

Cerclage for CL ≤20mm <24weeks in Singletons without Prior SPTB Decreases PTB: a Meta-analysis of RCTs using IPD Data EP16.52

Vincenzo Berghella MD, Siani Harding, Kypros Nicolaides MD, Orion A. Rust MD, Katsufumi Otsuki MD, Sietske Althuisius MD, Gabriele Saccone MD, Rupsa C. Boelig, MD

Objective

To evaluate the efficacy of cervical cerclage in preventing preterm birth (PTB) in asymptomatic singleton pregnancies without prior spontaneous PTB and with a mid-trimester short transvaginal ultrasound cervical length (TVU CL).

Methods

Medline, Cochrane Library, EMBASE, Pubmed Central, Scopus, ClinicalTrial.gov were electronically searched from their inception to November 2024. We included all randomized controlled trials (RCTs) of asymptomatic singleton pregnancies without prior spontaneous PTB screened with TVU CL, found to have a midtrimester short CL ≤25.9mm, and then randomized to management with either cerclage or no cerclage..

Main Outcome

The primary outcome: PTB <37 weeks.

Results

6 RCTs, n=507 asymptomatic singletons without prior SPTB and with short mid-trimester TVU CL ≤25.9mm. PTB < 37 week, occurred in 89/266 (33.5%) vs 96/241 (39.8%) in the cerclage vs no cerclage group, respectively (RR 0.88, 95% CI 0.59-1.31). Planned subgroup analyses revealed that **in patients with CL ≤20.9mm before 24 weeks, cerclage was associated with a significant decrease in PTB <37 weeks (56/181 (30.9%) vs 66/159 (41.5%); RR 0.75, 95% CI 0.56 to 0.99) and a significantly longer latency from randomization to delivery (p=0.049).**

Conclusions:

In singletons without prior SPTB and with short TVU CL ≤20.9mm before 24 weeks, cerclage is associated with a significant decrease in PTB < 37 weeks and a significant longer latency.

GA <24 weeks	Cerclage	No Cerclage	RR (95% CI)
CL≤25.9mm	73/216 (33.8%)	82/198 (41.4%)	0.82 (0.63 to 1.06)
CL≤20.9mm	56/181 (30.9%)	66/159 (41.5%)	0.75 (0.56 to 0.99)
CL≤15.9mm	49/151 (32.5%)	56/126 (44.4%)	0.73 (0.54 to 0.99)

