Cerclage for the management of cervical insufficiency

Mehdi Paydar MD. FACOG

Objectives

- Definition
- Diagnosis
- Treatment Options (Medical of surgical)
- In which patients is cerclage indicated (History OR physical Examination)?
- What is the Role of Ultrasonography in Managing Pts. with a History of cervical Insufficiency?
- Which Patients should not be considered for Cerclage ?
- Is Cerclage associated with increase morbidity?
- How should women with Cercalge and ***PROM*** be managed ?
- Is there a role for additional pre operative Intervention and post operative Ultrasonography assessment with cerclage ?
- Condidates for progesterone (Prior PTB and short Cervix) should be offered Cerclage and progesterone .

Definition

- Inability of the uterine cervix to retain a pregnancy in the absence of the signs and symptoms of clinical contraction or labor in the second trimester.

Diagnosis

- Painless of cervical dilation after the first trimester with abortion in the 2nd trimester, In the absence of other clear pathology and typically before 24 wks.
- In non-pregnant women, none of tests (H.S.G. Hegar test ….) have been validated for diagnosis

Treatment options

- Nonsurgical (Bed rest pelvic rest, restricted activity) are not effective
- Surgical approaches (McDonald, shirodkar) are with equal result
- Transabdominal cervical cerclage (by laparotomy or Laparoscopy) is reserved in the case of failed vaginal cerclage and are performed in the early 2^{nd} trimester

Indications

- Indicated based on obstetric history or vaginal exam .

What is the role of ultrasonography in managing women with a history of cervical insufficiency?

- Unnecessary history indicated cerclage ***can be avoided in more than 50%*** of patients
- Most patients at risk of cervical insufficiency can be safely monitored with serial vaginal sonography ***between 16 weeks and 24 weeks***
- Cerclage is useful in women with ***combination of history and ultrasound*** findings

Cerclage and Preterm Birth

Cerclage in women ***without*** history of prior spontaneous preterm birth and with a cervical length less than 25mm at 16-24 weeks ***has not been*** associated with a significant reduction of preterm birth

Which patients should not be considered for cerclage?

- Twin pregnancy (cerclage may increase the risk of preterm Birth)
- Prior conization loop electrosurgical excision
- Patients with mullerian anomaly

Is cerclage associated with an increase in morbidity?

- Overall, there is a low risk of complication.
- PROM , chorioamnionitis, cervical laceration, suture displacement
- Septicemia and uterine rupture are extremely rare

Is there a role for additional preoperative interventions and postoperative ultrasonography with cerclage?

- Neither antibiotic nor tocolytic shown to improve the efficacy of cerclage
- Sonography surveillance of cervical length after cerclage is not necessary

When is removal of McDonald suture indicated in patients with no complications

- At 36-37 Weeks
- In most cases , removal McDonad suture in the office is appropriate

How should patients with cervical suture and PROM be managed?

- No firm recommendation
- If cerclage remains, antibiotic prophylaxis beyond (7) days is Not recommended

Should cercalge be removed in patient with PTL?

- Cerclage removal recommended in case of:
  - Cervical change
  - Painful contractions
  - Vaginal bleeding

When is cervical ultrasonography clinically indicated in singleton pregnancies?

Symptoms suggesting preterm cervical change

- Persistent mild cramping
- Altered cervical discharge
- Pelvic pressure
- Backaches
- Short cervical length in a transabdominal ultrasonogram
- OR combination of the above

Identification of candidates for progesterone

ACOG and society for maternal-fetal medicine recommendation :

Women with a prior spontaneous preterm birth and short cervix (less than 25 mm) should be offered treatment with supplemental progestogens and cervical cerclage

When should 17-α hydroxyprogesterone caproat be initiated?

between : 16-20 weeks of gestation

prematurity prevention

-There are no strategies to reduce the incidence of preterm birth in Multifetal Gestation .

-Progesterone does not reduce the risk of PTB in twin or more; even with short cervix .

-Cerclage can increase the risk of PTB in women with a short cervix .

Thank You

OB.GYN. Vol.123,no.2, Part I, Feb 2014, Page 372-377