WEBVTT

NOTE duration:”00:04:26”

NOTE recognizability:0.829

NOTE language:en-us

NOTE Confidence: 0.87639729

00:00:00.000 --> 00:00:01.911 It's my pleasure to be here with

NOTE Confidence: 0.87639729

00:00:01.911 --> 00:00:03.816 Doctor Steve Rad, a maternal fetal

NOTE Confidence: 0.87639729

00:00:03.816 --> 00:00:05.626 medicine specialist in Los Angeles,

NOTE Confidence: 0.87639729

00:00:05.630 --> 00:00:08.143 CA, and he's going to demonstrate how

NOTE Confidence: 0.87639729

00:00:08.143 --> 00:00:11.419 to do an estimated placental volume.

NOTE Confidence: 0.87639729

00:00:11.420 --> 00:00:13.346 Thank you. So here we are

NOTE Confidence: 0.830899513333333

00:00:13.620 --> 00:00:16.385 scanning and we're going to

NOTE Confidence: 0.830899513333333

00:00:16.385 --> 00:00:17.988 be looking at the placenta.

NOTE Confidence: 0.830899513333333

00:00:17.988 --> 00:00:20.856 As you can see, the placenta is posterior.

NOTE Confidence: 0.830899513333333

00:00:20.856 --> 00:00:24.430 We want to scan through the placenta.

NOTE Confidence: 0.830899513333333

00:00:24.430 --> 00:00:26.936 And 1st get a feel and orientation

NOTE Confidence: 0.830899513333333

00:00:26.936 --> 00:00:29.000 of where the placenta is.

NOTE Confidence: 0.830899513333333

00:00:29.000 --> 00:00:31.888 We want to find we want to be

NOTE Confidence: 0.830899513333333

00:00:31.888 --> 00:00:34.736 perpendicular to the plane of the placenta,

NOTE Confidence: 0.830899513333333

00:00:34.740 --> 00:00:37.740 and find a Crescent where the

NOTE Confidence: 0.830899513333333

00:00:37.740 --> 00:00:40.920 placenta appears, Crescent shaped.

NOTE Confidence: 0.830899513333333

00:00:40.920 --> 00:00:45.600 So here, as we scan through the placenta.

NOTE Confidence: 0.830899513333333

00:00:45.600 --> 00:00:46.788 You notice that?

NOTE Confidence: 0.757408313333333

00:00:50.150 --> 00:00:53.669 Approximately this area.

NOTE Confidence: 0.757408313333333

00:00:53.670 --> 00:00:56.920 With the maximum width. And.

NOTE Confidence: 0.698410041818182

00:00:59.080 --> 00:01:02.014 You can start to tell it's like a crescent

NOTE Confidence: 0.698410041818182

00:01:02.014 --> 00:01:04.636 can confirm once you get to that area.

NOTE Confidence: 0.860628722857143

00:01:07.800 --> 00:01:11.120 The edges become a little bit more. Clear.

NOTE Confidence: 0.804915656

00:01:12.610 --> 00:01:13.710 Right. I'll say one thing.

NOTE Confidence: 0.804915656

00:01:13.710 --> 00:01:15.414 When you're exactly perpendicular,

NOTE Confidence: 0.804915656

00:01:15.414 --> 00:01:17.970 these sound waves go down and

NOTE Confidence: 0.804915656

00:01:18.040 --> 00:01:19.905 come back to the transducer

NOTE Confidence: 0.804915656

00:01:19.905 --> 00:01:21.770 and the image becomes sharp.

NOTE Confidence: 0.804915656

00:01:21.770 --> 00:01:24.339 So you're looking for a sharp image

NOTE Confidence: 0.804915656

00:01:24.339 --> 00:01:26.492 across the whole width of the

NOTE Confidence: 0.804915656

00:01:26.492 --> 00:01:28.767 placenta from the tip to the tip.

NOTE Confidence: 0.804915656

00:01:28.770 --> 00:01:30.858 When you have this crescent image.

NOTE Confidence: 0.627106166

00:01:31.230 --> 00:01:32.720 Perfect. I think that's here.

NOTE Confidence: 0.801392794285714

00:01:33.250 --> 00:01:35.175 Excellent. So what do you do next?

NOTE Confidence: 0.733074874285714

00:01:35.350 --> 00:01:37.394 So next we'll be doing some measurements.

NOTE Confidence: 0.733074874285714

00:01:37.400 --> 00:01:39.630 We're going to imagine the.

NOTE Confidence: 0.733074874285714

00:01:39.630 --> 00:01:42.760 Placenta resting on a table.

NOTE Confidence: 0.733074874285714

00:01:42.760 --> 00:01:45.118 And we're going to be first

NOTE Confidence: 0.733074874285714

00:01:45.118 --> 00:01:47.800 measuring the width of the placenta.

NOTE Confidence: 0.733074874285714

00:01:47.800 --> 00:01:50.434 And we do that by measuring

NOTE Confidence: 0.733074874285714

00:01:50.434 --> 00:01:52.798 from each edge of the placenta

NOTE Confidence: 0.733074874285714

00:01:52.798 --> 00:01:55.028 and one edge to the other.

NOTE Confidence: 0.874344831111111

00:02:00.190 --> 00:02:03.322 And that gives us. The width of the placenta.

NOTE Confidence: 0.8561967065

00:02:04.280 --> 00:02:06.275 Perfect. I'd like to think of this

NOTE Confidence: 0.8561967065

00:02:06.275 --> 00:02:08.587 as the tip to tip measurement and

NOTE Confidence: 0.8561967065

00:02:08.587 --> 00:02:10.675 which you've done in segment #1.

NOTE Confidence: 0.8561967065

00:02:10.680 --> 00:02:12.620 Perfect. Next, we're going

NOTE Confidence: 0.91348535125

00:02:12.630 --> 00:02:15.406 to be measuring the height of the placenta,

NOTE Confidence: 0.91348535125

00:02:15.410 --> 00:02:18.770 and we locate the apex of the placenta.

NOTE Confidence: 0.727883015

00:02:22.580 --> 00:02:25.720 And we will measure.

NOTE Confidence: 0.727883015

00:02:25.720 --> 00:02:27.526 From the base of the placenta,

NOTE Confidence: 0.727883015

00:02:27.530 --> 00:02:30.329 a perpendicular line.

NOTE Confidence: 0.727883015

00:02:30.330 --> 00:02:31.650 To our width line.

NOTE Confidence: 0.875645902

00:02:33.690 --> 00:02:35.874 And I think of this as think of

NOTE Confidence: 0.875645902

00:02:35.874 --> 00:02:38.048 going over a bridge that is curved.

NOTE Confidence: 0.875645902

00:02:38.050 --> 00:02:39.710 When you get to the very top of the bridge,

NOTE Confidence: 0.875645902

00:02:39.710 --> 00:02:41.468 you know where the apex is.

NOTE Confidence: 0.875645902

00:02:41.470 --> 00:02:42.722 That's what you're thinking

NOTE Confidence: 0.875645902

00:02:42.722 --> 00:02:43.974 about with this crescent.

NOTE Confidence: 0.875645902

00:02:43.980 --> 00:02:45.752 You're finding the topmost

NOTE Confidence: 0.875645902

00:02:45.752 --> 00:02:47.524 point of this placenta.

NOTE Confidence: 0.79605083375

00:02:48.640 --> 00:02:50.696 And we want our lines to be perpendicular.

NOTE Confidence: 0.79605083375

00:02:50.700 --> 00:02:53.136 So what I do sometimes is swing

NOTE Confidence: 0.79605083375

00:02:53.140 --> 00:02:55.168 side to side just to confirm.

NOTE Confidence: 0.7825795475

00:02:57.590 --> 00:02:59.438 That were exactly perpendicular.

NOTE Confidence: 0.83061055

00:03:06.570 --> 00:03:09.804 And then we will save that measurement.

NOTE Confidence: 0.83061055

00:03:09.810 --> 00:03:12.190 Next, we're going to measure

NOTE Confidence: 0.83061055

00:03:12.190 --> 00:03:13.618 the placenta thickness.

NOTE Confidence: 0.83061055

00:03:13.620 --> 00:03:15.475 And that is going to be from

NOTE Confidence: 0.83061055

00:03:15.475 --> 00:03:17.293 starting from the same point where

NOTE Confidence: 0.83061055

00:03:17.293 --> 00:03:19.924 we measured the height and we

NOTE Confidence: 0.83061055

00:03:19.924 --> 00:03:23.638 will draw a line from there to the

NOTE Confidence: 0.83061055

00:03:23.638 --> 00:03:26.026 edge of the placenta fetal surface

NOTE Confidence: 0.83061055

00:03:26.026 --> 00:03:28.400 where meets the amniotic fluid.

NOTE Confidence: 0.852042361428571

00:03:29.270 --> 00:03:31.244 Perfect. And I'll just make the point.

NOTE Confidence: 0.852042361428571

00:03:31.250 --> 00:03:34.166 This last segment, the thickness measurement,

NOTE Confidence: 0.852042361428571

00:03:34.170 --> 00:03:36.578 starts at the same apex point and

NOTE Confidence: 0.852042361428571

00:03:36.578 --> 00:03:38.778 follows exactly the same line that

NOTE Confidence: 0.852042361428571

00:03:38.778 --> 00:03:40.603 you've created for the height.

NOTE Confidence: 0.852042361428571

00:03:40.610 --> 00:03:42.470 And that is perfect the way you just did it.

NOTE Confidence: 0.830925758571428

00:03:43.210 --> 00:03:46.474 Precisely. And then we save our

NOTE Confidence: 0.830925758571428

00:03:46.474 --> 00:03:48.548 measurements. And they're listed here,

NOTE Confidence: 0.90123623875

00:03:48.850 --> 00:03:51.538 and those measurements can be put into an

NOTE Confidence: 0.90123623875

00:03:51.538 --> 00:03:54.280 app either for an iPhone or Android phone,

NOTE Confidence: 0.90123623875

00:03:54.280 --> 00:03:56.744 or if your machine is able to

NOTE Confidence: 0.90123623875

00:03:56.744 --> 00:03:58.700 take the equation internally,

NOTE Confidence: 0.90123623875

00:03:58.700 --> 00:04:00.356 you can have the machine do

NOTE Confidence: 0.90123623875

00:04:00.356 --> 00:04:01.460 the calculation for you,

NOTE Confidence: 0.90123623875

00:04:01.460 --> 00:04:04.715 but as those 3 numbers the width,

NOTE Confidence: 0.90123623875

00:04:04.720 --> 00:04:06.420 the height and the thickness

NOTE Confidence: 0.90123623875

00:04:06.420 --> 00:04:08.120 measurements: 1, 2 and 3 shown

NOTE Confidence: 0.90123623875

00:04:08.176 --> 00:04:10.668 here that allow you to calculate the

NOTE Confidence: 0.90123623875

00:04:10.668 --> 00:04:12.580 three-dimensional volume of this placenta.

NOTE Confidence: 0.828180615714286

00:04:14.350 --> 00:04:17.850 Exactly, and it doesn't take that long.

NOTE Confidence: 0.828180615714286

00:04:17.850 --> 00:04:21.749 And sometimes I personally repeat it.

NOTE Confidence: 0.828180615714286

00:04:21.750 --> 00:04:23.568 One or two times to confirm,

NOTE Confidence: 0.828180615714286

00:04:23.570 --> 00:04:25.190 and usually you'll get the very

NOTE Confidence: 0.828180615714286

00:04:25.190 --> 00:04:26.000 similar exact measurements.