

WEBVTT

NOTE duration: "00:04:50.645"

NOTE Confidence: 0.9966649

00:00:04.799 --> 00:00:06.500 We have nerve endings

NOTE Confidence: 0.76694125

00:00:06.879 --> 00:00:07.379 everywhere,

NOTE Confidence: 0.8993923

00:00:08.240 --> 00:00:09.460 literally everywhere.

NOTE Confidence: 0.89772356

00:00:10.000 --> 00:00:10.820 And ordinarily,

NOTE Confidence: 0.9881723

00:00:11.519 --> 00:00:12.980 from these nerve endings,

NOTE Confidence: 0.99930936

00:00:13.360 --> 00:00:14.980 pain gets transmitted.

NOTE Confidence: 0.9855684

00:00:15.755 --> 00:00:16.555 You can kind of think

NOTE Confidence: 0.9855684

00:00:16.555 --> 00:00:17.454 of them as

NOTE Confidence: 0.9980435

00:00:18.235 --> 00:00:19.994 your early warning system. They

NOTE Confidence: 0.9980435

00:00:19.994 --> 00:00:20.954 are the first line of

NOTE Confidence: 0.9980435

00:00:20.954 --> 00:00:22.475 defense that you have against

NOTE Confidence: 0.9980435

00:00:22.475 --> 00:00:23.695 threats in your environment.

NOTE Confidence: 0.96273136

00:00:24.715 --> 00:00:25.435 So it could be a

NOTE Confidence: 0.96273136

00:00:25.435 --> 00:00:27.035 cut. It could be an

NOTE Confidence: 0.96273136

00:00:27.035 --> 00:00:29.035 incision. It could be, something
NOTE Confidence: 0.96273136

00:00:29.035 --> 00:00:30.575 blunt. That initiates
NOTE Confidence: 0.9995386

00:00:31.240 --> 00:00:32.380 a chemical response
NOTE Confidence: 0.93699986

00:00:32.840 --> 00:00:34.120 that is transmitted to the
NOTE Confidence: 0.93699986

00:00:34.120 --> 00:00:35.960 spinal cord then travel to
NOTE Confidence: 0.93699986

00:00:35.960 --> 00:00:37.320 the brain and that's how
NOTE Confidence: 0.93699986

00:00:37.320 --> 00:00:39.020 pain is essentially perceived.
NOTE Confidence: 0.94447285

00:00:39.720 --> 00:00:40.860 Now this is in comparison
NOTE Confidence: 0.94447285

00:00:41.000 --> 00:00:42.600 to chronic pain. Chronic pain
NOTE Confidence: 0.94447285

00:00:42.600 --> 00:00:43.820 is essentially a
NOTE Confidence: 0.9928193

00:00:44.284 --> 00:00:45.485 response. Right? So this is
NOTE Confidence: 0.9928193

00:00:45.485 --> 00:00:47.645 an ongoing false alarm that
NOTE Confidence: 0.9928193

00:00:47.645 --> 00:00:48.845 really does not provide you
NOTE Confidence: 0.9928193

00:00:48.845 --> 00:00:50.305 or the body any benefit.
NOTE Confidence: 0.9912935

00:00:51.005 --> 00:00:52.945 Pain medications and anesthetics
NOTE Confidence: 0.99331903

00:00:53.565 --> 00:00:54.065 utilize

NOTE Confidence: 0.96115154
00:00:54.845 --> 00:00:56.285 a very large number of
NOTE Confidence: 0.96115154
00:00:56.285 --> 00:00:57.184 different mechanisms.
NOTE Confidence: 0.97431904
00:00:57.485 --> 00:00:59.520 But in general, it's interrupting
NOTE Confidence: 0.97431904
00:00:59.580 --> 00:01:00.400 those pathways.
NOTE Confidence: 0.99127114
00:01:00.860 --> 00:01:01.600 From wherever
NOTE Confidence: 0.96389645
00:01:01.980 --> 00:01:03.660 the insult or the incision
NOTE Confidence: 0.96389645
00:01:03.660 --> 00:01:05.100 is or the puncture is
NOTE Confidence: 0.96389645
00:01:05.100 --> 00:01:06.700 and disrupt that communication to
NOTE Confidence: 0.96389645
00:01:06.700 --> 00:01:07.760 the spinal cord.
NOTE Confidence: 0.9945947
00:01:08.220 --> 00:01:09.840 So that pain is ultimately
NOTE Confidence: 0.9985912
00:01:10.459 --> 00:01:11.360 not experienced.
NOTE Confidence: 0.9715521
00:01:14.975 --> 00:01:16.415 There are a few different
NOTE Confidence: 0.9715521
00:01:16.415 --> 00:01:17.694 types of anesthesia that we
NOTE Confidence: 0.9715521
00:01:17.694 --> 00:01:19.375 use now. One is a
NOTE Confidence: 0.9715521
00:01:19.375 --> 00:01:20.895 local anesthetic, right, which many
NOTE Confidence: 0.9715521

00:01:20.895 --> 00:01:22.255 of you have probably experienced
NOTE Confidence: 0.9715521

00:01:22.255 --> 00:01:23.295 in your doctor's office or
NOTE Confidence: 0.9715521

00:01:23.295 --> 00:01:24.435 your dentist office.
NOTE Confidence: 0.9589411

00:01:24.735 --> 00:01:26.755 We have regional anesthetic techniques,
NOTE Confidence: 0.956819

00:01:27.110 --> 00:01:28.890 what we call monitored anesthesia
NOTE Confidence: 0.956819

00:01:28.950 --> 00:01:29.990 care which is a very
NOTE Confidence: 0.956819

00:01:29.990 --> 00:01:30.810 deep sedation
NOTE Confidence: 0.90311646

00:01:31.190 --> 00:01:32.650 and then general anesthesia.
NOTE Confidence: 0.98928165

00:01:34.709 --> 00:01:35.770 Regional anesthesia
NOTE Confidence: 0.9947085

00:01:36.069 --> 00:01:37.909 is an anesthetic technique by
NOTE Confidence: 0.9947085

00:01:37.909 --> 00:01:39.209 which we administer
NOTE Confidence: 0.9628682

00:01:39.590 --> 00:01:41.365 local an aesthetic in and
NOTE Confidence: 0.9628682

00:01:41.365 --> 00:01:43.525 around large nerves that provide
NOTE Confidence: 0.9628682

00:01:43.525 --> 00:01:46.165 sensation to significant sections of
NOTE Confidence: 0.9628682

00:01:46.165 --> 00:01:48.105 our extremities or torso.
NOTE Confidence: 0.9905297

00:01:48.965 --> 00:01:50.885 Those are sometimes done on

NOTE Confidence: 0.9905297
00:01:50.885 --> 00:01:52.185 nerves in the periphery
NOTE Confidence: 0.98975897
00:01:52.870 --> 00:01:54.869 and sometimes they're done on
NOTE Confidence: 0.98975897
00:01:54.869 --> 00:01:56.490 nerves closer to
NOTE Confidence: 0.982894
00:01:56.790 --> 00:01:58.310 the spinal cord. And that
NOTE Confidence: 0.982894
00:01:58.310 --> 00:01:59.690 doesn't mean that it's dangerous
NOTE Confidence: 0.982894
00:01:59.750 --> 00:02:01.030 because it's closer to the
NOTE Confidence: 0.982894
00:02:01.030 --> 00:02:02.310 spinal cord. It just means
NOTE Confidence: 0.982894
00:02:02.310 --> 00:02:04.390 that you're getting more nerve
NOTE Confidence: 0.982894
00:02:04.390 --> 00:02:04.890 coverage
NOTE Confidence: 0.9671148
00:02:05.270 --> 00:02:06.470 the closer you get to
NOTE Confidence: 0.9671148
00:02:06.470 --> 00:02:07.770 the source of the nerves.
NOTE Confidence: 0.97547233
00:02:08.725 --> 00:02:10.325 So for laboring women, the
NOTE Confidence: 0.97547233
00:02:10.325 --> 00:02:12.005 injection is around the low
NOTE Confidence: 0.97547233
00:02:12.005 --> 00:02:13.845 back, and so it numbs
NOTE Confidence: 0.97547233
00:02:13.845 --> 00:02:15.205 all the nerves from that
NOTE Confidence: 0.97547233

00:02:15.205 --> 00:02:16.325 injection site and a little
NOTE Confidence: 0.97547233

00:02:16.325 --> 00:02:17.065 bit above
NOTE Confidence: 0.98072964

00:02:17.445 --> 00:02:19.145 down to the feet.
NOTE Confidence: 0.9925583

00:02:21.000 --> 00:02:22.680 General anesthesia means that your
NOTE Confidence: 0.9925583

00:02:22.680 --> 00:02:24.360 body is completely asleep. You're
NOTE Confidence: 0.9925583

00:02:24.360 --> 00:02:26.120 not experiencing pain. What we
NOTE Confidence: 0.9925583

00:02:26.120 --> 00:02:27.500 are doing is creating
NOTE Confidence: 0.9977983

00:02:27.960 --> 00:02:28.460 a
NOTE Confidence: 0.9702534

00:02:28.760 --> 00:02:30.520 space around both the brain
NOTE Confidence: 0.9702534

00:02:30.520 --> 00:02:31.639 and the body which is
NOTE Confidence: 0.9702534

00:02:31.639 --> 00:02:32.139 characterized
NOTE Confidence: 0.99719894

00:02:32.440 --> 00:02:33.260 by unconsciousness,
NOTE Confidence: 0.9947233

00:02:34.215 --> 00:02:34.715 analgesia,
NOTE Confidence: 0.999285

00:02:35.575 --> 00:02:36.075 amnesia
NOTE Confidence: 0.86149263

00:02:36.375 --> 00:02:37.115 and paralysis
NOTE Confidence: 0.91848975

00:02:37.735 --> 00:02:39.275 with the maintenance of physiologic

NOTE Confidence: 0.91848975
00:02:39.495 --> 00:02:39.995 function.
NOTE Confidence: 0.99615717
00:02:40.375 --> 00:02:42.375 And that physiologic function is
NOTE Confidence: 0.99615717
00:02:42.375 --> 00:02:43.514 monitored and maintained
NOTE Confidence: 0.9943404
00:02:43.815 --> 00:02:44.715 by your anesthesiologist
NOTE Confidence: 0.911776
00:02:45.335 --> 00:02:46.455 while you are as we
NOTE Confidence: 0.911776
00:02:46.455 --> 00:02:47.595 say sleeping.
NOTE Confidence: 0.99487567
00:02:50.210 --> 00:02:51.669 Another type of anesthesia
NOTE Confidence: 0.9621528
00:02:51.970 --> 00:02:53.350 is IV anesthesia,
NOTE Confidence: 0.9120983
00:02:53.730 --> 00:02:55.750 which like general anesthesia,
NOTE Confidence: 0.97323805
00:02:56.130 --> 00:02:58.630 it does afford one hypnosis
NOTE Confidence: 0.97323805
00:02:58.850 --> 00:03:00.585 and level of numbness, but
NOTE Confidence: 0.97323805
00:03:00.985 --> 00:03:02.745 usually you're not deep to
NOTE Confidence: 0.97323805
00:03:02.745 --> 00:03:04.045 the point where you need
NOTE Confidence: 0.97323805
00:03:04.264 --> 00:03:06.185 a breathing device for your
NOTE Confidence: 0.97323805
00:03:06.185 --> 00:03:07.865 airway to be protected. This
NOTE Confidence: 0.97323805

00:03:07.865 --> 00:03:09.005 is commonly seen
NOTE Confidence: 0.992385

00:03:09.305 --> 00:03:10.764 in cases like colonoscopies,
NOTE Confidence: 0.95040905

00:03:11.465 --> 00:03:11.965 endoscopy,
NOTE Confidence: 0.99899596

00:03:12.345 --> 00:03:13.245 or eye surgery.
NOTE Confidence: 0.99823165

00:03:14.790 --> 00:03:16.169 Your basic physiology
NOTE Confidence: 0.9549805

00:03:16.870 --> 00:03:18.410 is not only being maintained,
NOTE Confidence: 0.8176324

00:03:18.950 --> 00:03:20.010 but an anesthesiologist
NOTE Confidence: 0.96869224

00:03:21.430 --> 00:03:22.490 focusing on
NOTE Confidence: 0.99852407

00:03:22.790 --> 00:03:23.610 you holistically
NOTE Confidence: 0.9868948

00:03:24.310 --> 00:03:25.750 and helping to make sure
NOTE Confidence: 0.9868948

00:03:25.750 --> 00:03:27.270 that you stay in good
NOTE Confidence: 0.9868948

00:03:27.270 --> 00:03:27.770 balance.
NOTE Confidence: 0.96969944

00:03:31.815 --> 00:03:32.695 One of the things that
NOTE Confidence: 0.96969944

00:03:32.695 --> 00:03:34.315 we are seeing in anesthesia
NOTE Confidence: 0.96969944

00:03:34.535 --> 00:03:36.215 is really a move towards
NOTE Confidence: 0.96969944

00:03:36.215 --> 00:03:37.435 what we call a perioperative

NOTE Confidence: 0.96969944

00:03:37.655 --> 00:03:39.835 home. Where patients are not

NOTE Confidence: 0.96969944

00:03:40.055 --> 00:03:40.855 under the care of an

NOTE Confidence: 0.96969944

00:03:40.855 --> 00:03:41.355 anesthesiologist

NOTE Confidence: 0.96286994

00:03:41.735 --> 00:03:43.435 only during the immediate preoperative

NOTE Confidence: 0.96286994

00:03:43.495 --> 00:03:45.540 and intraoperative period but really

NOTE Confidence: 0.96286994

00:03:45.540 --> 00:03:47.300 becoming involved in care three

NOTE Confidence: 0.96286994

00:03:47.300 --> 00:03:48.500 to six months prior to

NOTE Confidence: 0.96286994

00:03:48.500 --> 00:03:49.879 a patient coming to surgery,

NOTE Confidence: 0.91299635

00:03:50.180 --> 00:03:51.540 during surgery and then their

NOTE Confidence: 0.91299635

00:03:51.540 --> 00:03:53.080 postoperative care afterwards.

NOTE Confidence: 0.9932303

00:03:53.620 --> 00:03:55.640 And chronic pain medicine provides

NOTE Confidence: 0.9932303

00:03:55.860 --> 00:03:56.519 an ability

NOTE Confidence: 0.99910337

00:03:56.819 --> 00:03:57.319 to

NOTE Confidence: 0.9770672

00:03:57.625 --> 00:03:59.305 attenuate risk factors for the

NOTE Confidence: 0.9770672

00:03:59.305 --> 00:04:00.985 development of chronic pain after

NOTE Confidence: 0.9770672

00:04:00.985 --> 00:04:01.485 surgery,
NOTE Confidence: 0.98375785

00:04:01.785 --> 00:04:03.644 as well as to facilitate
NOTE Confidence: 0.98375785

00:04:03.705 --> 00:04:04.364 the development
NOTE Confidence: 0.99567336

00:04:04.745 --> 00:04:06.525 of comprehensive pain plans
NOTE Confidence: 0.9439629

00:04:06.825 --> 00:04:07.325 to
NOTE Confidence: 0.9519443

00:04:07.705 --> 00:04:09.625 minimize discomfort in the post
NOTE Confidence: 0.9519443

00:04:09.625 --> 00:04:11.144 operative period both in and
NOTE Confidence: 0.9519443

00:04:11.144 --> 00:04:12.045 out of the hospital.
NOTE Confidence: 0.92899716

00:04:13.810 --> 00:04:15.349 It's a very exciting time
NOTE Confidence: 0.92899716

00:04:15.409 --> 00:04:16.150 in anesthesia.
NOTE Confidence: 0.99878186

00:04:16.529 --> 00:04:17.509 We're always
NOTE Confidence: 0.9728813

00:04:17.889 --> 00:04:19.810 interrogating and really asking the
NOTE Confidence: 0.9728813

00:04:19.810 --> 00:04:20.310 questions.
NOTE Confidence: 0.9917928

00:04:21.089 --> 00:04:22.710 What does the data show?
NOTE Confidence: 0.9917928

00:04:22.770 --> 00:04:24.789 So that we can do
NOTE Confidence: 0.9917928

00:04:24.930 --> 00:04:26.449 this shared decision making with

NOTE Confidence: 0.9917928
00:04:26.449 --> 00:04:27.190 our patients.
NOTE Confidence: 0.9991134
00:04:28.415 --> 00:04:28.915 Anesthesiology
NOTE Confidence: 0.99952537
00:04:29.455 --> 00:04:30.755 has become extraordinarily
NOTE Confidence: 0.75757706
00:04:31.375 --> 00:04:31.875 safe,
NOTE Confidence: 0.9958074
00:04:32.255 --> 00:04:33.714 both because of the monitoring
NOTE Confidence: 0.9958074
00:04:33.775 --> 00:04:35.555 that we have, the medication
NOTE Confidence: 0.9958074
00:04:35.775 --> 00:04:37.615 that we have, and the
NOTE Confidence: 0.9958074
00:04:37.615 --> 00:04:38.115 vigilance
NOTE Confidence: 0.88899344
00:04:38.654 --> 00:04:39.635 that we have.