicine
NOTE Confidence: 0.919735701428571
00:38:29.700 --> 00:38:31.800 into the spinal canal,
NOTE Confidence: 0.919735701428571
00:38:31.800 --> 00:38:33.879 into the CSF or fluid that surrounds
NOTE Confidence: 0.919735701428571
00:38:33.879 --> 00:38:35.725 your nerves and that forms that
NOTE Confidence: 0.919735701428571
00:38:35.725 --> 00:38:37.507 blockade allowing you to you do
NOTE Confidence: 0.919735701428571
00:38:37.507 --> 00:38:39.191 your surgery potentially without
NOTE Confidence: 0.919735701428571
00:38:39.191 --> 00:38:40.955 a full genital anesthetic.
NOTE Confidence: 0.919735701428571
00:38:40.960 --> 00:38:43.198 Patients feel a lot better afterwards.
NOTE Confidence: 0.919735701428571

00:38:43.200 --> 00:38:45.279 They don't have as much pain afterwards.
NOTE Confidence: 0.919735701428571

00:38:45.280 --> 00:38:46.280 They're typically able to do
NOTE Confidence: 0.919735701428571

00:38:46.280 --> 00:38:47.080 rehab a lot quicker,
NOTE Confidence: 0.919735701428571

00:38:47.080 --> 00:38:48.840 which is important for for
NOTE Confidence: 0.919735701428571

00:38:48.840 --> 00:38:50.600 you and the recovery process.
NOTE Confidence: 0.919735701428571

00:38:50.600 --> 00:38:52.720 So we do that part of regional anesthesia.
NOTE Confidence: 0.919735701428571

00:38:52.720 --> 00:38:55.360 We also do peripheral nerve blocks
NOTE Confidence: 0.919735701428571

00:38:55.360 --> 00:38:57.064 typically for a knee procedure we'll
NOTE Confidence: 0.919735701428571

00:38:57.064 --> 00:38:59.392 do the one or two nerve blocks for
NOTE Confidence: 0.919735701428571

00:38:59.392 --> 00:39:01.624 your knee helps with pain afterwards.
NOTE Confidence: 0.919735701428571

00:39:01.624 --> 00:39:03.704 That lasts typically anywhere from
NOTE Confidence: 0.919735701428571

00:39:03.704 --> 00:39:07.640 about 24 hours, maybe up to a few days.
NOTE Confidence: 0.919735701428571

00:39:07.640 --> 00:39:10.058 Now important to know specifically from
NOTE Confidence: 0.919735701428571

00:39:10.058 --> 00:39:12.568 those two the variation between the
NOTE Confidence: 0.919735701428571

00:39:12.568 --> 00:39:14.648 spinal anesthetic and the peripheral
NOTE Confidence: 0.919735701428571

00:39:14.648 --> 00:39:16.920 neuroblock for a knee operation.

NOTE Confidence: 0.919735701428571
00:39:16.920 --> 00:39:18.200 Now for a spinal anesthetic,
NOTE Confidence: 0.919735701428571
00:39:18.200 --> 00:39:19.760 typically you are completely numb.
NOTE Confidence: 0.919735701428571
00:39:19.760 --> 00:39:21.076 It's if your legs are not there
NOTE Confidence: 0.919735701428571
00:39:21.076 --> 00:39:23.031 and it can be a sort of a jarring
NOTE Confidence: 0.919735701428571
00:39:23.031 --> 00:39:24.190 sensation for patients when they
NOTE Confidence: 0.919735701428571
00:39:24.190 --> 00:39:25.716 wake up from in the recovery room.
NOTE Confidence: 0.919735701428571
00:39:25.720 --> 00:39:27.561 And we do warn that for patients
NOTE Confidence: 0.919735701428571
00:39:27.561 --> 00:39:28.799 afterwards they will be numb,
NOTE Confidence: 0.919735701428571
00:39:28.800 --> 00:39:30.920 they won't be able to feel it does come back.
NOTE Confidence: 0.919735701428571
00:39:30.920 --> 00:39:33.288 That comes back after about 3-4
NOTE Confidence: 0.919735701428571
00:39:33.288 --> 00:39:35.240 hours depending on medication.
NOTE Confidence: 0.919735701428571
00:39:35.240 --> 00:39:37.080 Now for peripheral nerve blocks,
NOTE Confidence: 0.919735701428571
00:39:37.080 --> 00:39:39.635 you may not have full pain relief.
NOTE Confidence: 0.919735701428571
00:39:39.640 --> 00:39:41.456 And the reason for that is we don't
NOTE Confidence: 0.919735701428571
00:39:41.456 --> 00:39:42.976 want to block those motor nerves
NOTE Confidence: 0.919735701428571

00:39:42.976 --> 00:39:45.080 that go to that part of your body.
NOTE Confidence: 0.919735701428571

00:39:45.080 --> 00:39:47.320 So you want a patient walking as
NOTE Confidence: 0.919735701428571

00:39:47.320 --> 00:39:49.824 soon as possible possible after your
NOTE Confidence: 0.919735701428571

00:39:49.824 --> 00:39:51.560 knee arthroplasty, hip arthroplasty.
NOTE Confidence: 0.919735701428571

00:39:51.560 --> 00:39:54.144 If we block those, no motor nerves,
NOTE Confidence: 0.919735701428571

00:39:54.144 --> 00:39:56.112 they're not able to walk properly,
NOTE Confidence: 0.919735701428571

00:39:56.120 --> 00:39:57.200 they're not able to move,
NOTE Confidence: 0.919735701428571

00:39:57.200 --> 00:39:59.320 regain motion of that joint.
NOTE Confidence: 0.902845852857143

00:39:59.320 --> 00:40:01.903 So we try to block that sensation which may
NOTE Confidence: 0.902845852857143

00:40:01.903 --> 00:40:04.800 not get full pain control, but it helps. Or
NOTE Confidence: 0.9226346

00:40:04.880 --> 00:40:06.160 anything helps that, you know,
NOTE Confidence: 0.9226346

00:40:06.160 --> 00:40:08.211 you have to take less narcotics or
NOTE Confidence: 0.9226346

00:40:08.211 --> 00:40:10.237 narcotics that have pros and cons to it.
NOTE Confidence: 0.9226346

00:40:10.240 --> 00:40:12.920 Obviously they can make you all so dizzy,
NOTE Confidence: 0.9226346

00:40:12.920 --> 00:40:14.360 constipated, you know,
NOTE Confidence: 0.9226346

00:40:14.360 --> 00:40:16.280 having more difficulty kind

NOTE Confidence: 0.9226346

00:40:16.280 --> 00:40:18.759 of with nausea and vomiting.

NOTE Confidence: 0.9226346

00:40:18.760 --> 00:40:20.216 So anything that's regional,

NOTE Confidence: 0.9226346

00:40:20.216 --> 00:40:22.036 which you really been implement,

NOTE Confidence: 0.9226346

00:40:22.040 --> 00:40:23.528 you know implementing this for quite

NOTE Confidence: 0.9226346

00:40:23.528 --> 00:40:25.235 a long time and really instrumental

NOTE Confidence: 0.9226346

00:40:25.235 --> 00:40:27.545 in helping drive this even through the

NOTE Confidence: 0.9226346

00:40:27.545 --> 00:40:29.573 Bridgeport hospital system to to kind

NOTE Confidence: 0.9226346

00:40:29.573 --> 00:40:31.439 of get patients use less narcotics,

NOTE Confidence: 0.9226346

00:40:31.440 --> 00:40:32.792 they are more awake,

NOTE Confidence: 0.9226346

00:40:32.792 --> 00:40:34.820 more comfortable and able to mobilize

NOTE Confidence: 0.9226346

00:40:34.881 --> 00:40:36.776 very quickly after big procedures

NOTE Confidence: 0.9226346

00:40:36.776 --> 00:40:38.671 like like knee replacements and

NOTE Confidence: 0.9226346

00:40:38.730 --> 00:40:40.478 hip replacements for instance.

NOTE Confidence: 0.9226346

00:40:40.480 --> 00:40:42.073 So what I actually want to do is I

NOTE Confidence: 0.9226346

00:40:42.073 --> 00:40:43.564 want to take a short break and I

NOTE Confidence: 0.9226346

00:40:43.564 --> 00:40:45.338 want to dive a little bit into the
NOTE Confidence: 0.9226346

00:40:45.338 --> 00:40:47.150 anesthesia team and then we'll go even
NOTE Confidence: 0.9226346

00:40:47.150 --> 00:40:49.355 specifics on the type of anesthesia again,
NOTE Confidence: 0.9226346

00:40:49.360 --> 00:40:51.880 talk about spinal epidurals for instance,
NOTE Confidence: 0.9226346

00:40:51.880 --> 00:40:54.645 and some of the sort of side effects, risks,
NOTE Confidence: 0.9226346

00:40:54.645 --> 00:40:57.555 benefits of these type of procedures.
NOTE Confidence: 0.9226346

00:40:57.560 --> 00:40:58.920 You're watching your health care.
NOTE Confidence: 0.9226346

00:40:58.920 --> 00:41:00.760 I'm Doctor Amit Lahav here
NOTE Confidence: 0.9226346

00:41:00.760 --> 00:41:02.232 with doctor Brian Kerner.
NOTE Confidence: 0.9226346

00:41:02.240 --> 00:41:03.080 We'll be right back.
NOTE Confidence: 0.8562788

00:41:42.600 --> 00:41:45.560 Welcome back to your healthcare.
NOTE Confidence: 0.8562788

00:41:45.560 --> 00:41:47.760 I'm doctor Amit Lahab here
NOTE Confidence: 0.8562788

00:41:47.760 --> 00:41:49.520 with Doctor Brian Kerner.
NOTE Confidence: 0.8562788

00:41:49.520 --> 00:41:52.796 Anesthesia and we talked a lot about
NOTE Confidence: 0.8562788

00:41:52.800 --> 00:41:55.200 the the history of anesthesia gel,
NOTE Confidence: 0.8562788

00:41:55.200 --> 00:41:56.815 anesthesia, some of the different

NOTE Confidence: 0.8562788

00:41:56.815 --> 00:41:58.795 medications that are used for the

NOTE Confidence: 0.8562788

00:41:58.795 --> 00:42:00.186 state of anesthesia, analgesia,

NOTE Confidence: 0.8562788

00:42:00.186 --> 00:42:02.516 pain relief and so forth.

NOTE Confidence: 0.8562788

00:42:02.520 --> 00:42:03.399 And Doctor Koerner,

NOTE Confidence: 0.8562788

00:42:03.399 --> 00:42:05.450 again thank you very much for being

NOTE Confidence: 0.8562788

00:42:05.507 --> 00:42:07.222 with us really and lighting us a

NOTE Confidence: 0.8562788

00:42:07.222 --> 00:42:09.078 lot about the field of anesthesia.

NOTE Confidence: 0.8562788

00:42:09.080 --> 00:42:10.680 Let's just briefly talk about

NOTE Confidence: 0.8562788

00:42:10.680 --> 00:42:11.640 the anesthesia team,

NOTE Confidence: 0.8562788

00:42:11.640 --> 00:42:12.800 because it's not just you,

NOTE Confidence: 0.8562788

00:42:12.800 --> 00:42:15.386 it's sort of a team approach and we'll

NOTE Confidence: 0.8562788

00:42:15.386 --> 00:42:16.784 go to some specifics in anesthesia

NOTE Confidence: 0.8562788

00:42:16.784 --> 00:42:18.388 and some of the risks involved

NOTE Confidence: 0.8562788

00:42:18.388 --> 00:42:19.753 with different type of procedures.

NOTE Confidence: 0.8772937111111111

00:42:20.000 --> 00:42:22.422 Absolutely. It's a great topic to talk

NOTE Confidence: 0.8772937111111111

00:42:22.422 --> 00:42:24.540 about because one of the most common

NOTE Confidence: 0.8772937111111111

00:42:24.540 --> 00:42:26.855 questions that I get asked when I speak

NOTE Confidence: 0.8772937111111111

00:42:26.855 --> 00:42:29.129 to a patient before surgery is will you

NOTE Confidence: 0.8772937111111111

00:42:29.129 --> 00:42:31.424 be there the entire time And it depends.

NOTE Confidence: 0.8772937111111111

00:42:31.424 --> 00:42:33.184 So there are different practice

NOTE Confidence: 0.8772937111111111

00:42:33.184 --> 00:42:35.119 types within the United States.

NOTE Confidence: 0.8772937111111111

00:42:35.120 --> 00:42:37.160 Some of them are physician only.

NOTE Confidence: 0.8772937111111111

00:42:37.160 --> 00:42:38.888 So if you have a physician

NOTE Confidence: 0.8772937111111111

00:42:38.888 --> 00:42:39.752 only anesthesia practice,

NOTE Confidence: 0.8772937111111111

00:42:39.760 --> 00:42:40.786 it means you will have a

NOTE Confidence: 0.8772937111111111

00:42:40.786 --> 00:42:41.880 physician with you in that room.

NOTE Confidence: 0.8772937111111111

00:42:41.880 --> 00:42:42.882 The entire case,

NOTE Confidence: 0.8772937111111111

00:42:42.882 --> 00:42:45.220 the majority of places within the country

NOTE Confidence: 0.8772937111111111

00:42:45.280 --> 00:42:47.236 are not that they're A-Team model,

NOTE Confidence: 0.8772937111111111

00:42:47.240 --> 00:42:49.196 which is very good as well.

NOTE Confidence: 0.8772937111111111

00:42:49.200 --> 00:42:50.172 I work very,

NOTE Confidence: 0.8772937111111111

00:42:50.172 --> 00:42:52.440 that's the model that I practice in.

NOTE Confidence: 0.8772937111111111

00:42:52.440 --> 00:42:55.896 It means that we work with the physician and

NOTE Confidence: 0.8772937111111111

00:42:55.896 --> 00:42:59.038 a CRNA or a a certified registered nurse,

NOTE Confidence: 0.8772937111111111

00:42:59.040 --> 00:43:02.048 anesthetist or anesthesiology assistant.

NOTE Confidence: 0.8772937111111111

00:43:02.048 --> 00:43:05.310 Now those other fields have gained

NOTE Confidence: 0.8772937111111111

00:43:05.310 --> 00:43:07.318 extra training in anesthesia.

NOTE Confidence: 0.8772937111111111

00:43:07.320 --> 00:43:09.174 So they're experts in the field

NOTE Confidence: 0.8772937111111111

00:43:09.174 --> 00:43:11.003 of anesthesia just going by that

NOTE Confidence: 0.8772937111111111

00:43:11.003 --> 00:43:12.450 a different path whether through

NOTE Confidence: 0.8772937111111111

00:43:12.450 --> 00:43:14.075 nursing or or or otherwise.

NOTE Confidence: 0.8772937111111111

00:43:14.080 --> 00:43:17.626 So typically I will be it's

NOTE Confidence: 0.8772937111111111

00:43:17.626 --> 00:43:19.399 called medical supervision.

NOTE Confidence: 0.8772937111111111

00:43:19.400 --> 00:43:21.549 So I will essentially be in charge

NOTE Confidence: 0.8772937111111111

00:43:21.549 --> 00:43:23.544 of the anesthetics of up to four

NOTE Confidence: 0.8772937111111111

00:43:23.544 --> 00:43:25.068 patients at a time and there's

NOTE Confidence: 0.8772937111111111

00:43:25.134 --> 00:43:26.639 someone else in that room,
NOTE Confidence: 0.8772937111111111

00:43:26.640 --> 00:43:28.288 a highly qualified individual
NOTE Confidence: 0.8772937111111111

00:43:28.288 --> 00:43:30.760 making sure to monitor the patient.
NOTE Confidence: 0.97108642

00:43:30.800 --> 00:43:32.325 But really there's always someone
NOTE Confidence: 0.97108642

00:43:32.325 --> 00:43:34.320 with the patient no matter what. Oh,
NOTE Confidence: 0.8766555495833333

00:43:34.320 --> 00:43:36.294 absolutely. Like I said, one of the
NOTE Confidence: 0.8766555495833333

00:43:36.294 --> 00:43:38.137 standards of care for anesthesia you
NOTE Confidence: 0.8766555495833333

00:43:38.137 --> 00:43:40.021 so you have a qualified individual
NOTE Confidence: 0.8766555495833333

00:43:40.021 --> 00:43:41.717 there for the entire procedure.
NOTE Confidence: 0.888048711875

00:43:41.880 --> 00:43:43.826 So it's it's safety is always priority
NOTE Confidence: 0.888048711875

00:43:43.826 --> 00:43:45.737 and that's why somebody S always
NOTE Confidence: 0.888048711875

00:43:45.737 --> 00:43:47.384 watching the patient, no question.
NOTE Confidence: 0.888048711875

00:43:47.384 --> 00:43:48.320 The anesthesia perspective,
NOTE Confidence: 0.8724838308

00:43:48.320 --> 00:43:50.189 absolutely. I mean I I work very
NOTE Confidence: 0.8724838308

00:43:50.189 --> 00:43:51.642 closely with my team colleagues
NOTE Confidence: 0.8724838308

00:43:51.642 --> 00:43:53.707 and I would trust myself or my

NOTE Confidence: 0.8724838308

00:43:53.707 --> 00:43:55.397 family member with one as well.

NOTE Confidence: 0.8724838308

00:43:55.400 --> 00:43:56.640 They're they're fantastic. You like

NOTE Confidence: 0.923916761538462

00:43:56.640 --> 00:43:58.677 the commander in chief and you have

NOTE Confidence: 0.923916761538462

00:43:58.677 --> 00:44:00.438 really excellent people working with you.

NOTE Confidence: 0.923916761538462

00:44:00.440 --> 00:44:02.405 Absolutely. It's a team absolutely

NOTE Confidence: 0.923916761538462

00:44:02.405 --> 00:44:04.115 that's even in the surgical field,

NOTE Confidence: 0.923916761538462

00:44:04.120 --> 00:44:05.998 you know you have physician assistant

NOTE Confidence: 0.923916761538462

00:44:05.998 --> 00:44:07.804 and nurse practitioners working with the

NOTE Confidence: 0.923916761538462

00:44:07.804 --> 00:44:09.304 surgeon to help facilitate the surgery

NOTE Confidence: 0.923916761538462

00:44:09.304 --> 00:44:11.076 and and you know can't do it alone,

NOTE Confidence: 0.923916761538462

00:44:11.080 --> 00:44:11.880 There's a team model,

NOTE Confidence: 0.853859570625

00:44:12.000 --> 00:44:13.650 right. I I think it's important

NOTE Confidence: 0.853859570625

00:44:13.650 --> 00:44:15.110 to distinguish that we are

NOTE Confidence: 0.853859570625

00:44:15.110 --> 00:44:16.640 available at every point though.

NOTE Confidence: 0.853859570625

00:44:16.640 --> 00:44:19.041 So one of the core standards is

NOTE Confidence: 0.853859570625

00:44:19.041 --> 00:44:21.198 that if something were to happen,
NOTE Confidence: 0.853859570625

00:44:21.200 --> 00:44:22.073 we're immediately available,
NOTE Confidence: 0.853859570625

00:44:22.073 --> 00:44:23.528 sometimes within seconds we can
NOTE Confidence: 0.853859570625

00:44:23.528 --> 00:44:25.400 be in that room. So absolutely
NOTE Confidence: 0.834319655714286

00:44:25.440 --> 00:44:27.127 and let's speak briefly also about about
NOTE Confidence: 0.834319655714286

00:44:27.127 --> 00:44:28.569 the safety of anesthesia and we'll
NOTE Confidence: 0.834319655714286

00:44:28.569 --> 00:44:30.360 kind of go maybe into some of the,
NOTE Confidence: 0.834319655714286

00:44:30.360 --> 00:44:31.560 you know, risks and benefits of
NOTE Confidence: 0.834319655714286

00:44:31.560 --> 00:44:32.360 different type of anesthesia.
NOTE Confidence: 0.874428936666667

00:44:32.480 --> 00:44:34.364 Absolutely great, great topic.
NOTE Confidence: 0.874428936666667

00:44:34.364 --> 00:44:38.970 What something we touched on a bit before
NOTE Confidence: 0.874428936666667

00:44:38.970 --> 00:44:41.960 is how anesthesia is so safe at this time.
NOTE Confidence: 0.874428936666667

00:44:41.960 --> 00:44:43.868 But 50 years ago it was
NOTE Confidence: 0.874428936666667

00:44:43.868 --> 00:44:45.560 quite a different ball game.
NOTE Confidence: 0.874428936666667

00:44:45.560 --> 00:44:48.224 Essentially at that point we were
NOTE Confidence: 0.874428936666667

00:44:48.224 --> 00:44:50.132 looking at a different monitor,

NOTE Confidence: 0.874428936666667
00:44:50.132 --> 00:44:52.680 so not the same monitors that we have now.
NOTE Confidence: 0.874428936666667
00:44:52.680 --> 00:44:54.360 And you'd have to check each of
NOTE Confidence: 0.874428936666667
00:44:54.360 --> 00:44:55.880 those every 5 minutes or so.
NOTE Confidence: 0.874428936666667
00:44:55.880 --> 00:44:59.237 So you you would look at the patient's chest,
NOTE Confidence: 0.874428936666667
00:44:59.240 --> 00:45:00.160 look like they were breathing,
NOTE Confidence: 0.874428936666667
00:45:00.160 --> 00:45:01.332 look at their skin,
NOTE Confidence: 0.874428936666667
00:45:01.332 --> 00:45:02.797 make sure they're not blue.
NOTE Confidence: 0.874428936666667
00:45:02.800 --> 00:45:04.528 You would now only take a blood pressure
NOTE Confidence: 0.874428936666667
00:45:04.528 --> 00:45:06.037 and that was your your anesthesia
NOTE Confidence: 0.874428936666667
00:45:06.037 --> 00:45:07.573 monitoring and every 5 minutes or
NOTE Confidence: 0.874428936666667
00:45:07.624 --> 00:45:09.040 so you would check those things.
NOTE Confidence: 0.874428936666667
00:45:09.040 --> 00:45:11.238 That's going back 50 years or so.
NOTE Confidence: 0.874428936666667
00:45:11.240 --> 00:45:13.120 It wasn't until about the 1970s,
NOTE Confidence: 0.874428936666667
00:45:13.120 --> 00:45:14.880 nineteen 80s where this.
NOTE Confidence: 0.874428936666667
00:45:14.880 --> 00:45:16.710 This push and safety started to
NOTE Confidence: 0.874428936666667

00:45:16.710 --> 00:45:19.058 come about and we had the invention
NOTE Confidence: 0.874428936666667

00:45:19.058 --> 00:45:20.117 of new monitors.
NOTE Confidence: 0.874428936666667

00:45:20.120 --> 00:45:21.305 One of them,
NOTE Confidence: 0.874428936666667

00:45:21.305 --> 00:45:23.675 absolutely crucial is the pulse oximeter.
NOTE Confidence: 0.874428936666667

00:45:23.680 --> 00:45:25.745 That's a device that we put on
NOTE Confidence: 0.874428936666667

00:45:25.745 --> 00:45:27.677 your finger prior to an anesthetic
NOTE Confidence: 0.874428936666667

00:45:27.677 --> 00:45:29.633 and it measures that level of
NOTE Confidence: 0.874428936666667

00:45:29.633 --> 00:45:31.318 oxygen in within your blood.
NOTE Confidence: 0.874428936666667

00:45:31.320 --> 00:45:33.210 Crucial now it's a standard of care
NOTE Confidence: 0.874428936666667

00:45:33.210 --> 00:45:34.955 that we monitor that continuously
NOTE Confidence: 0.874428936666667

00:45:34.955 --> 00:45:36.719 throughout the entire procedure.
NOTE Confidence: 0.874428936666667

00:45:36.720 --> 00:45:38.267 So instead of having to look at
NOTE Confidence: 0.874428936666667

00:45:38.267 --> 00:45:39.651 a patient's skin to make sure
NOTE Confidence: 0.874428936666667

00:45:39.651 --> 00:45:40.840 that they're not losing oxygen,
NOTE Confidence: 0.874428936666667

00:45:40.840 --> 00:45:41.360 I could,
NOTE Confidence: 0.874428936666667

00:45:41.360 --> 00:45:41.880 you know,

NOTE Confidence: 0.874428936666667
00:45:41.880 --> 00:45:44.816 I hear on the monitor at all times
NOTE Confidence: 0.874428936666667
00:45:44.816 --> 00:45:47.559 that that patient is oxygenating.
NOTE Confidence: 0.874428936666667
00:45:47.560 --> 00:45:48.680 We use blood pressure,
NOTE Confidence: 0.874428936666667
00:45:48.680 --> 00:45:50.880 cough every 5 minutes at a maximum,
NOTE Confidence: 0.874428936666667
00:45:50.880 --> 00:45:53.384 sometimes less than that,
NOTE Confidence: 0.874428936666667
00:45:53.384 --> 00:45:54.636 sometimes continuously.
NOTE Confidence: 0.874428936666667
00:45:54.640 --> 00:45:58.565 We also use what's called end title CO2.
NOTE Confidence: 0.874428936666667
00:45:58.565 --> 00:46:00.649 So we talked a bit about before
NOTE Confidence: 0.874428936666667
00:46:00.649 --> 00:46:02.494 the different gases that we
NOTE Confidence: 0.874428936666667
00:46:02.494 --> 00:46:04.440 exchange on a normal basis.
NOTE Confidence: 0.874428936666667
00:46:04.440 --> 00:46:07.040 One is oxygen and one is carbon dioxide.
NOTE Confidence: 0.874428936666667
00:46:07.040 --> 00:46:09.677 The best way you can see that we are
NOTE Confidence: 0.874428936666667
00:46:09.677 --> 00:46:11.554 adequately breathing for a patient
NOTE Confidence: 0.874428936666667
00:46:11.554 --> 00:46:13.834 is by measuring their carbon dioxide.
NOTE Confidence: 0.874428936666667
00:46:13.840 --> 00:46:17.083 We have new monitors now essentially there.
NOTE Confidence: 0.874428936666667

00:46:17.083 --> 00:46:19.261 It's pretty amazing how we're we
NOTE Confidence: 0.874428936666667

00:46:19.261 --> 00:46:21.538 can look at an EEG continuously
NOTE Confidence: 0.874428936666667

00:46:21.538 --> 00:46:24.128 during a surgery to see how deep
NOTE Confidence: 0.874428936666667

00:46:24.207 --> 00:46:26.559 or how anesthetized a patient is.
NOTE Confidence: 0.874428936666667

00:46:26.560 --> 00:46:28.863 Because studies show that if you are
NOTE Confidence: 0.874428936666667

00:46:28.863 --> 00:46:31.917 too deep or you have too much anesthesia,
NOTE Confidence: 0.874428936666667

00:46:31.920 --> 00:46:33.558 you may not do well afterwards either.
NOTE Confidence: 0.874428936666667

00:46:33.560 --> 00:46:36.192 So it may predispose to things like
NOTE Confidence: 0.874428936666667

00:46:36.192 --> 00:46:38.079 delirium and things like that.
NOTE Confidence: 0.874428936666667

00:46:38.080 --> 00:46:39.070 So now we have monitors like
NOTE Confidence: 0.874428936666667

00:46:39.070 --> 00:46:39.920 that that we can use.
NOTE Confidence: 0.874428936666667

00:46:39.920 --> 00:46:41.188 So it's the invention,
NOTE Confidence: 0.874428936666667

00:46:41.188 --> 00:46:43.090 the inclusion of these new modern
NOTE Confidence: 0.874428936666667

00:46:43.156 --> 00:46:45.086 monitoring systems which allowed anesthesia
NOTE Confidence: 0.874428936666667

00:46:45.086 --> 00:46:47.640 to be incredibly safe at this time.
NOTE Confidence: 0.893248548636364

00:46:48.000 --> 00:46:50.496 And you know also for the sake of

NOTE Confidence: 0.893248548636364

00:46:50.496 --> 00:46:52.813 time let's actually go through like

NOTE Confidence: 0.893248548636364

00:46:52.813 --> 00:46:55.778 an epidural versus spinal or you know

NOTE Confidence: 0.893248548636364

00:46:55.778 --> 00:46:58.470 regional 1/2 your body essentially that

NOTE Confidence: 0.893248548636364

00:46:58.470 --> 00:47:00.488 you're you're giving anesthesia to.

NOTE Confidence: 0.893248548636364

00:47:00.488 --> 00:47:02.448 So what's the difference between

NOTE Confidence: 0.893248548636364

00:47:02.448 --> 00:47:04.560 epidural and spinal for instance, sure.

NOTE Confidence: 0.945145096

00:47:04.560 --> 00:47:07.752 So it is medication going to a

NOTE Confidence: 0.945145096

00:47:07.752 --> 00:47:09.120 different location essentially.

NOTE Confidence: 0.945145096

00:47:09.120 --> 00:47:11.800 Now we can do a bolus or a

NOTE Confidence: 0.945145096

00:47:11.800 --> 00:47:13.800 single shot of medication.

NOTE Confidence: 0.945145096

00:47:13.800 --> 00:47:15.480 We can do a catheter,

NOTE Confidence: 0.945145096

00:47:15.480 --> 00:47:17.118 that catheter can go in either location,

NOTE Confidence: 0.945145096

00:47:17.120 --> 00:47:18.510 but it's really the location

NOTE Confidence: 0.945145096

00:47:18.510 --> 00:47:19.900 of that medication which has

NOTE Confidence: 0.945145096

00:47:19.953 --> 00:47:21.318 its have a different effect.

NOTE Confidence: 0.945145096

00:47:21.320 --> 00:47:22.812 Typically a spinal anesthetic
NOTE Confidence: 0.945145096

00:47:22.812 --> 00:47:24.677 is much a stronger effect.
NOTE Confidence: 0.945145096

00:47:24.680 --> 00:47:26.000 So it happens almost instantly,
NOTE Confidence: 0.945145096

00:47:26.000 --> 00:47:28.799 within a few seconds or in a few minutes,
NOTE Confidence: 0.945145096

00:47:28.800 --> 00:47:30.560 you're completely numb and
NOTE Confidence: 0.945145096

00:47:30.560 --> 00:47:31.880 it's very reliable.
NOTE Confidence: 0.945145096

00:47:31.880 --> 00:47:34.480 Epidural tends to take a little bit longer.
NOTE Confidence: 0.945145096

00:47:34.480 --> 00:47:35.360 The reason for that it's,
NOTE Confidence: 0.945145096

00:47:35.360 --> 00:47:37.600 it's outside that spinal fluid.
NOTE Confidence: 0.945145096

00:47:37.600 --> 00:47:39.546 So you have a layer of tissue
NOTE Confidence: 0.945145096

00:47:39.546 --> 00:47:40.880 called the dura matter.
NOTE Confidence: 0.945145096

00:47:40.880 --> 00:47:43.358 The epidural is outside that dura matter.
NOTE Confidence: 0.945145096

00:47:43.360 --> 00:47:45.584 The spinal is inside that dura so or
NOTE Confidence: 0.945145096

00:47:45.584 --> 00:47:47.920 the sub arachnoid space we call it.
NOTE Confidence: 0.945145096

00:47:47.920 --> 00:47:49.156 It's where all that fluid is.
NOTE Confidence: 0.945145096

00:47:49.160 --> 00:47:53.476 Now both can achieve the same effect,

NOTE Confidence: 0.945145096

00:47:53.480 --> 00:47:55.082 but typically spinal's a little bit

NOTE Confidence: 0.945145096

00:47:55.082 --> 00:47:56.839 more reliable and a lot stronger.

NOTE Confidence: 0.648608710909091

00:47:57.080 --> 00:47:59.520 Now we go ahead it it is in your lower back,

NOTE Confidence: 0.648608710909091

00:47:59.520 --> 00:48:01.277 this is really kind of where the,

NOTE Confidence: 0.648608710909091

00:48:01.280 --> 00:48:02.552 the needle goes in order to

NOTE Confidence: 0.648608710909091

00:48:02.552 --> 00:48:03.879 do an epidural or a spinal,

NOTE Confidence: 0.918576381818182

00:48:03.880 --> 00:48:06.120 correct. Now it can be low back as

NOTE Confidence: 0.918576381818182

00:48:06.120 --> 00:48:08.679 we can see from the model here or

NOTE Confidence: 0.918576381818182

00:48:08.679 --> 00:48:10.720 we can put epidurals higher up.

NOTE Confidence: 0.918576381818182

00:48:10.720 --> 00:48:13.336 Now the reason we can do an epidural

NOTE Confidence: 0.918576381818182

00:48:13.336 --> 00:48:15.700 higher up and not a spinal is

NOTE Confidence: 0.918576381818182

00:48:15.700 --> 00:48:17.784 because it's much safer to enter

NOTE Confidence: 0.918576381818182

00:48:17.784 --> 00:48:20.395 that spinal column at a lower level.

NOTE Confidence: 0.918576381818182

00:48:20.400 --> 00:48:22.200 Essentially your your spinal cord

NOTE Confidence: 0.918576381818182

00:48:22.200 --> 00:48:25.020 ends at a a, the high lumbar spine,

NOTE Confidence: 0.918576381818182

00:48:25.020 --> 00:48:27.417 so the mid back, lower mid back.

NOTE Confidence: 0.918576381818182

00:48:27.417 --> 00:48:29.790 And I sometimes explain this and I

NOTE Confidence: 0.918576381818182

00:48:29.866 --> 00:48:32.146 had a patient recently tell me and I

NOTE Confidence: 0.918576381818182

00:48:32.146 --> 00:48:34.757 I say that it's a bundle of nerves,

NOTE Confidence: 0.918576381818182

00:48:34.760 --> 00:48:36.944 your spinal cord and a point it ends

NOTE Confidence: 0.918576381818182

00:48:36.944 --> 00:48:39.240 and you just have strands of cords,

NOTE Confidence: 0.918576381818182

00:48:39.240 --> 00:48:42.117 split strands of nerves floating in liquid.

NOTE Confidence: 0.918576381818182

00:48:42.120 --> 00:48:43.856 And that's why it's safe to enter

NOTE Confidence: 0.918576381818182

00:48:43.856 --> 00:48:44.600 in that point,

NOTE Confidence: 0.918576381818182

00:48:44.600 --> 00:48:46.328 because instead of taking a chance

NOTE Confidence: 0.918576381818182

00:48:46.328 --> 00:48:48.320 of going into one of the nerves,

NOTE Confidence: 0.918576381818182

00:48:48.320 --> 00:48:50.720 they essentially get pushed away.

NOTE Confidence: 0.918576381818182

00:48:50.720 --> 00:48:52.316 We call that the Cordia Aquino

NOTE Confidence: 0.918576381818182

00:48:52.316 --> 00:48:55.200 or the horse's tail.

NOTE Confidence: 0.904903226190476

00:48:55.200 --> 00:48:57.616 And if you bought a kit here also

NOTE Confidence: 0.904903226190476

00:48:57.616 --> 00:48:59.548 just maybe show quickly what do

NOTE Confidence: 0.904903226190476

00:48:59.548 --> 00:49:01.720 you have there in the kit for

NOTE Confidence: 0.848133328

00:49:02.240 --> 00:49:03.272 sure. For us,

NOTE Confidence: 0.848133328

00:49:03.272 --> 00:49:05.680 we have a standard epidural kit here.

NOTE Confidence: 0.848133328

00:49:05.680 --> 00:49:08.036 I'm not sure if the camera can focus

NOTE Confidence: 0.848133328

00:49:08.036 --> 00:49:10.080 in and everything is pretty small here,

NOTE Confidence: 0.848133328

00:49:10.080 --> 00:49:12.198 but we have a catheter here

NOTE Confidence: 0.848133328

00:49:12.200 --> 00:49:15.200 technically in a pregnant patient,

NOTE Confidence: 0.848133328

00:49:15.200 --> 00:49:16.495 patient who is laboring and

NOTE Confidence: 0.848133328

00:49:16.495 --> 00:49:18.455 we want to have some form of

NOTE Confidence: 0.848133328

00:49:18.455 --> 00:49:19.675 analgesia or pain control,

NOTE Confidence: 0.848133328

00:49:19.680 --> 00:49:21.880 which many prefer to have.

NOTE Confidence: 0.848133328

00:49:21.880 --> 00:49:24.390 We would insert this catheter

NOTE Confidence: 0.848133328

00:49:24.390 --> 00:49:26.398 into the epidural space.

NOTE Confidence: 0.848133328

00:49:26.400 --> 00:49:29.375 We do that via certain needles

NOTE Confidence: 0.848133328

00:49:29.375 --> 00:49:31.440 which we have here in the kit.

NOTE Confidence: 0.848133328

00:49:31.440 --> 00:49:33.498 We use that with different syringes and

NOTE Confidence: 0.848133328

00:49:33.498 --> 00:49:36.120 we have a spinal needle here as well.

NOTE Confidence: 0.848133328

00:49:36.120 --> 00:49:37.586 That spinal needle essentially

NOTE Confidence: 0.848133328

00:49:37.586 --> 00:49:40.280 is what we take and we enter

NOTE Confidence: 0.848133328

00:49:40.280 --> 00:49:41.811 into the spinal column through

NOTE Confidence: 0.848133328

00:49:41.811 --> 00:49:43.593 the the spaces in your back.

NOTE Confidence: 0.899108722222222

00:49:44.080 --> 00:49:45.448 So again, these needles

NOTE Confidence: 0.899108722222222

00:49:45.448 --> 00:49:47.158 actually are also very thin,

NOTE Confidence: 0.899108722222222

00:49:47.160 --> 00:49:48.776 very small because you don't need a big

NOTE Confidence: 0.899108722222222

00:49:48.776 --> 00:49:50.600 hole to actually give these medications.

NOTE Confidence: 0.899108722222222

00:49:50.600 --> 00:49:52.274 You just need a small entrance

NOTE Confidence: 0.899108722222222

00:49:52.274 --> 00:49:54.651 and just to get and you don't even

NOTE Confidence: 0.899108722222222

00:49:54.651 --> 00:49:56.439 have to give much of anything.

NOTE Confidence: 0.899108722222222

00:49:56.440 --> 00:49:58.050 You give a few CCS and you're

NOTE Confidence: 0.899108722222222

00:49:58.050 --> 00:49:59.653 or a few millimeter milliliters

NOTE Confidence: 0.899108722222222

00:49:59.653 --> 00:50:02.197 actually and that's all you need.

NOTE Confidence: 0.8991087222222222
00:50:02.200 --> 00:50:03.280 And then you're numb for the waist down,
NOTE Confidence: 0.8521380783333333
00:50:03.600 --> 00:50:05.832 right. Our our goal is to use the
NOTE Confidence: 0.8521380783333333
00:50:05.832 --> 00:50:07.390 smallest needle as possible and
NOTE Confidence: 0.8521380783333333
00:50:07.390 --> 00:50:09.560 typically the IV that you receive in
NOTE Confidence: 0.8521380783333333
00:50:09.560 --> 00:50:11.538 the intravenous line that you receive in
NOTE Confidence: 0.8521380783333333
00:50:11.538 --> 00:50:13.840 the pre op area that's typically bigger,
NOTE Confidence: 0.8521380783333333
00:50:13.840 --> 00:50:15.076 almost always bigger than the needle
NOTE Confidence: 0.8521380783333333
00:50:15.076 --> 00:50:16.438 that we would use in your back.
NOTE Confidence: 0.8521380783333333
00:50:16.440 --> 00:50:18.080 So we want to use a small needle.
NOTE Confidence: 0.8521380783333333
00:50:18.080 --> 00:50:19.620 The reason for that is you can
NOTE Confidence: 0.8521380783333333
00:50:19.620 --> 00:50:20.280 have less complications,
NOTE Confidence: 0.8521380783333333
00:50:20.280 --> 00:50:22.535 so you can have less chances
NOTE Confidence: 0.8521380783333333
00:50:22.535 --> 00:50:23.315 of getting a headache,
NOTE Confidence: 0.8521380783333333
00:50:23.320 --> 00:50:24.960 maybe less chances of bleeding,
NOTE Confidence: 0.8521380783333333
00:50:24.960 --> 00:50:25.710 things like that.
NOTE Confidence: 0.8521380783333333

00:50:25.710 --> 00:50:27.960 So yes we use the smallest needle possible.

NOTE Confidence: 0.850439944285714

00:50:28.240 --> 00:50:30.396 So how do you prepare for anaesthesia?

NOTE Confidence: 0.850439944285714

00:50:30.400 --> 00:50:32.640 You know what, what should we tell patients,

NOTE Confidence: 0.850439944285714

00:50:32.640 --> 00:50:34.943 you know, to prepare for general versus

NOTE Confidence: 0.850439944285714

00:50:34.943 --> 00:50:37.359 spinal versus just having a procedure done?

NOTE Confidence: 0.8702056555

00:50:38.080 --> 00:50:39.968 Sure. I I think the most important thing

NOTE Confidence: 0.8702056555

00:50:39.968 --> 00:50:41.928 is that you have a good relationship

NOTE Confidence: 0.8702056555

00:50:41.928 --> 00:50:43.358 with the primary care doctor.

NOTE Confidence: 0.8702056555

00:50:43.360 --> 00:50:45.300 That primary contractor who knows

NOTE Confidence: 0.8702056555

00:50:45.300 --> 00:50:48.168 you over a long period of time

NOTE Confidence: 0.8702056555

00:50:48.168 --> 00:50:50.186 could essentially manage your your,

NOTE Confidence: 0.8702056555

00:50:50.186 --> 00:50:52.328 your medical problems and then if needed

NOTE Confidence: 0.8702056555

00:50:52.328 --> 00:50:54.359 sends you to different specialists.

NOTE Confidence: 0.8702056555

00:50:54.360 --> 00:50:56.088 So make sure that everything is

NOTE Confidence: 0.8702056555

00:50:56.088 --> 00:50:57.880 what we would call optimized.

NOTE Confidence: 0.8702056555

00:50:57.880 --> 00:51:00.913 So we want a patient in the best condition

NOTE Confidence: 0.8702056555

00:51:00.913 --> 00:51:03.040 possible going into that procedure.

NOTE Confidence: 0.8702056555

00:51:03.040 --> 00:51:04.360 Things such as losing weight,

NOTE Confidence: 0.8702056555

00:51:04.360 --> 00:51:07.280 things such as stopping smoking,

NOTE Confidence: 0.8702056555

00:51:07.280 --> 00:51:09.108 getting diabetes under control,

NOTE Confidence: 0.8702056555

00:51:09.108 --> 00:51:10.479 things like that,

NOTE Confidence: 0.8702056555

00:51:10.480 --> 00:51:12.586 they can really make a difference

NOTE Confidence: 0.8702056555

00:51:12.586 --> 00:51:14.600 for a patient undergoing surgery.

NOTE Confidence: 0.64697178

00:51:16.080 --> 00:51:17.760 And in diabetes, there are certain,

NOTE Confidence: 0.64697178

00:51:17.760 --> 00:51:19.475 no, you know, this is something new

NOTE Confidence: 0.64697178

00:51:19.475 --> 00:51:21.411 that actually came up, some of these,

NOTE Confidence: 0.64697178

00:51:21.411 --> 00:51:23.096 some of these diabetic medications

NOTE Confidence: 0.64697178

00:51:23.096 --> 00:51:24.921 actually have to be stopped before

NOTE Confidence: 0.64697178

00:51:24.921 --> 00:51:26.904 the procedure and some have to be

NOTE Confidence: 0.64697178

00:51:26.904 --> 00:51:28.632 stopped even a week before the

NOTE Confidence: 0.64697178

00:51:28.632 --> 00:51:29.799 procedure for certain reasons.

NOTE Confidence: 0.64697178

00:51:29.799 --> 00:51:30.678 You know why,
NOTE Confidence: 0.850079

00:51:31.560 --> 00:51:33.426 right. So I think you're referencing
NOTE Confidence: 0.850079

00:51:33.426 --> 00:51:35.160 Ozempic and that's probably in every,
NOTE Confidence: 0.850079

00:51:35.160 --> 00:51:36.924 you know, not only health magazine
NOTE Confidence: 0.850079

00:51:36.924 --> 00:51:38.100 but also lifestyle magazine
NOTE Confidence: 0.850079

00:51:38.153 --> 00:51:39.719 within the country at this point.
NOTE Confidence: 0.850079

00:51:39.720 --> 00:51:41.640 So, you know, it's being spoken about it.
NOTE Confidence: 0.850079

00:51:41.640 --> 00:51:43.880 It's being used more and more frequently now.
NOTE Confidence: 0.850079

00:51:43.880 --> 00:51:45.735 And the reason for that is while
NOTE Confidence: 0.850079

00:51:45.735 --> 00:51:47.573 this medication was used for a long
NOTE Confidence: 0.850079

00:51:47.573 --> 00:51:49.424 time for diabetes, like you said,
NOTE Confidence: 0.850079

00:51:49.424 --> 00:51:51.264 there's also a new indication
NOTE Confidence: 0.850079

00:51:51.264 --> 00:51:53.640 and maybe new indications coming.
NOTE Confidence: 0.850079

00:51:53.640 --> 00:51:55.411 It's now being used as a weight
NOTE Confidence: 0.850079

00:51:55.411 --> 00:51:56.835 loss medication for people who
NOTE Confidence: 0.850079

00:51:56.835 --> 00:51:57.756 don't have diabetes.

NOTE Confidence: 0.850079

00:51:57.760 --> 00:51:59.560 There was a trial recently,

NOTE Confidence: 0.850079

00:51:59.560 --> 00:52:03.022 almost 20,000 patients and people were

NOTE Confidence: 0.850079

00:52:03.022 --> 00:52:05.352 using Ozempic for three years and they

NOTE Confidence: 0.850079

00:52:05.352 --> 00:52:07.960 were having a 10% weight loss during

NOTE Confidence: 0.850079

00:52:07.960 --> 00:52:10.320 that period and they were having a

NOTE Confidence: 0.850079

00:52:10.320 --> 00:52:11.980 20% decrease in cardiovascular event.

NOTE Confidence: 0.850079

00:52:11.980 --> 00:52:14.465 So we're going to see more and

NOTE Confidence: 0.850079

00:52:14.465 --> 00:52:16.235 more patients on this medication.

NOTE Confidence: 0.850079

00:52:16.240 --> 00:52:18.653 Now the way it works is in

NOTE Confidence: 0.850079

00:52:18.653 --> 00:52:19.532 multiple different ways,

NOTE Confidence: 0.850079

00:52:19.532 --> 00:52:21.574 but one it increases the insulin in

NOTE Confidence: 0.850079

00:52:21.574 --> 00:52:23.198 your body so it breaks things down,

NOTE Confidence: 0.850079

00:52:23.200 --> 00:52:24.340 hence weight loss.

NOTE Confidence: 0.850079

00:52:24.340 --> 00:52:26.240 You think less about food,

NOTE Confidence: 0.850079

00:52:26.240 --> 00:52:28.298 but important for anesthesia is it

NOTE Confidence: 0.850079

00:52:28.298 --> 00:52:30.679 induces what's known as a gastroparesis,
NOTE Confidence: 0.850079

00:52:30.680 --> 00:52:34.076 the slong of the digestive tract.
NOTE Confidence: 0.850079

00:52:34.080 --> 00:52:35.964 What that what that means is
NOTE Confidence: 0.850079

00:52:35.964 --> 00:52:37.829 typically you're told to not eat
NOTE Confidence: 0.850079

00:52:37.829 --> 00:52:39.461 or drink anything for a period
NOTE Confidence: 0.850079

00:52:39.461 --> 00:52:41.319 of time before an anesthetic.
NOTE Confidence: 0.850079

00:52:41.320 --> 00:52:43.392 The reason for that is we want all
NOTE Confidence: 0.850079

00:52:43.392 --> 00:52:45.131 that food that you've been eating
NOTE Confidence: 0.850079

00:52:45.131 --> 00:52:47.280 to pass through to a safe point.
NOTE Confidence: 0.850079

00:52:47.280 --> 00:52:49.716 One of the most serious complications
NOTE Confidence: 0.850079

00:52:49.716 --> 00:52:52.160 that can happen during anesthetic,
NOTE Confidence: 0.850079

00:52:52.160 --> 00:52:53.171 it's called aspiration.
NOTE Confidence: 0.850079

00:52:53.171 --> 00:52:54.519 Essentially what that is,
NOTE Confidence: 0.850079

00:52:54.520 --> 00:52:56.550 is contacts from your stunning
NOTE Confidence: 0.850079

00:52:56.550 --> 00:52:58.350 stomach going up and then going
NOTE Confidence: 0.850079

00:52:58.350 --> 00:53:00.440 down the wrong pipe into your lungs.

NOTE Confidence: 0.850079

00:53:00.440 --> 00:53:02.600 That can cause pneumonia and really

NOTE Confidence: 0.850079

00:53:02.600 --> 00:53:05.272 serious health complications for a patient.

NOTE Confidence: 0.850079

00:53:05.272 --> 00:53:08.200 So when patients are taking Ozempic,

NOTE Confidence: 0.850079

00:53:08.200 --> 00:53:10.332 they have this medically

NOTE Confidence: 0.850079

00:53:10.332 --> 00:53:11.398 induced gastroparesis.

NOTE Confidence: 0.850079

00:53:11.400 --> 00:53:13.260 So slowly the digestive tract and

NOTE Confidence: 0.850079

00:53:13.260 --> 00:53:15.112 they're more likely to have food

NOTE Confidence: 0.850079

00:53:15.112 --> 00:53:16.774 in their stomach when if they

NOTE Confidence: 0.850079

00:53:16.774 --> 00:53:18.485 weren't on that medication they

NOTE Confidence: 0.850079

00:53:18.485 --> 00:53:20.320 wouldn't that wouldn't be there.

NOTE Confidence: 0.850079

00:53:20.320 --> 00:53:22.084 So the recommendations are right now

NOTE Confidence: 0.850079

00:53:22.084 --> 00:53:24.287 if you're on a once weekly medication

NOTE Confidence: 0.850079

00:53:24.287 --> 00:53:26.864 that you only that you missed the dose

NOTE Confidence: 0.850079

00:53:26.864 --> 00:53:28.677 prior so you don't take it within

NOTE Confidence: 0.850079

00:53:28.677 --> 00:53:30.760 a week of anesthesia and that's the

NOTE Confidence: 0.850079

00:53:30.760 --> 00:53:32.320 decrease that risk of aspiration.
NOTE Confidence: 0.9405634033333333

00:53:32.640 --> 00:53:35.016 And let's speak in the last few minutes
NOTE Confidence: 0.9405634033333333

00:53:35.016 --> 00:53:37.232 even though we have some of the, you know,
NOTE Confidence: 0.9405634033333333

00:53:37.232 --> 00:53:38.800 the risks that we try to to decrease,
NOTE Confidence: 0.9405634033333333

00:53:38.800 --> 00:53:40.606 you know, things like people say
NOTE Confidence: 0.9405634033333333

00:53:40.606 --> 00:53:42.400 you don't nausea or vomiting,
NOTE Confidence: 0.9405634033333333

00:53:42.400 --> 00:53:44.480 headaches, things like that. Sure.
NOTE Confidence: 0.918273576

00:53:44.920 --> 00:53:47.062 Nausea is one of the things that people
NOTE Confidence: 0.918273576

00:53:47.062 --> 00:53:48.706 really do not like to experience
NOTE Confidence: 0.918273576

00:53:48.706 --> 00:53:50.408 after anesthesia and it's somewhat of
NOTE Confidence: 0.918273576

00:53:50.408 --> 00:53:52.216 a common complication that we have.
NOTE Confidence: 0.918273576

00:53:52.216 --> 00:53:54.100 You know they they've done studies
NOTE Confidence: 0.918273576

00:53:54.160 --> 00:53:55.605 where they essentially ask people
NOTE Confidence: 0.918273576

00:53:55.605 --> 00:53:57.721 would you rather be in pain or
NOTE Confidence: 0.918273576

00:53:57.721 --> 00:53:59.266 nauseous after surgery and almost
NOTE Confidence: 0.918273576

00:53:59.266 --> 00:54:01.864 everybody says I'd rather be in pain.

NOTE Confidence: 0.918273576

00:54:01.864 --> 00:54:04.639 Yeah, the combination of the two is horrible.

NOTE Confidence: 0.918273576

00:54:04.640 --> 00:54:06.922 So you know we have protocols our

NOTE Confidence: 0.918273576

00:54:06.922 --> 00:54:08.573 our institution there are what

NOTE Confidence: 0.918273576

00:54:08.573 --> 00:54:09.797 we know as guidelines,

NOTE Confidence: 0.918273576

00:54:09.800 --> 00:54:12.680 so recommendations that we give multiple

NOTE Confidence: 0.918273576

00:54:12.680 --> 00:54:14.819 different anti nausea medications

NOTE Confidence: 0.918273576

00:54:14.819 --> 00:54:17.536 to try to decrease the chance that

NOTE Confidence: 0.918273576

00:54:17.536 --> 00:54:19.120 a patient will be nauseous for

NOTE Confidence: 0.836260446333333

00:54:19.200 --> 00:54:20.670 anesthesia. And again nausea also is

NOTE Confidence: 0.836260446333333

00:54:20.670 --> 00:54:22.870 is you know the the higher level of

NOTE Confidence: 0.836260446333333

00:54:22.870 --> 00:54:24.622 anesthesia you get like general anesthesia

NOTE Confidence: 0.836260446333333

00:54:24.676 --> 00:54:26.160 carries a little bit more of that

NOTE Confidence: 0.836260446333333

00:54:26.160 --> 00:54:27.880 risk than a regional anesthesia like

NOTE Confidence: 0.836260446333333

00:54:27.880 --> 00:54:30.400 a spinal or nerve blocks or regional

NOTE Confidence: 0.812803123636364

00:54:30.520 --> 00:54:31.666 absolutely great point.

NOTE Confidence: 0.812803123636364

00:54:31.666 --> 00:54:33.576 So if we utilize that
NOTE Confidence: 0.812803123636364

00:54:33.576 --> 00:54:35.120 that regional anesthesia,
NOTE Confidence: 0.812803123636364

00:54:35.120 --> 00:54:36.984 often we don't have to use that same
NOTE Confidence: 0.812803123636364

00:54:36.984 --> 00:54:38.855 level of general anesthesia or same
NOTE Confidence: 0.812803123636364

00:54:38.855 --> 00:54:40.540 medications and people are less
NOTE Confidence: 0.812803123636364

00:54:40.540 --> 00:54:42.279 likely to be nauseous afterwards.
NOTE Confidence: 0.856293527272728

00:54:42.600 --> 00:54:44.140 So that's again one of the reasons
NOTE Confidence: 0.856293527272728

00:54:44.140 --> 00:54:46.011 that you know we try to kind of sort
NOTE Confidence: 0.856293527272728

00:54:46.011 --> 00:54:47.520 of minimize some of the anesthesia.
NOTE Confidence: 0.856293527272728

00:54:47.520 --> 00:54:49.374 You're getting it going more towards
NOTE Confidence: 0.856293527272728

00:54:49.374 --> 00:54:50.902 blocks or regional anesthesia which
NOTE Confidence: 0.856293527272728

00:54:50.902 --> 00:54:52.360 is really even an orthopaedic spin
NOTE Confidence: 0.856293527272728

00:54:52.360 --> 00:54:54.357 sort of the trend and it works better.
NOTE Confidence: 0.856293527272728

00:54:54.360 --> 00:54:55.848 And this is really where your
NOTE Confidence: 0.856293527272728

00:54:55.848 --> 00:54:56.840 expertise come in handy.
NOTE Confidence: 0.856293527272728

00:54:56.840 --> 00:54:58.703 This is what you do in order to get

NOTE Confidence: 0.856293527272728
00:54:58.703 --> 00:55:00.643 the patient safely through there and
NOTE Confidence: 0.856293527272728
00:55:00.643 --> 00:55:02.640 more comfortably through it as well.
NOTE Confidence: 0.856293527272728
00:55:02.640 --> 00:55:04.166 You know even things like like like
NOTE Confidence: 0.856293527272728
00:55:04.166 --> 00:55:05.738 headache and a lot of people say you
NOTE Confidence: 0.856293527272728
00:55:05.738 --> 00:55:07.324 know am I going to be in pain or
NOTE Confidence: 0.856293527272728
00:55:07.324 --> 00:55:08.938 how much pain am I going to have?
NOTE Confidence: 0.856293527272728
00:55:08.938 --> 00:55:10.792 And this is really where again
NOTE Confidence: 0.856293527272728
00:55:10.792 --> 00:55:12.278 your expertise come in handy.
NOTE Confidence: 0.856293527272728
00:55:12.280 --> 00:55:14.471 The blocks that you give that that
NOTE Confidence: 0.856293527272728
00:55:14.471 --> 00:55:16.219 regional or aerial anesthesia that
NOTE Confidence: 0.856293527272728
00:55:16.219 --> 00:55:18.823 you provide the patients makes a big
NOTE Confidence: 0.856293527272728
00:55:18.823 --> 00:55:20.798 difference on mobilizing the patient,
NOTE Confidence: 0.856293527272728
00:55:20.800 --> 00:55:22.800 make him feel more comfortable
NOTE Confidence: 0.856293527272728
00:55:22.800 --> 00:55:25.838 that way and then less use of again
NOTE Confidence: 0.856293527272728
00:55:25.838 --> 00:55:27.744 narcotics and other medications that
NOTE Confidence: 0.856293527272728

00:55:27.744 --> 00:55:29.838 can cause some some side effects.
NOTE Confidence: 0.856293527272728

00:55:29.840 --> 00:55:31.070 Is there anything else would you
NOTE Confidence: 0.856293527272728

00:55:31.070 --> 00:55:32.597 say the patient you know how do
NOTE Confidence: 0.856293527272728

00:55:32.597 --> 00:55:33.477 you prepare for anesthesia?
NOTE Confidence: 0.856293527272728

00:55:33.480 --> 00:55:35.640 We spoke about optimization with your
NOTE Confidence: 0.856293527272728

00:55:35.640 --> 00:55:37.248 primary care, your medical comorbidities,
NOTE Confidence: 0.856293527272728

00:55:37.248 --> 00:55:39.320 make sure your blood pressure is good,
NOTE Confidence: 0.856293527272728

00:55:39.320 --> 00:55:40.600 estrogenation, whatever you can do.
NOTE Confidence: 0.856293527272728

00:55:40.600 --> 00:55:42.380 Your diabetes is well controlled
NOTE Confidence: 0.856293527272728

00:55:42.380 --> 00:55:44.600 to decrease some of those risks.
NOTE Confidence: 0.856293527272728

00:55:44.600 --> 00:55:46.560 Anything else you would add to the
NOTE Confidence: 0.856293527272728

00:55:46.560 --> 00:55:48.220 patient to maybe to relax, you know,
NOTE Confidence: 0.856293527272728

00:55:48.220 --> 00:55:50.030 you're in good hands, so to speak.
NOTE Confidence: 0.856293527272728

00:55:50.030 --> 00:55:50.360 Absolutely.
NOTE Confidence: 0.796451861428571

00:55:51.120 --> 00:55:53.556 11, I would say is stop smoking.
NOTE Confidence: 0.796451861428571

00:55:53.560 --> 00:55:55.174 Having surgery is a great opportunity

NOTE Confidence: 0.796451861428571
00:55:55.174 --> 00:55:57.112 to sort of counsel patients and there
NOTE Confidence: 0.796451861428571
00:55:57.112 --> 00:55:58.504 are higher risks for patients who
NOTE Confidence: 0.796451861428571
00:55:58.504 --> 00:56:00.079 smoke during the preoperative period.
NOTE Confidence: 0.796451861428571
00:56:00.080 --> 00:56:01.320 So if you're able to,
NOTE Confidence: 0.796451861428571
00:56:01.320 --> 00:56:02.400 it's a good time to stop.
NOTE Confidence: 0.796451861428571
00:56:02.400 --> 00:56:03.324 We know it's hard.
NOTE Confidence: 0.796451861428571
00:56:03.324 --> 00:56:05.119 We know everybody's not going to do that,
NOTE Confidence: 0.796451861428571
00:56:05.120 --> 00:56:07.400 but it's a great opportunity to try that.
NOTE Confidence: 0.796451861428571
00:56:07.400 --> 00:56:10.480 Now as far as relaxing,
NOTE Confidence: 0.796451861428571
00:56:10.480 --> 00:56:11.440 take it easy night before,
NOTE Confidence: 0.796451861428571
00:56:11.440 --> 00:56:13.320 watch a movie, try to get some sleep.
NOTE Confidence: 0.796451861428571
00:56:13.320 --> 00:56:13.998 If you don't,
NOTE Confidence: 0.796451861428571
00:56:13.998 --> 00:56:17.120 we'll get you a nice nap we say.
NOTE Confidence: 0.796451861428571
00:56:17.120 --> 00:56:18.500 And really anesthesia is an
NOTE Confidence: 0.796451861428571
00:56:18.500 --> 00:56:19.880 incredibly safe thing these days.
NOTE Confidence: 0.796451861428571

00:56:19.880 --> 00:56:22.504 I mean people do incredibly well.
NOTE Confidence: 0.796451861428571

00:56:22.504 --> 00:56:22.760 So
NOTE Confidence: 0.783304030588235

00:56:23.400 --> 00:56:24.740 well in the last,
NOTE Confidence: 0.783304030588235

00:56:24.740 --> 00:56:26.750 you know couple minutes here again
NOTE Confidence: 0.783304030588235

00:56:26.821 --> 00:56:29.075 I want to thank doctor Brian Kerner
NOTE Confidence: 0.783304030588235

00:56:29.080 --> 00:56:31.440 really Director of Regional anesthesia,
NOTE Confidence: 0.783304030588235

00:56:31.440 --> 00:56:32.434 Bridgeport Hospitals,
NOTE Confidence: 0.783304030588235

00:56:32.434 --> 00:56:34.919 Associate Professor at Yale School
NOTE Confidence: 0.783304030588235

00:56:34.919 --> 00:56:37.360 of Medicine Department of Anesthesia.
NOTE Confidence: 0.783304030588235

00:56:37.360 --> 00:56:39.964 Really it's been a privilege working
NOTE Confidence: 0.783304030588235

00:56:39.964 --> 00:56:42.286 alongside with him providing patients
NOTE Confidence: 0.783304030588235

00:56:42.286 --> 00:56:45.000 excellent care blocks, pain relief,
NOTE Confidence: 0.783304030588235

00:56:45.000 --> 00:56:47.320 safety, decreasing those risks,
NOTE Confidence: 0.783304030588235

00:56:47.320 --> 00:56:48.328 optimizing those benefits.
NOTE Confidence: 0.783304030588235

00:56:48.328 --> 00:56:50.680 So you can really undergo the procedure
NOTE Confidence: 0.783304030588235

00:56:50.740 --> 00:56:52.679 and focus on on really getting better.

NOTE Confidence: 0.783304030588235
00:56:52.680 --> 00:56:53.996 We spoke with some of the risks
NOTE Confidence: 0.783304030588235
00:56:53.996 --> 00:56:55.040 and benefits of anesthesia,
NOTE Confidence: 0.783304030588235
00:56:55.040 --> 00:56:56.744 different types of anesthesia.
NOTE Confidence: 0.783304030588235
00:56:56.744 --> 00:57:00.456 And really, how do you prepare for your
NOTE Confidence: 0.783304030588235
00:57:00.456 --> 00:57:03.253 anesthetic with the team of leading
NOTE Confidence: 0.783304030588235
00:57:03.253 --> 00:57:06.318 the team by the anesthesiologist.
NOTE Confidence: 0.783304030588235
00:57:06.320 --> 00:57:07.844 This is your healthcare.
NOTE Confidence: 0.783304030588235
00:57:07.844 --> 00:57:10.920 You've been watching the field of anesthesia.
NOTE Confidence: 0.783304030588235
00:57:10.920 --> 00:57:12.792 Again, thank you to doctor Brian
NOTE Confidence: 0.783304030588235
00:57:12.792 --> 00:57:14.560 Kerner for being here with us.
NOTE Confidence: 0.783304030588235
00:57:14.560 --> 00:57:15.548 As I always say,
NOTE Confidence: 0.783304030588235
00:57:15.548 --> 00:57:17.480 the more you know about your health,
NOTE Confidence: 0.783304030588235
00:57:17.480 --> 00:57:18.696 the better you are,
NOTE Confidence: 0.783304030588235
00:57:18.696 --> 00:57:19.912 but making the appropriate
NOTE Confidence: 0.783304030588235
00:57:19.912 --> 00:57:21.040 decision for yourself.
NOTE Confidence: 0.783304030588235

00:57:21.040 --> 00:57:21.964 I'm Doctor Mila Hav,

NOTE Confidence: 0.783304030588235

00:57:21.964 --> 00:57:23.119 and thank you for watching.