Placenta previa: evaluation of cervical length as a predictor of caesarean section before 34 weeks

Filomena Maellaro 1, Daniele Farsetti 1,2, Ilaria Pisani 2, Giulia Massa 1,*, Barbara Vasapollo 2, Herbert Valensise 1,2

1 Obstetrics and Gynecology Unit, Department of Surgical Sciences, University of Rome Tor Vergata, Rome, Italy.
2 Department of Obstetrics and Gynecology, Policlinico Casilino, Rome, Italy.

Objective. Placenta previa carries significant maternal and fetal complications, that can be effectively prevented by early identification and proper follow-up in specialized centers, and by performing a scheduled caesarean section, sometimes with a multidisciplinary team. Ultrasound assessment by a qualified operator is recommended in these cases. The aim of the present study is to evaluate the cervical length as a predictor of caesarian section before 34 weeks in women with placenta previa.

Materials and Methods. 36 pregnant women were involved in this study. Cervicometry by transvaginal ultrasound was performed between 30 weeks+1 day and 34 weeks, according to a standardized technique. 31 patients underwent caesarean section after 34 weeks (group A - 86.11%) and 4 patients before or at 34 weeks (group B – 13.89%). ROC curve analysis was performed to test the sensitivity and specificity of cervical length and emergency caesarean sections before 34 weeks.

Results. Cervical length proved to be a moderately accurate predictor of emergency caesarean sections before 34 weeks (AUC 0.716, 95%CI 0.542-0.853). Patients with cervical length < 25 mm have an increased risk of caesarean section before 34 weeks (OR 20.00, 95%CI 1.97-291.08).

Conclusions. The cervicometry is not the unique prognostic factor of caesarean section before 34 weeks, but its evaluation could be useful in women with placenta previa in order to prevent obstetric complications.