

WEBVTT

NOTE duration: "00:03:00.181"

NOTE Confidence: 0.95106876

00:00:00.880 --> 00:00:03.139 Welcome to Yale emergency ultrasound

NOTE Confidence: 0.95106876

00:00:03.199 --> 00:00:04.260 nerve block series.

NOTE Confidence: 0.91167444

00:00:04.640 --> 00:00:05.680 Today, we are going to

NOTE Confidence: 0.91167444

00:00:05.680 --> 00:00:07.299 go over the erector spinae

NOTE Confidence: 0.91167444

00:00:07.359 --> 00:00:08.100 plain block.

NOTE Confidence: 0.9823956

00:00:08.480 --> 00:00:09.440 This way, you are ready

NOTE Confidence: 0.9823956

00:00:09.440 --> 00:00:10.639 to block on your next

NOTE Confidence: 0.9823956

00:00:10.639 --> 00:00:12.160 shift. The first step is

NOTE Confidence: 0.9823956

00:00:12.160 --> 00:00:13.119 to go to the cart

NOTE Confidence: 0.9823956

00:00:13.119 --> 00:00:14.880 by the ultrasound station near

NOTE Confidence: 0.9823956

00:00:14.880 --> 00:00:15.620 a sixteen.

NOTE Confidence: 0.980072

00:00:16.135 --> 00:00:17.414 On the bottom drawer, you

NOTE Confidence: 0.980072

00:00:17.414 --> 00:00:19.015 will find premade kits to

NOTE Confidence: 0.980072

00:00:19.015 --> 00:00:20.314 use for nerve blocks.

NOTE Confidence: 0.99429864

00:00:22.215 --> 00:00:24.134 The kits include a sterile
NOTE Confidence: 0.99429864

00:00:24.134 --> 00:00:24.875 probe cover,
NOTE Confidence: 0.86114204

00:00:25.494 --> 00:00:25.994 chloroprep,
NOTE Confidence: 0.99444026

00:00:26.775 --> 00:00:28.875 a saline flush, an echogenic
NOTE Confidence: 0.99444026

00:00:29.015 --> 00:00:29.515 needle,
NOTE Confidence: 0.9788368

00:00:29.895 --> 00:00:31.359 a blunt needle, and a
NOTE Confidence: 0.9788368

00:00:31.359 --> 00:00:32.659 ten cc syringe.
NOTE Confidence: 0.92543316

00:00:34.239 --> 00:00:36.100 Some indications for the rectospinae
NOTE Confidence: 0.92948514

00:00:36.479 --> 00:00:38.159 plain block include chest wall
NOTE Confidence: 0.92948514

00:00:38.159 --> 00:00:38.659 trauma,
NOTE Confidence: 0.925175

00:00:39.040 --> 00:00:40.260 posterior rib fractures,
NOTE Confidence: 0.98667186

00:00:40.720 --> 00:00:42.340 vertebral compression fractures,
NOTE Confidence: 0.9912596

00:00:42.719 --> 00:00:45.120 back pain, herpes zoster, and
NOTE Confidence: 0.9912596

00:00:45.120 --> 00:00:45.915 renal colic.
NOTE Confidence: 0.9975555

00:00:46.395 --> 00:00:47.695 This block will anesthetize
NOTE Confidence: 0.99163747

00:00:47.995 --> 00:00:49.515 all levels below where we

NOTE Confidence: 0.99163747
00:00:49.515 --> 00:00:50.015 inject.
NOTE Confidence: 0.9541443
00:00:50.315 --> 00:00:52.395 Because of gravity, for example,
NOTE Confidence: 0.9541443
00:00:52.395 --> 00:00:53.695 if you block at T12,
NOTE Confidence: 0.9541443
00:00:53.915 --> 00:00:55.435 the anesthetic will run down
NOTE Confidence: 0.9541443
00:00:55.435 --> 00:00:56.095 the plane,
NOTE Confidence: 0.9458715
00:00:56.475 --> 00:00:58.415 blocking all levels below T12
NOTE Confidence: 0.9458715
00:00:58.635 --> 00:00:59.580 on the side injected.
NOTE Confidence: 0.86086804
00:01:01.340 --> 00:01:02.540 Because this is a large
NOTE Confidence: 0.86086804
00:01:02.540 --> 00:01:03.900 volume block, make sure to
NOTE Confidence: 0.86086804
00:01:03.900 --> 00:01:04.860 have the patient on the
NOTE Confidence: 0.86086804
00:01:04.860 --> 00:01:05.360 telemonitor
NOTE Confidence: 0.948267
00:01:05.660 --> 00:01:06.560 before you start.
NOTE Confidence: 0.87688977
00:01:06.940 --> 00:01:09.500 Local anesthetic systemic toxicity is
NOTE Confidence: 0.87688977
00:01:09.500 --> 00:01:10.800 rare but life threatening.
NOTE Confidence: 0.94074214
00:01:11.580 --> 00:01:13.025 Have the patient's weight updated
NOTE Confidence: 0.94074214

00:01:13.025 --> 00:01:14.545 in the chart and use
NOTE Confidence: 0.94074214

00:01:14.545 --> 00:01:17.045 MD Calc, local anesthetic dosing,
NOTE Confidence: 0.94074214

00:01:17.265 --> 00:01:19.025 to calculate the maximum dose
NOTE Confidence: 0.94074214

00:01:19.025 --> 00:01:20.485 allowed for this plain block.
NOTE Confidence: 0.96257627

00:01:21.345 --> 00:01:23.525 We recommend using fifteen milliliter
NOTE Confidence: 0.98884374

00:01:23.825 --> 00:01:25.765 of anesthetic and fifteen milliliter
NOTE Confidence: 0.98884374

00:01:25.985 --> 00:01:27.830 of normal saline. You'll be
NOTE Confidence: 0.98884374

00:01:27.830 --> 00:01:28.330 administering
NOTE Confidence: 0.96457905

00:01:28.950 --> 00:01:30.729 two cc every two minutes,
NOTE Confidence: 0.96457905

00:01:30.869 --> 00:01:31.909 keeping an eye on the
NOTE Confidence: 0.96457905

00:01:31.909 --> 00:01:32.409 monitor,
NOTE Confidence: 0.9094531

00:01:32.869 --> 00:01:34.490 looking for signs of last
NOTE Confidence: 0.9094531

00:01:34.549 --> 00:01:35.850 and patient's tolerance.
NOTE Confidence: 0.95434433

00:01:38.630 --> 00:01:39.909 For this plan block, you
NOTE Confidence: 0.95434433

00:01:39.909 --> 00:01:40.970 will need to identify
NOTE Confidence: 0.99437845

00:01:41.694 --> 00:01:42.275 the trapezius,

NOTE Confidence: 0.9782354

00:01:42.655 --> 00:01:45.075 rhomboid, and erector spinae muscles

NOTE Confidence: 0.91734904

00:01:45.375 --> 00:01:46.515 as well as the transverse

NOTE Confidence: 0.91734904

00:01:46.655 --> 00:01:47.155 process.

NOTE Confidence: 0.9779677

00:01:47.695 --> 00:01:49.215 Your needle will make contact

NOTE Confidence: 0.9779677

00:01:49.215 --> 00:01:51.134 with the transverse process and

NOTE Confidence: 0.9779677

00:01:51.134 --> 00:01:52.994 your goal is to inject

NOTE Confidence: 0.9779677

00:01:53.055 --> 00:01:55.134 local anesthetic under the fascia

NOTE Confidence: 0.9779677

00:01:55.134 --> 00:01:56.354 of the erector spinae.

NOTE Confidence: 0.98201925

00:01:57.790 --> 00:01:58.990 Since this is a volume

NOTE Confidence: 0.98201925

00:01:58.990 --> 00:02:00.610 block, you'll need to inject

NOTE Confidence: 0.98201925

00:02:00.750 --> 00:02:02.530 twenty five to thirty cc's

NOTE Confidence: 0.9907749

00:02:03.230 --> 00:02:04.930 of volume in this space.

NOTE Confidence: 0.9850745

00:02:06.670 --> 00:02:07.950 Now we will use our

NOTE Confidence: 0.9850745

00:02:07.950 --> 00:02:10.050 ultrasound to identify the anatomy.

NOTE Confidence: 0.9185312

00:02:10.915 --> 00:02:12.775 Your probe is pointing cephalad

NOTE Confidence: 0.9185312

00:02:12.995 --> 00:02:14.294 in a sagittal orientation.
NOTE Confidence: 0.9860287

00:02:15.155 --> 00:02:17.495 First, identify the spinous process.
NOTE Confidence: 0.9962168

00:02:17.955 --> 00:02:19.815 Move lateral to then identify
NOTE Confidence: 0.961058

00:02:20.115 --> 00:02:22.115 the transverse process. If you
NOTE Confidence: 0.961058

00:02:22.115 --> 00:02:23.555 move in more lateral, you'll
NOTE Confidence: 0.961058

00:02:23.555 --> 00:02:24.055 identify
NOTE Confidence: 0.9769603

00:02:24.355 --> 00:02:25.735 the rib and pleura.
NOTE Confidence: 0.9974297

00:02:27.790 --> 00:02:29.469 Let's demonstrate this on a
NOTE Confidence: 0.9974297

00:02:29.469 --> 00:02:30.290 real patient.
NOTE Confidence: 0.93891174

00:02:30.750 --> 00:02:31.790 First, you will begin in
NOTE Confidence: 0.93891174

00:02:31.790 --> 00:02:33.250 the midline and identify
NOTE Confidence: 0.9852173

00:02:33.629 --> 00:02:35.010 the spinous process.
NOTE Confidence: 0.98572636

00:02:35.310 --> 00:02:37.069 You move laterally to then
NOTE Confidence: 0.98572636

00:02:37.069 --> 00:02:38.930 identify the transverse process.
NOTE Confidence: 0.97133034

00:02:39.544 --> 00:02:41.165 If you move too lateral,
NOTE Confidence: 0.97133034

00:02:41.305 --> 00:02:42.665 you will identify the rib

NOTE Confidence: 0.97133034

00:02:42.665 --> 00:02:43.405 and pleural.

NOTE Confidence: 0.9712167

00:02:44.025 --> 00:02:45.864 Stay sterile. An assistant should

NOTE Confidence: 0.9712167

00:02:45.864 --> 00:02:46.845 push the syringe.

NOTE Confidence: 0.9936267

00:02:47.385 --> 00:02:48.745 Visualize the needle at all

NOTE Confidence: 0.9936267

00:02:48.745 --> 00:02:50.316 times. Once your needle is

NOTE Confidence: 0.9936267

00:02:50.316 --> 00:02:51.756 in the correct position, have

NOTE Confidence: 0.9936267

00:02:51.756 --> 00:02:53.536 your assistant push saline slowly.

NOTE Confidence: 0.9190631

00:02:53.996 --> 00:02:55.356 You should be seeing hydra

NOTE Confidence: 0.9190631

00:02:55.356 --> 00:02:57.056 dissection of the fascial plane.

NOTE Confidence: 0.9814919

00:02:57.516 --> 00:02:58.556 Now you can have the

NOTE Confidence: 0.9814919

00:02:58.556 --> 00:03:00.016 assistant switch to anesthetic.