

# A single-center retrospective study of pregnancy outcomes after midtrimester cerclage

• Koteva Mirakovska M, Daneva Markova A, Stefanija A, Bina A, Kjaev I, Milkovski D, Okleska A, Andonovski D

## Objective

- To evaluate the safety and effectiveness of late cervical cerclage. The outcomes of interest were effectiveness of ultrasound guided and emergency cerclage in prolongation of pregnancy and evaluation of pregnancy outcome including maternal and fetal complications.

## Methods

- Retrospective analysis of the hospital records for singleton and twin pregnancies diagnosed with short cervix (<25 mm), cervical dilatation and bulging membranes who underwent late cervical cerclage. Medical information was retrieved from all cases of patients who underwent a late cervical cerclage between the years 2018 and 2022 at the University Clinic of Obstetrics and Gynecology, Skopje, a tertiary medical center. A total of 38 patients underwent late cervical cerclage during the study period. Three of them were twin pregnancies. All cerclage procedures were done according to McDonald technique and Mersilene tape was used. The primary outcome was gestational age at birth and secondary outcome neonatal birthweight and neonatal survival rate.

## Results

- The average gestational age at birth was 33 weeks of gestation. The mean interval between cerclage and delivery was 13 weeks (15 weeks in the ultrasound guided group and 11 weeks in emergency cerclage group). In the ultrasound guided group 14% give birth between 24-27<sup>+6</sup> gestational weeks, 21% give birth between 28-33<sup>+6</sup> gestational weeks, 21% give birth between 34-36<sup>+6</sup> gestational weeks and 43% give birth > 37 weeks of gestation. In emergency cerclage group 14,2% gave birth between 24-27<sup>+6</sup> gestational weeks, 19% give birth between 28-33<sup>+6</sup> gestational weeks, 14,2% give birth between 34-36<sup>+6</sup> gestational weeks and 50% give birth > 37 weeks of gestation. In the ultrasound guided group there was one neonatal death and in the emergency cerclage group there were 3 neonatal deaths.

## Conclusion

- In our study population, late cervical cerclage was found to be a safe procedure resulting in almost 90% of successful deliveries without maternal or fetal complications. Cervical cerclage reduces the possible risks of preterm delivery by prolonging the interval until delivery.