WEBVTT

NOTE duration:"00:03:13"

NOTE recognizability:0.842

NOTE language:en-us

NOTE Confidence: 0.842018588

00:00:00.000 --> 00:00:01.425 Hi, this is Harvey Kleinman.

NOTE Confidence: 0.842018588

00:00:01.425 --> 00:00:03.797 I'd like to talk to you about

NOTE Confidence: 0.842018588

00:00:03.797 --> 00:00:05.617 estimated placental volume. EV.

NOTE Confidence: 0.842018588

00:00:05.617 --> 00:00:09.096 Why should we measure the placenta volume?

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

00:00:15.880 --> 00:00:18.562 I have here a little model of a placenta.

NOTE Confidence: 0.842018588

00:00:18.570 --> 00:00:20.538 This would be the fetal surface.

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

00:00:25.380 --> 00:00:27.996 And this is the maternal surface, the side

NOTE Confidence: 0.842018588

00:00:27.996 --> 00:00:30.642 that is attaching to the mother's uterus.

NOTE Confidence: 0.842018588

00:00:30.650 --> 00:00:33.584 So I wanted to go over some basic concepts,

NOTE Confidence: 0.842018588

00:00:33.590 --> 00:00:37.174 dos and don'ts about measuring epv O.

NOTE Confidence: 0.842018588

00:00:37.174 --> 00:00:40.246 This placenta can be any place in space.

NOTE Confidence: 0.842018588

00:00:40.250 --> 00:00:42.662 If you imagine a patient lying here in the

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

00:00:50.110 --> 00:00:53.206 but of course it can be lateral on either

NOTE Confidence: 0.842018588

00:00:53.206 --> 00:00:55.790 side, fundle at the top of the uterus.

NOTE Confidence: 0.842018588

00:00:55.790 --> 00:00:56.564 Of course,

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

00:00:58.890 --> 00:01:00.906 It's probably going to be very difficult.

NOTE Confidence: 0.842018588

00:01:00.910 --> 00:01:03.886 Measure placenta volume in this position.

NOTE Confidence: 0.842018588

00:01:03.890 --> 00:01:06.778 But I want to talk about the ideal

NOTE Confidence: 0.842018588

00:01:06.778 --> 00:01:10.149 way to measure placental volume epv.

NOTE Confidence: 0.842018588

00:01:10.150 --> 00:01:12.847 The way that you want to do it is think of

NOTE Confidence: 0.842018588

00:01:12.847 --> 00:01:15.143 the placenta as a that you're cutting,

NOTE Confidence: 0.842018588

00:01:15.150 --> 00:01:17.310 and if you can see these lines here,

NOTE Confidence: 0.842018588

00:01:17.310 --> 00:01:20.152 you want to find the widest cross

NOTE Confidence: 0.842018588

00:01:20.152 --> 00:01:22.529 section axis of the placenta.

NOTE Confidence: 0.842018588

00:01:22.530 --> 00:01:22.786 Here,

NOTE Confidence: 0.842018588

00:01:22.786 --> 00:01:24.834 let me take this apart and show you

NOTE Confidence: 0.842018588

00:01:24.834 --> 00:01:27.245 what it looks like when you've made that

NOTE Confidence: 0.842018588

00:01:27.245 --> 00:01:29.430 cross section with the ultrasound device.

NOTE Confidence: 0.842018588

00:01:29.430 --> 00:01:31.938 It basically looks like a Crescent.

NOTE Confidence: 0.842018588

00:01:31.940 --> 00:01:34.145 And if you imagine this in space,

NOTE Confidence: 0.842018588

00:01:34.150 --> 00:01:36.958 what we need to do to measure epv is

NOTE Confidence: 0.842018588

00:01:36.958 --> 00:01:39.865 draw a line from this tip to this tip.

NOTE Confidence: 0.842018588

00:01:39.870 --> 00:01:42.030 This is the width. Measurement.

NOTE Confidence: 0.842018588

00:01:42.030 --> 00:01:44.758 Then you find the apex of the placenta.

NOTE Confidence: 0.842018588

00:01:44.760 --> 00:01:47.294 Drop a line down to this width

NOTE Confidence: 0.842018588

00:01:47.294 --> 00:01:50.190 line and make sure it's 90 degrees.

NOTE Confidence: 0.842018588

00:01:50.190 --> 00:01:52.290 Fix it and then draw another line

NOTE Confidence: 0.842018588

00:01:52.290 --> 00:01:54.268 from your exact starting point here

NOTE Confidence: 0.842018588

00:01:54.268 --> 00:01:56.627 down to the bottom of the placenta.

NOTE Confidence: 0.842018588

00:01:56.630 --> 00:01:58.550 This is the thickness measurement.

NOTE Confidence: 0.842018588

00:01:58.550 --> 00:01:59.600 With the width,

NOTE Confidence: 0.842018588

00:01:59.600 --> 00:02:01.700 the height and the thickness measurements

NOTE Confidence: 0.842018588

00:02:01.700 --> 00:02:04.682 you have the three numbers you need to

NOTE Confidence: 0.842018588

00:02:04.682 --> 00:02:06.432 calculate estimated possanza, volume, EPV.

NOTE Confidence: 0.842018588

00:02:06.432 --> 00:02:08.679 Now what are some of the things

NOTE Confidence: 0.842018588

00:02:08.679 --> 00:02:10.190 that you shouldn't do?

NOTE Confidence: 0.842018588

00:02:10.190 --> 00:02:11.120 One is.

NOTE Confidence: 0.842018588

00:02:11.120 --> 00:02:13.445 Not finding the complete center

NOTE Confidence: 0.842018588

00:02:13.445 --> 00:02:15.760 axis of the placenta.

NOTE Confidence: 0.842018588

00:02:15.760 --> 00:02:17.531 If you were to cut across here

NOTE Confidence: 0.842018588

00:02:17.531 --> 00:02:19.120 this part of the placenta,

NOTE Confidence: 0.842018588

00:02:19.120 --> 00:02:21.801 you would not get an accurate estimation

NOTE Confidence: 0.842018588

00:02:21.801 --> 00:02:24.455 of placental volume and I'll show you a

NOTE Confidence: 0.842018588

00:02:24.455 --> 00:02:26.918 cross section here that I can take apart.

NOTE Confidence: 0.842018588

00:02:26.920 --> 00:02:29.480 So this cross section is much less than

NOTE Confidence: 0.842018588

00:02:29.480 --> 00:02:31.958 the major cross section I showed you.

NOTE Confidence: 0.842018588

00:02:31.960 --> 00:02:33.728 So if you were to make these measurements,

NOTE Confidence: 0.842018588

00:02:33.730 --> 00:02:36.474 you would have an artificially small number.

NOTE Confidence: 0.842018588

00:02:36.480 --> 00:02:39.259 The other thing that you can do

NOTE Confidence: 0.842018588

00:02:39.259 --> 00:02:41.969 incorrectly is not holding the probe.

NOTE Confidence: 0.842018588

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

NOTE Confidence: 0.842018588

00:02:43.658 --> 00:02:45.346 So it's very important,

NOTE Confidence: 0.842018588

00:02:45.350 --> 00:02:47.814 let me just put this back together here,

NOTE Confidence: 0.842018588

00:02:47.820 --> 00:02:50.832 to hold your ultrasound probe directly

NOTE Confidence: 0.842018588

00:02:50.832 --> 00:02:52.840 perpendicular to the surface.

NOTE Confidence: 0.842018588

00:02:52.840 --> 00:02:55.632 1 does not want to be oblique in

NOTE Confidence: 0.842018588

00:02:55.632 --> 00:02:57.877 that measurement because you can

NOTE Confidence: 0.842018588

00:02:57.877 --> 00:02:59.841 artificially make the thickness

NOTE Confidence: 0.842018588

00:02:59.841 --> 00:03:01.314 measurement larger by

NOTE Confidence: 0.8485622732

00:03:01.393 --> 00:03:03.458 being oblique to the surface.

NOTE Confidence: 0.8485622732

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

NOTE Confidence: 0.8485622732

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

NOTE Confidence: 0.8485622732

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

NOTE Confidence: 0.8485622732

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