

- 17 **DOES TRANSVAGINAL ULTRASOUND MEASUREMENTS OF TOTAL CERVICAL LENGTH OR "FUNNELING TO THE CERCLAGE" PREDICT PREMATURITY IN WOMEN AT INCREASED RISK OF PRETERM BIRTH WHO HAVE A CERVICAL CERCLAGE IN SITU?** ALEXANDRA SEAWARD, JULIA KFOURI, JODIE DODD, RORY WINDRIM, WENDY WHITTLE. Mount Sinai Hospital, Toronto, Ontario, Canada

**OBJECTIVE:** To determine if transvaginal ultrasound (TVUS) measurement of total cervical length (CL) and /or the presence of "funneling to the cerclage" is predictive preterm birth and correlated with adverse perinatal outcome.

**STUDY DESIGN:** A prospective cohort of women with a history of spontaneous preterm birth and/or significant uterine anomaly followed in the Prevention of Preterm Birth Clinic (Mount Sinai Hospital; Toronto, CA) underwent serial TVUS assessment following cerclage placement. TVUS parameters were correlated with gestational age at delivery, birth weight and neonatal outcome.

**RESULTS:** The mean gestational age at delivery of this cohort (n=75) was 34.4+/-6.2 w. 17% of the deliveries occurred preterm at <28w gestation: 60% of those preterm patients demonstrated "funneling to the cerclage" and 70% demonstrated CL < 1.5 cm prior to delivery. The predictive values of these TVUS parameters for prematurity are listed in the table below. Beyond 28 weeks of gestation there was no correlation between either CL and/or the presence of funneling and the timing of delivery, birth weight, NICU admission, neonatal sepsis or respiratory distress syndrome.

**CONCLUSION:** Total CL or the presence of "funneling to the cerclage" are predictive of spontaneous preterm birth <28w gestation. Beyond 28w gestation, TVUS surveillance of cervical characteristics appears to be unwarranted.

Test characteristics in the identification of women who will deliver at <28w gestation

	Sensitivity	Specificity	PPV	NPV
CL < 1.5 cm	70%	85%	50%	93%
"Funnel to the Cerclage"	60%	50%	21%	85%

0002-9378/\$ - see front matter  
doi:10.1016/j.ajog.2007.10.019