CERVICAL INSUFFICIENCY

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Article History: Received: 05.04.2023 **Revised:** 10.05.2023 **Accepted:** 13.05.2023

Abstract

Cervical insufficiency is the inability of the cervix to retain fetus, in the absence of uterine contractions or labor (painless cervical dilatation), owing to a functional or structural defect. It is cervical ripening that occurs far from the term. Cervical insufficiency is rarely a distinct and well defined clinical entity but only part of a large and more complex spontaneous preterm birth syndrome. This activity reviews the cause and presentation of cervical incompetence and highlights the role of the interprofessional team in its management..

Keywords: Obstetrics & Gynaecology Department, Faculty of Medicine, Minia University

DOI: 10.48047/ecb/2023.12.si4.813

1. INTRODUCTION

Cervical insufficiency can be described as an inability of cervix uteri to retain the pregnancy in the absence of objective signs of labor, for example due to normal uterine contraction, especially in the second trimester. It has a particular clinical importance since preterm birth and prematurity-related risks are high in this group of patients. The incidence is reported to be around 1% in the general obstetric population, but this rate is 8% in women with second trimester pregnancy loss (1).

The etiology of cervical insufficiency is not clear but risk factors include antecedent cervical surgeries such as conization, repeated dilatation and curettage, congenital uterine anomalies, in utero exposure to the synthetic estrogen, diethylstilbestrol and, possibly, the most important risk factor is a history of cervical insufficiency in previous pregnancies (2).

Bed rest, activity restriction and vaginal pessaries are non-surgical treatment modalities for cervical insufficiency and the effectiveness of these modalities has been evaluated previously (3-5). Activity restriction was reported to be ineffective in one study (6). Moreover, a higher risk of preterm delivery has been reported in women advised to restrict activity. In singleton pregnancies diagnosed with short cervix, expectant management was compared with vaginal pessaries and pessaries were shown to be more effective at reducing delivery under 34 gestational weeks. However, in twin pregnancies, vaginal pessary was not superior to expectant management in preventing delivery under 34 gestational weeks in a contemporary publication. Due to a lack of consensus in identifying the optimal non-surgical treatment, these modalities are generally discouraged (2).

Cervical cerclage procedures can be performed trans-abdominally or trans-vaginally. Trans-abdominal approaches should be reserved for patients with cervical anatomical disturbances, such as trachelectomized patients, and also for patients with repetitive failure of trans-vaginal cerclage that resulted in pregnancy loss. McDonald- and Schirodkar-type trans-vaginal cervical cerclage are the best known and most widely performed and both are equally effective (7).

Indication for cerclage can be based on medical history or as a result of findings uncovered during physical examination often requiring emergency cerclage procedures. The American College of Obstetrician and Gynecologists (ACOG) define indications for prophylactic cerclage as painless cervical dilatation or a requirement for cervical cerclage in a prior pregnancy. ACOG guidelines recommend that indications for emergency cerclage include painless cervical dilatation in the second trimester and cervical length less than 25 mm with a history of preterm birth before 34 gestational weeks in a prior pregnancy (2).

Success of these cerclage procedures in preventing preterm delivery may be affected by a range of clinical parameters and patient characteristics.

The recruited patients will be subjected to history taking, clinical examination, ultrasound evaluation including cervical assessment [cervical length, cervical dilatation and prolapsed membranes],

routine laboratory testing, high vaginal swab and urine culture. They will be evaluated with senior obstetrician. Sterile speculum examination will be done to assess the condition of the cervix and membranes and to obtain high vaginal swab to exclude the possibility of infection.
Recruited patients will be counselled in details about her condition. They will be offered the options of emergency cervical cerclage. All risks and benefits will be explained. Those who declined the procedure will be offered the option of conservative management.

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