



Laparoscopic Transabdominal Cerclage effectiveness in consecutive pregnancies



Isabela dos Anjos Siqueira¹, Alex Ades^{1,2}

1- Agora Specialist Centre, Epworth Hospital, Melbourne, Victoria, Australia

2- Department of Obstetrics and Gynecology, Royal Women's Hospital, University of Melbourne, Victoria, Australia

Background: Cervical insufficiency is described as the inability of the uterine cervix to retain a pregnancy in the second trimester in the absence of clinical contractions, labour or both. It is, therefore, a major cause of preterm delivery and consequently, mortality and morbidity for mothers and babies. Transabdominal cerclage (TAC) is currently used as first option for women who have previously failed transvaginal cerclage (TVC) or have significantly shortened cervix, not amenable to a TVC.

Aims: This study aims to evaluate the obstetric outcomes of subsequent pregnancies in women who had more than one pregnancy with the same laparoscopic transabdominal cerclage.

Methods: A prospective observational study of women who underwent laparoscopic transabdominal cerclage from 2007 to June 2021 performed by a single surgeon (AA) and had more than one delivery was conducted. The primary outcome is neonatal survival and secondary outcome is delivery at ≥ 34 weeks.

References:

1. Moawad G, Tyan P, Bracke T, Abi Khalil E, Vargas V, Gimovsky A, Marfori C. Systematic Review of Transabdominal Cerclage Placed via Laparoscopy for the Prevention of Preterm Birth. *J Minim Invasive Gynecol.* 2018; 25(2):277.
2. Norwitz E, Craigo S. Transabdominal and Laparoscopic Cervicoisthmic Cerclage. *UpToDate.* Retrieved July 23, 2018.
3. Ades A, Parghi S, Aref-Adib M. Laparoscopic transabdominal cerclage: Outcomes of 121 pregnancies.

Results: During the study period, our Centre performed 422 laparoscopic Transabdominal Cerclages and 335 deliveries were reported post TAC. Excluding twin pregnancies and deliveries, 58 women had more than one delivery on the same cerclage. 48 women had two deliveries, 9 had three and one had 4 deliveries. Neonatal survival in second pregnancies after a TAC was 98%. Survival in third and fourth pregnancies was 100%. 93% of second pregnancies after TAC were delivered after 34 weeks whereas 100% of third pregnancies went above 34 weeks.

Conclusion: Women and caregivers can be reassured that the same transabdominal suture can be reused in subsequent pregnancies with good outcomes.

