Emergency Cervical Cerclage: A Case Report

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This report describes emergency cervical cerclage performed at Ondokuz Mayıs University. A women with singleton pregnancy in 20 weeks gestation presented with a cervical dilatation of 10 cm and membrane prolapse. After exclusion of labor, preterm rupture of membranes and chorioamnionitis, an emergency cervical cerclage was proposed to the patient. The membranes were replaced using the technique of overfilling the urinary bladder and then performing McDonald's cerclage. The patient received prophylactic antibiotics and tocolytics. Pregnancy ended in live birth. The extension of pregnancy in the survivor was 17 weeks, and the gestational age at delivery 37 weeks. Emergency cerclage should be considered as a management option in women with painless cervical dilatation and membrane prolapse in the midtrimester.

Key Words: Cervical incompetence, Cervical cerclage

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Introduction

Emergency cerclage has been used for painless cervical dilatation and membrane prolapse for several years. It previously associated with dismal prognosis until it was method of therapy for patients with cervical incompetence. Also, cases with the membranes already protruding are not always unsalvageable.[1-7]

Case

A 35-years-old, primiparous patient who had conception after in vitro fertilization presented with impending preterm labor at 20th weeks of pregnancy. She had a cervical dilatation of 10 cm and had membranes prolapsed into the vagina. After exclusion of labor, preterm rupture of membranes and chorioamnionitis, an emergency cervical cerclage was planned. The prolapsed membranes were replaced using the technique of overfilling the urinary bladder. The membranes started to recede after 500 cc infusion and with the recession of the membranes into the uterine cavity, reformation of the cervix occurred. The length of the reformed cervix was 2-3 cm and dilatation was 4-5 cm. A McDonald's cerclage was placed just below the bladder base. There were no anesthetic complications and blood loss was less than 10 cc.

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Tocolysis was continued for 72 hours postoperatively, and the patient was observed in the ward. Patient was given cephradine intravenously during the procedure and continued for 72 hours. Patient was discharged one week after cerclage with advices to take plenty of rest, to avoid coitus and to attend the antenatal clinic for assessment at three-week intervals.

The gestational age at delivery was 37 weeks and the pregnancy was prolonged for a period of 17 weeks after the cerclageprocedure. The pregnancy ended in live birth. Histopathological examination of the placenta and fetal membranes was free of signs of chorioamnionitis.

Discussion

Emergency cervical cerclage can be offered to women with impending preterm labor and cervical incompetence during their second trimesters. The main complication of emergency cervical cerclage is that membranes can rupture during the procedure, especially when the cervix is widely dilated. To prevent that, Scheerer et al. described a technique for reducing prolapsed fetal membranes without direct mechanical contact, by filling the bladder with a 0,45% saline solution through a Foley catheter.[4] Overfilling the urinary bladder was associated with reduction of herniated membranes. We have not found that technique satisfactory when cervical dilatation and protrusion of fetal membranes are both substantial. Therefore, we experimented with a new technique to replace fetal membranes into the uterus using a balloon designed for endoscopic preperitoneal dissection. The concept was inspired by reports in which authors used Foley catheters to reduce prolapsed membranes.[1,8]

We expect the interest in emergency cerclage to increase in

the future. In order to avoid unnecessary elective cerclage, there is a growing tendency to delay it until evidence of cervical changes at ultrasound scan appears. This policy may increase the presentation with painless cervical dilatation and membrane prolapse in the midtrimester. Second, there is much scepticism about the value of emergency cerclage, although several authors have reported that it can prolong pregnancy and influence the outcome favorably.[1,2] Our result also suggest that an active approach to cervical dilatation in the midtrimester can lead to delivery of a viable infant. In our case, successful cerclage prolonged the pregnancy to 37 weeks and as a result the majority of babies did not require special care and if they did it was only for a short time.

Important procedures that will ultimately determine the successful outcomes for women with cervical dilatation in middle trimester are: 1) the exclusion of placental abruption; 2) exclusion and prevention of labor; 3) successful reduction of membranes; and 4) exclusion and prevention of infection. Placental abruption and labor were excluded by observing the patients for a period of time before considering emergency cerclage. By the technique of overfilling the urinary bladder, we were able to replace the membranes successfully. This compares favorably with a 30% rate of intraoperative rupture of membranes reported by Hargar.[3] The main advantage of this technique is its ability to replace the membranes without touching them even when a large part of the membranes had prolapsed into the vagina.[4] The uterine-relaxing effect of halothane, Trendelenburg position of the patient, and traction of the cervix helped the herniated membranes to fall back. We did not find exclusion of labor, placental abruption and replacement of membranes to be difficult.

The main difficulty, as reported by previous authors, is the exclusion of infection before insertion of suture and prevention of it thereafter.[5,6] The diagnosis of clinical infection (in the presence of pyrexia, uterine tenderness and purulent vaginal discharge) should not pose a problem.

Acil Servikal Serklaj: Olgu Sunumu

Bu rapor 19 Mayıs Üniversitesindeki acil servikal serklaj uygulamalasını anlatmaktadır. Tek bebekli hamileliğinin 20. haftasında, 10 santimetrelik servikal açılma ve zar sarkması olan bir kadına; doğum sancısı, ablatio plasenta ve intrauterin enfeksiyon dışlandıktan sonra acil serklaj yapılmıştır. Zarlar idrar torbasının fazla doldurulması tekniğiyle kaviteye gönderildi ve devamında Mc Donald's serklajı yapıldı. Hastaya profilaktik antibiyotikler ve tokoliz uygulandı. Hamilelik canlı doğumla sonuçlandı. Hamilelik süresinin uzaması 17 haftayı, doğum esnasındaki hamilelik yaşı 37 haftayı buldu. Acil servikal serklaj uygulaması, 2. trimesterde zar sarkması ve ağrısız servikal açılmaya maruz kalan kadınlarda bir tedavi seçeneği olarak düşünülmelidir.

Anahtar Kelimeler: Servikal yetmezlik, Servikal serklaj

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