Transperineal ultrasonography: The assessment of cervical length during preterm labor
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Objective
The aim of this study is to determine the correlation and agreement between transperineal ultrasonography and transvaginal ultrasonography in the assessment of cervical length in gravid patients with preterm labor.

Methods
This prospective cohort study was carried out, between July 2013 and July 2014, in department of obstetrics and gynecology Mongi Slim hospital, La Marsa, Tunis, Tunisia. Sixty patients between 25 and 36 week’s gestation with intact membranes and cephalic presentation underwent transperineal and transvaginal cervical length assessment under a blinded sonographer protocol. The Pearson correlation coefficient and Bland Altman-Blot were used. P<0. 05 was considered as significant. The patient’s discomfort and preference for either method were assessed with a questionnaire.

Results
Only in one case, transperineal cervical length assessment was impossible. The cervical funneling was observed in 6 cases in both methods. Close agreement between transperineal and transvaginal measurements were observed. The estimated difference between the paired means was 0. 378 mm ( IC 95%; [-0. 37 , 1. 126]; P=0. 316. Correlation was good and significant ( R= 0. 95; p<0. 0001; [IC 95 % = (-0. 032–0. 170)]. The Bland–Altman plot confirmed a satisfactory agreement (4. 1%; 95% CI; 0. 23%-7. 8%). Transperineal ultrasonography was preferred in all cases.

Conclusion
Cervical length measurement by transperineal ultrasonography in preterm labor shows good agreement and correlation with transvaginal ultrasonography. It’s a satisfactory alternative to a transvaginal evaluation of the cervix by the obstetric team on duty.