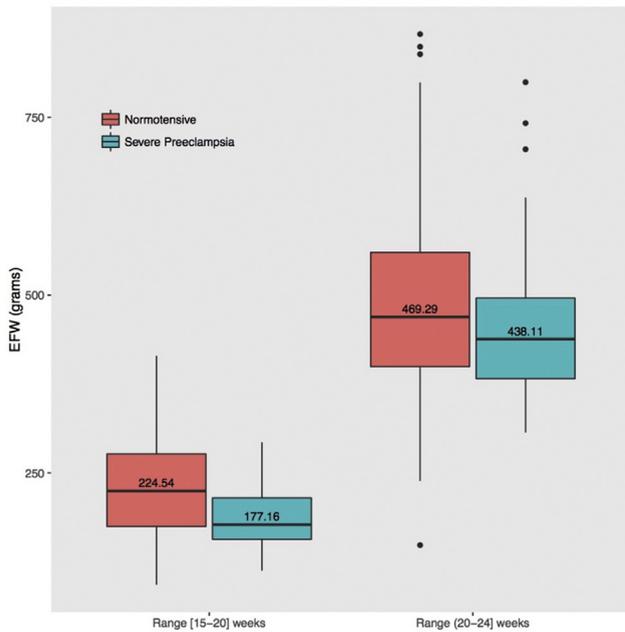


women who subsequently developed severe-PE compared to normotensive women (Figure;  $p=0.01$ ). Similar findings were noted for all individual biometries (all  $p < 0.05$ ) between 15 and 20 weeks, except BPD ( $p=0.052$ ). Area under ROC curve was 0.685 for predicting subsequent severe PE based on abnormal EFW at 15-20 weeks' gestation. No fetal growth differences were identified between 20 and 24 weeks of gestation for the severe-PE group compared to normotensive patients.

**CONCLUSION:** Fetal undergrowth between 15 and 20 weeks' gestation anticipates and predicts the development of severe-PE. The later development of severe-PE was not associated with first trimester differences in CRL.

Figure: EFW (median  $\pm$  interquartile ranges) in severe-PE compared with normotensive women during the second trimester.



## 212 Intrapartum measurement of the lower uterine segment thickness (LUST) - defining the normal



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**OBJECTIVE:** Trial of labor after previous cesarean delivery (TOLAC) may result in adverse outcomes such as uterine rupture. Although not proved, a 2mm cutoff of the lower uterine segment thickness (LUST) is often used when counseling pregnant women regarding TOLAC. The aim of our study was to establish the normal range of LUST in parturients with no previous cesarean delivery (CD).

**STUDY DESIGN:** A prospective study of parturients between 37 and 41 weeks of gestation with no past CD. All of the women had singleton gestations in the cephalic presentation, an epidural anesthesia and a urinary catheter. Measurements were performed using Samsung's

Medison Sonoace R5/R7 ultrasound device. Sonographic evaluation included fetal presentation and attitude, fetal biometry, placental location and myometrial thickness. LUST was measured within 2cm distance above the end an empty bladder while the women experience no contractions. Multiple measures were taken by up to three different experienced sonographers.

**RESULTS:** A total of 64 women were recruited, of which 62 had satisfactory measurements. A total of 28 (45.2%) women were nuliparous and 34 (54.8%) multiparous, 35 (56.4%) were in latent phase while 27 (43.6%) were in active labor (defined as 5cm dilation or more). Of those in active labor, 10 (37%) women were fully dilated when examined. Mean LUST was  $3.2 \pm 0.8$ mm (ranging 6.1-1.7mm). No correlation was found between the dilation and mean LUST. Nuliparous women had significant lower mean LUST when compared with multiparous at all stages of labor.

**CONCLUSION:** We have found that LUST ranges from 1.7 to 6.1mm during delivery with mean LUST of 3.2mm. Also, LUST may be effected by parity. Further studies are required to estimate the exact risk for uterine rupture according to lower uterine segment.

|                         | No. | Mean | SD   |
|-------------------------|-----|------|------|
| Age (years)             | 62  | 31.6 | 4.5  |
| BMI ( $\text{kg/m}^2$ ) | 62  | 23.3 | 3.92 |
| Parity                  | 62  | 1.1  | 1.25 |
| GA (weeks)              | 62  | 38.6 | 1.37 |
| mean segment (mm)       | 62  | 3.23 | 0.8  |
| MAX segment (mm)        | 62  | 2.92 | 1.67 |
| MIN segment (mm)        | 62  | 2.38 | 1.38 |

No. - number, SD- standard deviation, BMI- body mass index, GA- gestational age. Max- maximal, Min- minimal

