ORIGINAL RESEARCH PAPER

Obstetrics & Gynaecology

KEY WORDS: Incompetent cervical OS, thinned out cervix, Cervical Cerclage by Bead technique.

RESCUE CERVICAL CERCLAGE WITH BEADS AND KNOT TECHNIQUE

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ABSTRACT

21year old Primigravida reported with history of 29weeks pregnancy with ultrasonography suggestive of incompetent cervical OS. On examination, patient was vitally stable. Uterus was corresponding to the period of gestation. Per speculum examination revealed cervix was thinned out, membranes bulging out through 3cm dilated cervical OS. Patient was taken up for Cervical Cerclage procedure. Intraoperatively cervix was dilated and bulging, membranes could be seen through the OS. Preoperatively, diagnosis of incompetent cervical OS was made. Cervical Cerclage was performed by Bead technique. Ultrasonography findings were suggestive of U-shaped funnelling of Cervical OS with AP diameter: 2.1cm, length: 2.5cm, functional length: 1.23cm

INTRODUCTION

Cervical incompetency also termed as Cervical insufficiency. It is a discrete obstetric entity characterized classically by painless cervical dilatation in second trimester.

Although the cause of incompetence is obscure, previous cervical trauma such as dilatation and curettage, conization, cauterization or amputation has been implicated as the risk factor for cervical incompetence. Complications associated with this procedure includes membrane rupture, preterm labour, hemorrhage, infections or combinations thereof.

Cervical insufficiency may be present in up to 1% of obstetric populations, and it therefore represents a concern frequently enough that a guideline to address.

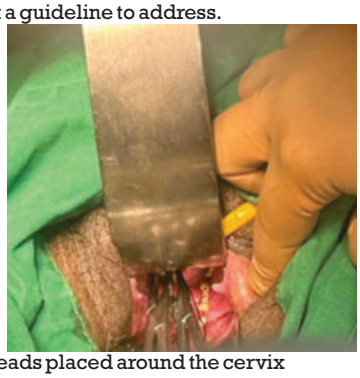

Figure 1: Beads placed around the cervix

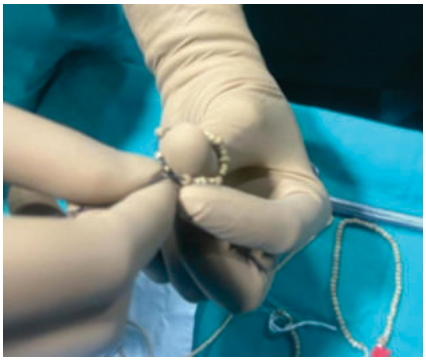

Figure 2

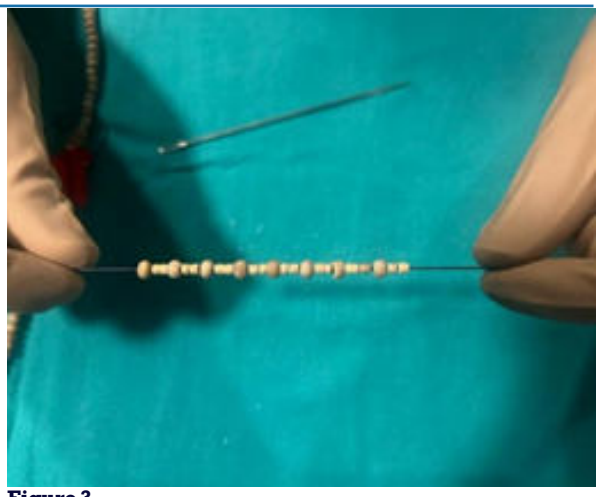

Figure 3

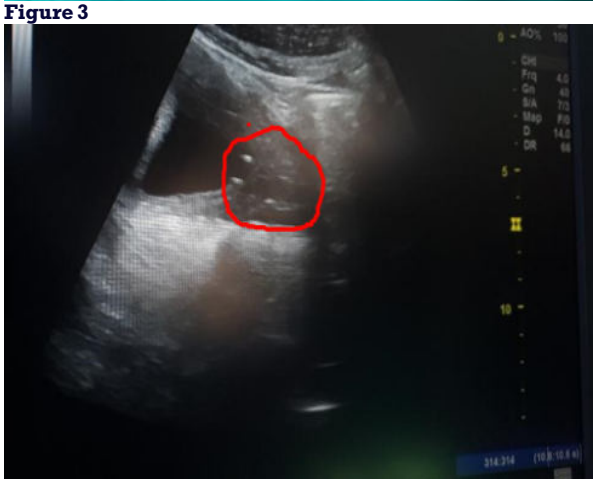

Figure 4 Beads as seen on Ultrasonography.

CASE STUDY

21 year/old Primigravida reported with history of 29 weeks pregnancy with ultrasonography suggestive of incompetent cervical OS.

On examination- The abdominal examination revealed uterus to be corresponding to the period of gestational age Fetal heart sounds present

Per speculum examination revealed cervix was thinned out, membranes bulging out through 3cm dilated cervical OS.

Per Vaginal Examination- OS was 3cm dilated and bag of membranes bulging till OS Laboratory investigations were all within normal limit Ultrasonography findings were suggestive of U-shaped funnelling of Cervical OS with AP diameter: 2.1cm, length: 2.5cm, functional length: 1.23cm

Plan Of Action
Cervical Cerclage procedure using bead technique

Intraoperatively radiology call was given, ultrasonography findings suggestive of anterior cervical lip 1.1cm, posterior cervical lip : 1.2cm, Cervical OS 2.1cm dilated.

Intraoperative Findings
Cervix was dilated, bulging membranes seen through dilated OS. Head low was given to the patient which caused bulging membranes to move into the OS. By Bead technique suture was taken at 12 O' clock position and beads were placed completely around the cervix and knot was taken at 12 O' clock position causing closure of the opened OS. Fetal cardiac activity was confirmed on Ultrasonography. The patient made uneventful recovery and was discharged on Post operative day 7 on Cap. Depin 10mg, Tab. Erythromycin 250mg, Inj. Proluton 500mg weekly. Patient regularly followed up with Ultrasonography reports and on local examination beads were felt insitu.

Patient was readmitted at 38weeks of gestation for safe confinement. On examination, patient was vitally stable, uterus was corresponding to period of gestation. Per speculum examination revealed 3-4cm dilated cervical OS, fully effaced cervix. Beads were not felt (showing possibility of spontaneous expulsion of beads) pelvis was adequate for the baby to deliver vaginally. Ultrasonography findings suggestive of 0.8cm cervical length, Amniotic Fluid Index: 7.2cm, Estimated Fetal Weight: 3370gms, Doppler: normal.

PATIENT DELIVERED A LIVE, HEALTHY, FEMALE CHILD ON 08/09/2023 at 01.06pm WITH BIRTH WEIGHT OF 3280GMS.

DISCUSSION:
Cervical incompetency are on rising trend and the diagnosis is confirmed by sonographically with ruptured membranes and bleeding or contractions or both, a likelihood of failure is substantially increased. Thus prophylactic Cerclage before dilatation is preferable. At times a rescue Cerclage is performed emergently after the cervix is found to be dilated, effaced or both. In some or even many of these women, Cerclage is unknowingly being used to incorrectly to treat preterm labour with cervical dilatation rather than incompetent cervix.

There is always a debate as to how late can this procedure be performed. The conundrum is that the more advanced the pregnancy, the greater the risk that the surgical intervention will stimulate preterm labour or membrane rupture.

CONCLUSIONS
Cervical incompetence when diagnosed, should always be managed promptly as it can reduce Neonatal Morbidities and Mortalities. Hence patients who are at risk for Cervical incompetence should be evaluated thoroughly and managed accordingly.

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