# Gynecology & Reproductive Health

## Secondary Amenorrhea Due to Unusual Cause (Hematometrocolpos)

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### ABSTRACT

Hematometrocolpos usually caused by obstruction of lower genital tract, somewhere in the vagina such as Imperforated hymen. In our case there is no obstruction in the vagina, but started at the cervix in a form of membrane. This membrane extended in the vagina forming intavaginal cyst which filled with blood and by time gave the complete picture of hematometrocolpos. This case aged 53 years old, para7 and presenting to our clinic complaining of urinary retention burning of micturition and secondary amenorrhea for 9 months.

#### Keywords

Metrocolpos, Amenorrhea, Urinary retention.

#### Introduction

Hematometrocolpos refers to a blood-filled distended uterus and vagina, this usually results due to an anatomical mechanical obstruction precluding the evacuation of the menstrual blood flow.

#### **Usual Causes**

Imperforated hymen in 2/3 of cases Transverse vaginal septum Vaginal stenosis Vaginal atresia Hypoplasia

The Majority of the cases are due to congenital anomalies and seen in young girls. In older ladies, causes are acquired such as vaginal stenosis secondary to chronic infection, carcinoma cervix or post radiation exposure, dysfunctional uterine bleeding following progestin use can be one of the rare causes.

Uterine bleeding in presence of an obstruction of the lower female genital tract causes proximal dilatation and the occurrence ofhematocolpos, hematotrachelos or hematometra the most common problems defined as congenital abnormalities [4-6]. obstruction of the female genital outflow tract is rare [7,8].

Our case is different, the obstruction started at the cervical canal in a form of membrane (as shown in H/P report).

This membrane started to protrude through cervix slowly, and continue progressively in the vagina, in a form of cyst filled with blood.

#### Case Report

Our patient is 53 years old, P7, who was presented to our clinic complaining of on/off urine retention with burning of micturition and dyspareunia associated with secondary amenorrhea for the last 9 months.

Abdominal examination showed an enlarged mass mostly equal to 16 wks uterine size. This was not her complain and she didn't give any attention to the mass or the amenorrhea.

She had no history of vomiting or any other urinary symptoms, no fever.

She was diagnosed earlier as a case of urinary tract infection and treated for this. On vaginal examination, the vagina is almost filled with a tense cyst extending to the lower 1/3 of vagina leaving only about one 1 cm from introits.

On bimanual examination, vaginal cavity was full with a cystic mass which was connected to the suprapubic mass. Vaginal speculum examination was tried which gave no extra information. A part from that, the cystic vaginal mass was occupying almost all the vaginal space.

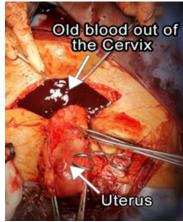
US scanning has revealed a dilated uterine cavity, cervix and

vagina were mostly full of blood, very clear picture of a cystic mass similar to what we see in the haematomatrocolpos.

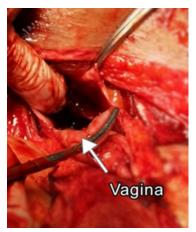
MRI showed the same picture without any evidence of other pelvic tumors. From previous presentation we couldn't exclude cervical cancer or vaginal pathology.



After a discussion with the patient, she accepted to undergo a simple abdominal hysterectomywith conservation of both ovaries. Abdominal hysterectomy was performed and the result was haematometrocolpos.



She had no surgical difficulties. Vaginal examination at the end of operation revealed completely normal vagina in terms of depth and texture.



She had no complication during or post-surgery and discharged

home after three days of hospital admission. The uterus with its pathology sent for histopathology study.

#### Discussion

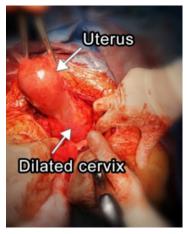
Congenital abnormalities resulting in hematometrocolpos include imperforate hymen, a complete transverse vaginal septum, vaginal atresia and rarely, cervical atresia [7-9]. Acquired obstruction of the lower female genital tract is rare. These acquired problems are caused by iatrogenic interventional traumas to the uterine cervix such as cone biopsies, loop electrosurgical procedures, dilation and curettage, obstetric lacerations, cervical or endometrial carcinoma, and radiation therapy [9-14] obstruction is generally uncommon but has been reported recently [15].

About one fifth of females presenting with heavy menstrual period may have an underlying blood dyscrasia [2,15-17].

In the present case, sonographic findings suggest acquired obstruction of the lower female genital tract, specifically hematometra, and hematocolpos. as in the picture attached. Malignancy, is a likely but we could not rule out.

The underlying etiology of the obstruction in this patient was uncertain.

This case denotes an unusual cause of acquired spontaneous hematometra and heamatotracheloshematocolpos developed following use inflammation which leads to cervical stenosis and low menstrual flow.



The cervical cancer with or without endometrial malignancy cannot excluded. MRI showed the same picture of ultrasonography. Discussion with the patient results the patient in favor to have hysterectomy. Decision was taken for hysterectomy. During surgery we done hysterectomy and the result was the uterus with continuation of intact cyst full with old blood in the vagina.

As soon as came out spontaneous rupture of the cyst with dark old blood as what we usually see in chocolate cyst. both ovaries conserved the histopathology results was: cervical tunnel clusters of predominantly cystic type. Dilation of endocervical canal with formation of the sac lined by benign columnar epithelium of endocervical type and filled by hemolyzed blood intermixed with mucous substance. Moderate chronic nonspecific endocervices. Atrophic endometrium. Mild chronic nonspecific endometritis.

This form of hematometrocolpos look unusual in first the continuation of hematoclopis with the uterus as cyst contains blood (chocolalike) which was kept intact by pseudo wall inside the vagina as in histopathology report.

#### Conclusion

Other unusual causes of secondary amenorrhea should be considered, the evidence in our case points towards hematometra secondary to lower genital tract obstruction. A pelvic ultrasound examinationis still one of the best tools to confirm the diagnosis with bimanual vaginal examination.

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