Transabdominal cerclage-safety, efficacy and the role of surgical experience.

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Objective

Transabdominal cerclage (TAC) has traditionally been reserved for patients in whom a transvaginal cerclage (TVC) has failed or is not feasible due to deep cervical laceration or severe cervical shortening. We have also offered TAC to higher order multiples as a prophylaxis against cervical insufficiency. This is an evaluation of safety and efficacy in a large group of patients undergoing TAC.

Study design

183 TACs have been performed by a single maternal fetal specialist. Our evaluation focused on maternal and fetal safety, efficacy of the procedure, and the potential effect of operative experience through chart review and concurrently collected data. Statistical analysis was by Fisher's Exact Test.

Results

In 183 cases, only 1 required transfusion, 1 case of wound hematoma, no cases of rupture of membranes during the procedure and no cases of fetal death in the perioperative period. There were 3 cases of erosion of the cerclage, one in a septuplet gestation at 21 weeks, one in a triplet pregnancy at 33 weeks, and one in a singleton pregnancy at 38 weeks, all due to labor. After TAC, 5/85 (5.9%) singleton pregnancies with history of failed prophylactic vaginal cerclage in a prior pregnancy delivered at < 28 and 3/85 < 24 weeks compared to 52 < 28 and 43 < 24 weeks in prior pregnancies (p = 0.001). In the first 49 surgeries performed in singletons, second trimester losses occurred 5 times but 0 times in the latter 76 cases (p = 0.011). Prophylactic TAC was performed in 39 triplet gestations, with only one pregnancy delivering prior to 28 weeks, compared to 5/34 undergoing vaginal cerclage and 0/22 with no cerclage in the same practice (p=.041).

Conclusion

TAC is a relatively safe procedure. Experience may play a role in safety. Efficacy is apparent in selected patients with classical indications. TAC may be helpful to avoid very early delivery in higher order multiples. Whether TAC should be used in patients with cervical insufficiency without prior failed TVC will best be addressed by a randomized prospective trial.