Cervical funneling: effect on gestational length and ultrasound-indicated cerclage in high-risk women.

Objective: The purpose of this study was to assess funnel type and pregnancy duration in women with previous spontaneous preterm birth and cervical length <25 mm.

Study Design: We performed a secondary analysis of a multicenter randomized trial of cerclage. At the randomization scan that documented short cervix, the presence and type of funnel (U or V) were recorded.

Results: One hundred forty-seven of 301 women (49%) had funneling: V-shaped funnel, 99 women; U-shaped funnel, 48 women. U-shaped funnel was associated significantly with preterm birth at <24, <28, <35, and <37 weeks of gestation. In multivariable models that controlled for randomization cervical length and cerclage, women with U-shaped funnel delivered earlier than women with either V-shaped funnel or no funnel. Interaction between cerclage and U-shaped funnel was observed, and analyses that were stratified by cerclage showed that women with a U-shaped funnel and cerclage delivered at a mean of 33.8 +/- 6.6 weeks of gestation, compared with women who did not receive cerclage (28.9 +/- 6.9 weeks of gestation).

Conclusion: U-shaped funnels in high-risk women with a short cervix are associated with earlier birth.