

WEBVTT

NOTE duration:"00:03:13"

NOTE recognizability:0.826

NOTE language:en-us

NOTE Confidence: 0.822366629375

00:00:00.000 --> 00:00:01.730 Hi, this is Harvey Kliman.

NOTE Confidence: 0.822366629375

00:00:01.730 --> 00:00:04.525 I'd like to talk to you about

NOTE Confidence: 0.822366629375

00:00:04.525 --> 00:00:06.497 estimated placental volume epv.

NOTE Confidence: 0.822366629375

00:00:06.500 --> 00:00:09.097 Why should we measure the placenta volume?

NOTE Confidence: 0.822366629375

00:00:09.100 --> 00:00:11.182 Well, the placenta is the entire

NOTE Confidence: 0.822366629375

00:00:11.182 --> 00:00:13.020 support system for the fetus.

NOTE Confidence: 0.822366629375

00:00:13.020 --> 00:00:14.472 You can think of the placenta

NOTE Confidence: 0.822366629375

00:00:14.472 --> 00:00:15.880 as the roots of a tree.

NOTE Confidence: 0.822366629375

00:00:15.880 --> 00:00:18.580 I have here a little model of a placenta.

NOTE Confidence: 0.822366629375

00:00:18.580 --> 00:00:20.536 This would be the fetal surface.

NOTE Confidence: 0.822366629375

00:00:20.540 --> 00:00:23.168 You can see the umbilical cord and the fetal

NOTE Confidence: 0.822366629375

00:00:23.168 --> 00:00:25.378 vessels branching over the fetal surface.

NOTE Confidence: 0.822366629375

00:00:25.380 --> 00:00:27.240 And this is the maternal surface,

NOTE Confidence: 0.822366629375

00:00:27.240 --> 00:00:29.145 the side that is attaching
NOTE Confidence: 0.822366629375

00:00:29.145 --> 00:00:30.669 to the mother's uterus.
NOTE Confidence: 0.822366629375

00:00:30.670 --> 00:00:33.586 So I wanted to go over some basic concepts,
NOTE Confidence: 0.822366629375

00:00:33.590 --> 00:00:37.192 dos and don'ts about measuring epv O.
NOTE Confidence: 0.822366629375

00:00:37.192 --> 00:00:40.248 This placenta can be any place in space.
NOTE Confidence: 0.822366629375

00:00:40.250 --> 00:00:42.662 If you imagine a patient lying here on the
NOTE Confidence: 0.822366629375

00:00:42.662 --> 00:00:45.708 table, this can be an anterior placenta.
NOTE Confidence: 0.822366629375

00:00:45.710 --> 00:00:48.308 It can be a posterior placenta.
NOTE Confidence: 0.822366629375

00:00:48.310 --> 00:00:50.110 Those are relatively easy to measure,
NOTE Confidence: 0.822366629375

00:00:50.110 --> 00:00:53.080 but of course it can be lateral on either
NOTE Confidence: 0.822366629375

00:00:53.080 --> 00:00:55.785 side fundle at the top of the uterus.
NOTE Confidence: 0.822366629375

00:00:55.790 --> 00:00:56.564 Of course,
NOTE Confidence: 0.822366629375

00:00:56.564 --> 00:00:58.886 a dangerous situation is placenta previa.
NOTE Confidence: 0.822366629375

00:00:58.890 --> 00:01:00.230 It's probably going to be
NOTE Confidence: 0.822366629375

00:01:00.230 --> 00:01:01.302 very difficult to measure.
NOTE Confidence: 0.822366629375

00:01:01.310 --> 00:01:03.890 Percent of volume in this position.

NOTE Confidence: 0.822366629375
00:01:03.890 --> 00:01:06.770 But I want to talk about the ideal
NOTE Confidence: 0.822366629375
00:01:06.770 --> 00:01:10.129 way to measure placental volume epv.
NOTE Confidence: 0.822366629375
00:01:10.130 --> 00:01:12.838 The way that you want to do it is think of
NOTE Confidence: 0.822366629375
00:01:12.838 --> 00:01:15.150 the placenta as a that you're cutting,
NOTE Confidence: 0.822366629375
00:01:15.150 --> 00:01:17.310 and if you can see these lines here,
NOTE Confidence: 0.822366629375
00:01:17.310 --> 00:01:20.152 you want to find the widest cross
NOTE Confidence: 0.822366629375
00:01:20.152 --> 00:01:22.529 section axis of the placenta.
NOTE Confidence: 0.822366629375
00:01:22.530 --> 00:01:24.834 Here, let me take this apart and show you
NOTE Confidence: 0.822366629375
00:01:24.834 --> 00:01:27.245 what it looks like when you've made that
NOTE Confidence: 0.822366629375
00:01:27.245 --> 00:01:29.430 cross section with the ultrasound device.
NOTE Confidence: 0.822366629375
00:01:29.430 --> 00:01:31.938 It basically looks like a Crescent.
NOTE Confidence: 0.822366629375
00:01:31.940 --> 00:01:34.145 And if you imagine this in space,
NOTE Confidence: 0.822366629375
00:01:34.150 --> 00:01:36.958 what we need to do to measure epv is
NOTE Confidence: 0.822366629375
00:01:36.958 --> 00:01:39.865 draw a line from this tip to this tip.
NOTE Confidence: 0.822366629375
00:01:39.870 --> 00:01:41.598 This is the width.
NOTE Confidence: 0.822366629375

00:01:41.598 --> 00:01:42.030 Measurement.
NOTE Confidence: 0.822366629375

00:01:42.030 --> 00:01:44.766 Then you find the apex of the placenta.
NOTE Confidence: 0.822366629375

00:01:44.770 --> 00:01:47.658 Drop a line down to this width line
NOTE Confidence: 0.822366629375

00:01:47.658 --> 00:01:50.189 and make sure it's 90 degrees.
NOTE Confidence: 0.822366629375

00:01:50.190 --> 00:01:50.796 Fix it,
NOTE Confidence: 0.822366629375

00:01:50.796 --> 00:01:52.614 and then draw another line from
NOTE Confidence: 0.822366629375

00:01:52.614 --> 00:01:54.290 your exact starting point here
NOTE Confidence: 0.822366629375

00:01:54.290 --> 00:01:56.628 down to the bottom of the placenta.
NOTE Confidence: 0.822366629375

00:01:56.630 --> 00:01:59.059 This is the thickness measurement with the.
NOTE Confidence: 0.822366629375

00:01:59.060 --> 00:02:01.320 With the height and the
NOTE Confidence: 0.822366629375

00:02:01.320 --> 00:02:02.224 thickness measurements,
NOTE Confidence: 0.822366629375

00:02:02.230 --> 00:02:05.406 you have the three numbers you need to
NOTE Confidence: 0.822366629375

00:02:05.406 --> 00:02:07.650 calculate estimated posando volume E PV.
NOTE Confidence: 0.822366629375

00:02:07.650 --> 00:02:07.885 Now,
NOTE Confidence: 0.822366629375

00:02:07.885 --> 00:02:09.530 what are some of the things that
NOTE Confidence: 0.822366629375

00:02:09.530 --> 00:02:10.190 you shouldn't do?

NOTE Confidence: 0.822366629375
00:02:10.190 --> 00:02:11.122 One is.
NOTE Confidence: 0.822366629375
00:02:11.122 --> 00:02:13.452 Not finding the complete center
NOTE Confidence: 0.822366629375
00:02:13.452 --> 00:02:15.770 axis of the placenta.
NOTE Confidence: 0.822366629375
00:02:15.770 --> 00:02:17.541 If you were to cut across here
NOTE Confidence: 0.822366629375
00:02:17.541 --> 00:02:19.130 this part of the placenta,
NOTE Confidence: 0.822366629375
00:02:19.130 --> 00:02:21.518 you would not get an accurate
NOTE Confidence: 0.822366629375
00:02:21.518 --> 00:02:23.110 estimation of placental volume,
NOTE Confidence: 0.822366629375
00:02:23.110 --> 00:02:25.077 and I'll show you a cross section
NOTE Confidence: 0.822366629375
00:02:25.077 --> 00:02:26.930 here that I can take apart.
NOTE Confidence: 0.822366629375
00:02:26.930 --> 00:02:29.490 So this cross section is much less than
NOTE Confidence: 0.822366629375
00:02:29.490 --> 00:02:31.968 the major cross section I showed you.
NOTE Confidence: 0.822366629375
00:02:31.970 --> 00:02:33.730 So if you were to make these measurements,
NOTE Confidence: 0.822366629375
00:02:33.730 --> 00:02:36.467 you would have an artificially small number.
NOTE Confidence: 0.822366629375
00:02:36.470 --> 00:02:39.256 The other thing that you can do
NOTE Confidence: 0.822366629375
00:02:39.256 --> 00:02:41.969 incorrectly is not holding the probe.
NOTE Confidence: 0.822366629375

00:02:41.970 --> 00:02:43.658 Perpendicular to the surface.
NOTE Confidence: 0.822366629375

00:02:43.658 --> 00:02:45.346 So it's very important.
NOTE Confidence: 0.822366629375

00:02:45.350 --> 00:02:47.632 Let me just put this back together
NOTE Confidence: 0.822366629375

00:02:47.632 --> 00:02:50.239 here to hold your ultrasound probe
NOTE Confidence: 0.822366629375

00:02:50.239 --> 00:02:52.839 directly perpendicular to the surface.
NOTE Confidence: 0.822366629375

00:02:52.840 --> 00:02:55.283 1 does not want to be oblique
NOTE Confidence: 0.822366629375

00:02:55.283 --> 00:02:56.330 in that measurement
NOTE Confidence: 0.8615455692

00:02:56.404 --> 00:02:58.859 because you can artificially make
NOTE Confidence: 0.8615455692

00:02:58.859 --> 00:03:00.823 the thickness measurement larger
NOTE Confidence: 0.8615455692

00:03:00.823 --> 00:03:03.458 by being oblique to the surface.
NOTE Confidence: 0.8615455692

00:03:03.460 --> 00:03:06.800 OK, so that's a basic overview how to do EPV.
NOTE Confidence: 0.8615455692

00:03:06.800 --> 00:03:08.508 Let's go see how it's actually done
NOTE Confidence: 0.8615455692

00:03:08.508 --> 00:03:11.015 with a real patient and a real maternal
NOTE Confidence: 0.8615455692

00:03:11.015 --> 00:03:13.000 fetal medicine physician. Doctor Rad.