

The effect of an emergency cerclage to prevent preterm birth: a systematic review

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Objective

The aim of our review was to systematically review the literature to evaluate the available data on and the effectiveness of emergency cerclage before fetal viability (i. e. before 24/7 weeks of gestation).

Methods

We performed a comprehensive search in MEDLINE, EMBASE, CENTRAL, Cochrane, PubMed and ClinicalTrials.gov. We included randomized controlled trials, cohort studies and case-control studies comparing emergency cerclage with expectant management in singleton pregnancies with dilation of the cervix ≤ 5 cm at a gestational age between 14 and 24 weeks. Screening of papers for eligibility was accomplished by two independent investigators, any disagreements were resolved by consensus and, where necessary, a third reviewer was consulted.

Results

Four studies met our inclusion criteria and were included in our systematic review which were all non-randomized (retrospective) studies. The final study population resulted in a total of 215 women, among whom 163 (76%) women underwent cerclage placement and 52 (24%) were expectantly managed. Emergency cerclage was associated with significant lower rates of preterm birth before 37, 34, 32, 28 and 24 weeks of gestation, significant prolongation of the pregnancy and a greater gestational age at delivery compared to expectant management.

Conclusion

The current literature suggests that emergency cerclage before 24 weeks of gestation is associated with improved pregnancy outcomes (ie. less preterm birth) compared to expectant management. The results are limited by the lack of randomised trials and the potential for bias in the included studies.