

# Overview on history-indicated cerclage: are we overdiagnosing cervical insufficiency? a ten-year review at a perinatal differentiated hospital

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## **Objective**

To assess timing and route of delivery after prophylactic cervical cerclage. Secondary aims were to evaluate maternal complications and neonatal outcomes.

#### Methods

All cases of pregnant women with singleton pregnancy who underwent prophylactic cerclage and delivered at Centro Hospitalar Universitário do Algarve – Faro between January 2008 and December 2017 were analyzed. Clinical records were accessed for collection of obstetric data.

### Results

We included 12 pregnancies who underwent history-indicated cerclage meeting the inclusion criteria, corresponding to 9 different women. Mean maternal age either at first cerclage or overall was 28, 2 years (range 20-38). Pregnancy occurred spontaneously in 83, 3%. Eighty-percent of women had 2 or more prior pregnancies, but only 50% had a previous livebaby: 33, 3% had history of early second trimester lost and 58, 5% had previous late-first trimester losses. There were 3 cases of previously dilated cervix for curettage and 1 case of conization. Mean gestational age at hospital referral was 12 weeks, and the procedure was performed at a median of 16 weeks. Mean cervical length at cerclage placement was 27, 5 mm (range 10-38mm), and discharge occurred after an average 10, 7 days. Vaginal cerclage was performed in all cases (McDonald technique) and tocolysis with indomethacin was given. 25% were given prophylactic antibiotics. Progesterone was concomitantly prescribed to 83, 3% of cases. No maternal complications related to the procedure were recorded. Cerclage removal occurred in an outpatient setting in 83, 3% of cases, at a mean gestational age of 36, 9 weeks (range 35-41). Delivery occurred on average 14 days after cerclage removal (range 1-28), with a mean gestational age at birth of 38, 9 weeks. Labor occurred spontaneously in 75%, with two cases of induced labor at 41 weeks and 1 case of caesarian before labor for placental abruption. Vaginal delivery occurred in 83, 4% of cases. Only one case of late preterm labor occurred. Newborns had a mean birthweight of 3440g. There were no cases of admission to the neonatal intensive care unit.

#### Conclusion

In our analysis, delivery occurred at full term in most cases, several days after cerclage removal, with some patients requiring induction of labor. Neonatal outcomes were significantly encouraging after cerclage placement at the expense of no maternal complications. However, these results may suggest an overdiagnosis of cervical insufficiency based on history, resulting in overtreatment and the related costs and morbidities. More studies are required to assess the capability of prophylactic cerclage to impede adverse obstetric outcomes.