

Successful Emergency Cervical Cerclage for Advanced Cervical Dilatation in a Primigravid. A Case Report

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ABSTRACT

Introduction and Importance: This case highlights the success of an emergency cervical cerclage even with advanced cervical dilatation.

Case Presentation: A 26-year-old lady, at her first pregnancy, her past medical and surgical history was unremarkable apart from laparoscopic ovarian cystectomy for serous cystadenoma five years ago.

The pregnancy was uneventful till the 25th week, and while performing the anomaly scan, the sonographer noticed a dilated internal cervical os, although the lady was asymptomatic. A speculum examination was conducted to find a bulging fetal membrane through a dilated cervix with visible fetal parts. A diagnosis of cervical incompetence was made.

As the case was an emergency, leaving her without intervention would lead to inevitable pre-term delivery. Emergency cervical cerclage using a purse-string maneuver as the cervix was more than 4 cm dilation, indomethacin suppositories for two days, and Progesterone injections were started and continued through the pregnancy, and she was advised to restrict her activities.

At 37 weeks' gestation, the cerclage was removed, and the patient progressed in labour spontaneously to deliver after two hours of removing the cerclage a healthy female weighing 3.295kg.

Relevance and Impact

The main take-away lessons are:

The importance of cervical competence assessment for all cases.

Emergency cerclage can save the life of the fetus even if the cervix is in advanced dilatation.

Keywords: Cervical Cerclage, Insufficient Cervix, Primigravid, Midtrimester Miscarriage

Introduction

Background

Second-trimester miscarriage and preterm labour may be caused by cervical incompetence. The American College of Obstetricians and Gynaecologists defines cervical insufficiency as the uterine cervix's incapacity to sustain a pregnancy during the second trimester without the presence of labour, clinical contractions, or both [1].

According to earlier research, executing cerclage may be beneficial since these individuals had a longer latency period until delivery, a larger gestational age at birth, and a reduced rate of prematurity [2].

Rationale

This case is interesting as it is rare to face a case of prolapsed membrane with visible fetal parts and with difficulty in performing the typically known cervical cerclage procedure, and to finish her pregnancy till 37 weeks.

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Guidelines and Literature

The guidelines recommend an emergency cerclage with or without a period of observation before proceeding to the procedure.

Antibiotics, Indomethacin, Progesterone, and bed rest may be used to further prolong the pregnancy to achieve viability [3].

Patient Information

The patient was a 26-year-old lady housewife with an average body mass index, in a stable marital status.

Presentation

The patient presented for usual antenatal care. While performing the anomaly scan, the sonographer noticed an open internal cervical os, although the lady was asymptomatic. A speculum examination was conducted to find a bulging fetal membrane through a dilated cervix more than 4 cm, in the upper part of the vagina, with visible fetal parts.

Past Medical and Surgical History

She had no medical problems before, apart from laparoscopic ovarian cystectomy for serous cystadenoma five years ago.

Drug History and Allergies

She has no history of any allergies.

Family History

No relevant medical disorders in the family.

Social History

She lives with her husband in a flat on the third floor without an elevator. The husband is a smoker.

Clinical Findings

The patient presented in a stable general condition without any complaints.

Timeline

The patient was seen at the outpatient department at 15:00, the diagnosis was done, then the couple was counselled about the diagnosis and the need for an emergency cerclage; they agreed, and after two hours of arrangements, the patient was admitted to the operating theatre.

Diagnostic assessment and interpretation

Diagnostic Assessment

An anomaly scan was done, showing a singleton viable female fetus without structural anomalies.

CBC and CRP were within normal range.

Prognostic Characteristics

The pregnancy was a singleton, and the presentation was without pain and features of infection.

Intervention

Pre-Operative Patient Optimisation

The patient was admitted and advised to restrict her activity and to stay fasting.

Surgical Interventions

Preoperative:

Indometacin 100mg rectally prophylaxis was given, then an emergency cervical cerclage was performed. Progesterone was started and continued for 37 weeks.

Broad-spectrum antibiotics were started and continued for 5 days postoperatively.

Procedure: Under general anesthesia, the patient was in the Trendelenburg position, with the head down position. Using wet sponges to reduce membranes, as the cervix was dilated and the cervical tissue was small, McDonald; suture was difficult to perform, so instead we performed a purse string stitch using a Mersilene tape (5 mm) after gradual membrane reduction.

Indomethacin 100mg rectally twice daily was continued for two days postoperatively.

Specific Details regarding Interventions

As the cervix is advanced dilated with visible fetal parts, miscarriage is ominous. Emergency cerclage was needed and discussed with the couple as a way to may save the pregnancy. Indomethacin 100mg was inserted rectally, and hydroxyprogesterone 100mg was injected intramuscularly to relax the uterine muscles, and prophylaxis broad-spectrum antibiotic was started.

After two hours of arrangement, the patient was admitted to the operating theatre. under general anesthesia, the patient was in the Trendelenburg position, with the head down position to decrease the tension on the cervix.

Using wet sponges to reduce membranes, as the cervix was dilated more than 4cm and the cervical tissue was small, McDonald; suture was difficult to perform, so instead we performed a purse string stitch, starting anteriorly and continue around the cervix with progressive pull and punctures with the needle till we return to the initial point using a Mersilene tape (5 mm). At the same time, the assistant continued a gradual membrane reduction using a wet sponge.

To our knowledge, it has not been mentioned before to use a Mersilene tape in this way.

Operator Details and Setting of Intervention

The operator was a consultant with 30 years of experience. The procedure was performed at Yashfeen clinic.

Follow-Up and Outcomes

The patient was discharged home on the second day with instructions to reduce daily activity, to continue her medicines, and to keep in contact with the team through phone consultations regarding any fever or discharge, or pain.

She was advised to present to the clinic after four weeks.

Intervention Adherence and Compliance

The patient was adherent to the advice provided.

Outcomes

The patient continued her follow-up as per the regular antenatal care schedule without any further complications. At 37 weeks' gestation, the cerclage was removed, and the patient progressed in labour spontaneously to deliver after two hours a healthy female weighing 3.295kg. Both the mother and her daughter went home on the second day.

Complications and Adverse Events

There were no complications.

Discussion

Strengths

The strength of the case lies in its presentation of advanced cervical dilatation, the modification of the known procedure, and the success of prolongation of pregnancy till maturity.

Weaknesses and Limitations

Assessment of cervical length at the early stage was not done as it is not included in the antenatal care system in our country.

Relevant Literature

Literature review shows presentation of different cases managed with different types of cerclages, including vaginal and abdominal access. The success of the different procedures is dependent on the case, her presentation, and the aetiology of the insufficiency.

Take-Away Lessons

Cervical insufficiency is a known risk factor for midtrimester miscarriage and preterm labour.

An effective screening protocol for cervical insufficiency may reduce preterm labour caused by such factors.

The application of cervical cerclage is an effective tool that could prevent mid-trimester miscarriage and preterm labour.

Informed Consent

The patient and her husband gave their consent

Additional Information

This case report has been written according to the SCARE guidelines [4].

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Reference

1. ACOG Practice Bulletin No.142: Cerclage for the management of cervical insufficiency. Obstet Gynecol. 2014. 123: 372-379.
2. Costa MMF, Amorim Filho AG, Barros MF, Rodrigues AS, Zugaib M, et al. Emergency cerclage: gestational and neonatal outcomes. Rev Assoc Med Bras. 2019. 65: 598-602.
3. Chatzakis C, Efthymiou A, Sotiriadis A, Makrydimas G. Emergency cerclage in singleton pregnancies with painless cervical dilatation: A meta-analysis. Acta Obstet Gynecol Scand. 2020. 99: 1444-1457.
4. Agha RA, Franchi T, Sohrabi C, Mathew G, Kerwan A, et al. The SCARE 2020 Guideline: Updating Consensus Surgical CAse REport (SCARE) Guidelines. Int J Surg. 2020. 84: 226-230.