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### **CASE REPORT**

Hematometra Ec Stenosis Of The Cervix Of The Uterus: A Case Report

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#### Abstract

Background: Cervical stenosis has been defined as a narrowing of the endocervical canal preventing passage of a 2.5-mm Hegar or Pratt dilator. Stenosis of the external cervical os has been described as an external os diameter of less than 4.5mm. Symptoms of cervical stenosis are dependent on the degree of endocervical canal obstruction and the patient's menopausal status. Those patients with severe or complete obstruction of the endocervical canal can experience hematometra with scant or sporadic menstrual flow, amenorrhea, dysmenorrhea, chronic pelvic pain, and infertility.

**Case Report :** A 16-year-old woman was consulted from Pediatric with cervix stenosis with haematometra wich had been noticed since a month ago. Menarche at the age 13 years, regular and slightly pain menstruation every month. The result of MRI examination represented bilateral hematometra and hematocolpos ec suspected cervical stenosis. The management of this case was cervical dilatation and cervical tube installation.

**Conclusion :** Cervical stenosis is a caused of menstrual complaint which is characterized by slightly pain while menstruation, hematometra and hematocolpos.

# Keywords:



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# INTRODUCTION

Cervical stenosis is defined as a narrowing of the endocervical canal preventing passage of a 2.5 mm Hegar or Pratt dilator. Stenosis of the external cervix is described as a narrowing of the external os measuring less than 4.5 mm in diameter. 1.2 The incidence of cervical stenosis remains unknown, but a retrospective review showed that out of 30,000 hysteroscopy procedures, one third of cases were identified as cervical stenosis. 3 Cervical stenosis may result from congenital abnormalities or be secondary to cervical trauma, infection, cancer, radiation, or post-menopausal atrophy. In addition, nabothi cysts and leiomyomas in the cervical canal can contribute to cervical stenosis. Common risk factors for cervical stenosis include nulliparity, history of endometrial curettage, and treatments for cervical dysplasia such as cervical conization, cryotherapy, and colposcopy biopsies.

Symptoms of cervical stenosis depend on the degree of obstruction of the endocervix and the menopausal status of the patient. Mostly, premenopausal patients with incomplete obstruction are asymptomatic and present with the chief complaint of infertility.

Patients with severe or complete endocervical obstruction may develop a hematometra with scanty or infrequent menstrual flow, amenorrhea, dysmenorrhea, chronic pelvic pain, and infertility. Women with cervical obstruction have a higher incidence of endometriosis due to increased retrograde menstruation which often resolves after the obstruction is treated. 5 Post-menopausal patients with cervical stenosis are generally recognized when there are complaints of post-menopausal bleeding. Physicians need to carefully consider menopausal status, risk factors, and symptoms that appear in patients to anticipate treatment options for patients.

Common management of cervical stenosis with cervical dilatation. There are two main methods of cervical dilatation, namely mechanical methods that include traditional dilators (such as Hern, Pratt, Hanks, and Denniston dilators)7-10, balloon catheters or osmotic dilators,8,11 or pharmacological methods, namely prostaglandins or hyoscine butylbromide.12-14

# CASE REPORT

A 16-year-old woman for obstetric care, admitted from the urogynaecology polyclinic, previously consulted a child with a diagnosis of hematometra ec, suspected cervical stenosis. Complaints of stomach feeling bloated, hard, and painful. Menstruation has been coming out little by little since I was 13 years old. Abdominal pain is felt every menstrual period since one month ago. There was no history of weight loss, fever, trauma, and leukorrhea. Feces and urine within normal limits.

Menstrual history of a patient with menarche aged 13 years, regular menstrual cycles every 28 days for 5-6 with 2-3 changes of pads every day. The patient complains of slight pain every menstrual cycle.

On pre-operative physical examination, vital signs were found with blood pressure 100/60 mmHg, pulse 90 beats/minute, respiratory rate 20 beats/minute, and temperature 370C. On general examination found within normal limits. On abdominal examination, there was a

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feeling of tension on palpation and no distention was seen. On examination of the genitalia there was a hymen, there were no tumors, lacerations, and bleeding.



Figure 1. Preoperative vaginal inspection

The patient underwent further pelvic MRI examinations. The results obtained were bilateral hematometra and hematocolpos ec suspected cervical stenosis and septate cystic lesion in the pelvic area ec suspected ovarian cystic tumor dd/oozing. No masses or enlarged lymph nodes were found on MRI.



Figure 2. Pelvic MRI with Hematometra and Hematocolpos

The operative procedure performed on this patient was a buccination laparotomy under spinal anesthesia for indications of haematometra and haematocolpos ec cervical stenosis. The patient also underwent cervical dilation and cervical tube insertion.



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Figure 3. Upper Busination Laparotomy Indications of Cervical Stenosis

# **DISCUSSION**

Cervical stenosis is one of the causes of hematometra and hematocolpos during childbearing age. Hematometra is a clinical condition in which menstrual blood is retained and collects in the uterine cavity. 15 The formation of cervical stenosis is associated with increasing age and menopause. Many risk factors can cause cervical stenosis. According to Hasegawa et al. reported that premenopausal and postmenopausal patients with laser cone biopsy had an incidence of cervical stenosis of 8.3% and 59.1%.

In addition, cervical stenosis due to cervical surgical procedures such as Loop Electrosurgical Excision Procedure (LEEP)17-22 and conization, history of cervical radiation therapy23 or a complication of endometrial detachment. 24 Ablation of the cervico-uterine junction is possible in some cases, which makes choosing difficult. surgical procedure. 24 Cervical stenosis can present as a late complication of extensive resection or trauma to the cervical orifice, and the presentation of symptoms depends on the degree of obstruction. 25 Conization of the cervix is associated with a high risk of stenosis of 1.3%–25%. 25 Contrary to previous studies carried out by Suh-Burgmann et al. reported that there were 6% cases of cervical stenosis after the LEEP procedure

The study conducted by Biggs et al. It showed that there were 75 patients (51%) who had severe cervical stenosis and 63 patients (43%) had complete cervical stenosis. One patient was identified as having a hematometra but the pelvic ultrasound showed normal results. Patients underwent cervical dilatation therapy with 5 patients under general anesthesia and 119 patients (83%) underwent cervical dilatation under local anesthesia. Hegar dilator used an average of 8 mm. Six patients could not be inserted with a speculum and in 19 cases failed the cervical dilatation procedure



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There were no reports of complications in patients who underwent successful cervical dilatation.26 Arsenijevic et al. reported that cervical tissue damage was greater in the use of Hegar dilators compared to balloon dilators. The use of prostaglandins as a pharmacological treatment can reduce the risk of lacerations by reducing the power of the instruments used. On

In patients who are at greater risk of pain and bleeding, the use of pharmacological agents is not recommended. 27,28

# **CONCLUSION**

Stenosis serviks merupakan salah satu penyebab gangguan menstruasi pada usia subur terutama pada kasus stenosis serviks berat atau komplit. Keluhan pada kasus ringan bersifat asimptomatis. Namun pada kasus berat pasien mengeluhkan dismenorrhea, menstruasi yang sedikit atau jarang, amenorrhea, dan infertilitas. Perlu pertimbangan status menstruasi, derajat stenosis dan gejala yang muncul pada pasien guna menentukan tatalaksana yang akan dipilih pada pasien.

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