

## ORIGINAL RESEARCH

# Case report of benign cervical stenosis with Hematometra

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### ABSTRACT

A 70 year old lady reported to OPD with complaints of abdominal pain for 3 months. She had no other symptoms. She attained menopause 25 years back and obstetric history P3L1 and not sterilized. Her general and systemic examinations were normal and on prevaginal examination uterus found 12 weeks and all fornices fullness present. Ultrasound revealed tubo ovarian mass, hydrometra or pyometra with benign cervical stenosis.

It was decided to take her for dilatation and evacuation intraop found uterus 12 weeks size and serial cervical dilation done with Mathew ducan dilator and evacuated blood stained collection. Endocervical sampling done and cervical biopsy taken. Foleys catheter kept in uterine cavity for drainage and to avoid further stenosis. Histopathology revealed chronic cervicitis with foci of papillary endocervicitis and hemorrhage.

**Key words:** Cervical stenosis, hematometra, pyometra, endocervicitis

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## 1. INTRODUCTION

Stenosis of uterine cervix is the pathologic narrowing of the uterine cervix. Cervical stenosis is clinically defined as cervical narrowing that prevents the insertion of a 2.5 mm wide dilator through cervical os. It may be congenital or acquired.

In this case report, a postmenopausal woman having obstetric history of P3L1, all normal deliveries presented with c/o lower abdomen pain, she has undergone abdominal tubectomy 25 years back. Cervical stenosis with hematometra diagnosed with USG and MRI. Cervical dilatation and evacuation were performed. After the procedure, histopathological examination revealed hemorrhage in endometrial cavity and cervical biopsy revealed features of chronic nonspecific cervicitis with foci of papillary endocervicitis.

## 2. Case Report

A 70 year old lady reported to OPD with complaints of lower abdominal pain for 3 months. The pain was throbbing in character and non- radiating. There was no history of fever or vomiting. Bowel and bladder habits were regular.

**2.1 Menstrual History:** Attained menopause 25 years ago

**2.2 Past History:** She is a known case of diabetes mellitus for past 30 years and is on regular treatment. Also, she is a known case of hypertension for past 1 year and now her blood pressure is under control and not on any drugs. No significant past surgical history.

**2.3 Obstetric History:** P3L1. She had all normal deliveries. Last delivery was 47 years back and not sterilised.

On general examination, patient was obese, fully conscious and well oriented to time, place and person. Pulse – 84/min, BP-130/80 mmHg, Afebrile, No pallor, icterus, cyanosis, clubbing or lymphadenopathy. On abdominal examination, abdomen was soft there was no tenderness, bowel sounds present. No organomegaly. No free fluid, CVS, Respiratory system and CNS-NAD. On per speculam examination, cervix pointing downward, uterus 12 weeks size, mobile, all fornices fullness present, no tenderness.

Ultrasound revealed two thick walled cystic lesion with internal echos noted in bilateral adnexa measuring 8x6.6 cm in right side and 4x4.6cm in Left side, Tuboovarian abscess. There was no fluid in pouch of Douglas. Ca 125 was done which was only 2.3U/ml. Most of laboratory investigations done at the time of admission were normal except elevated blood sugars and echo changes as hypertensive heart disease with tricupd regurgitation, mild pulmonary hypertension and Grade I diastolic dysfunction.

Patient was stable. MRI was taken and it revealed large hydrometra or pyometra measuring 13.4x7.2x3.8cm in size with T1 hyperintensity. Suspected external os level occlusion, No endometrial or cervical mass lesion. According to these findings it was decided to take up patient for dilatation and evacuation in view of hydrometra in postmenopausal woman.

Under anesthesia, uterus was found to be 12 weeks size with cervical stenosis. Serial cervical dilatation done with Mathew Duncan dilator and suction evacuation done. Around 50 ml of blood stained collection evacuated. Cervical punch biopsy taken at 12'0 clock and 3'0 clock position.

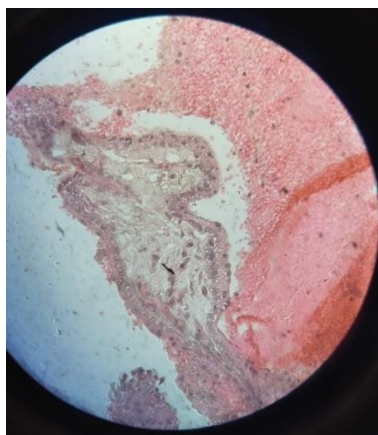
Endocervicalcuritage sample taken and 16 G Foleys catheter inserted into uterine cavity and bulb inflated with 10 ml of distilled water to prevent further stenosis and for further drainage.

On POD 1 patient vitals were stable and drainage had 20 ml collection. On POD 2 patient vitals remained stable and no collection in the drain, so on POD 3 drain removed and patient discharged on POD 5. Patient came for followup after 2 weeks and she was asymptomatic.

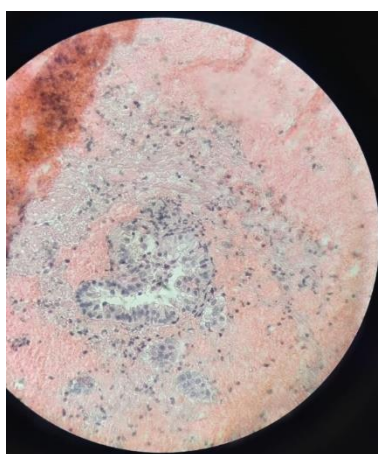
### 3. Histopathology Report

Gross- Received specimen in two containers. Container I with cervical biopsy has single grey brown white soft tissue piece measuring less than 0.3 ML. Container II with endometrial sample has multiple grey brown, grey black soft tissue pieces altogether measuring 0.2 ml. Micropsy showed tiny fragment of ecto and endocervical tissue showing features of chronic nonspecific cervicitis with foci of papillary endocervicitis.

Endometrial sample section studies reveal only hemorrhage and no viable endometrial tissue.



**Fig 1:** Endocervical gland



**Fig 2:** Foci of papillary endocervicitis

#### 4. Discussion

Hematometra is a collection or retention of blood in the uterus. It can be due to congenital or acquired causes. Most common congenital cause is imperforate hymen or transverse vaginal septum. Acquired causes are cervical stenosis due to cervical conization, ablation or radiation treatment. Hematometra is also pathognomonic of endometrial cancer. Here in this case, hematometra is seen in a postmenopausal woman with benign cervical stenosis without any cause for cervical stenosis.

Cervical stenosis may be complete or partial. It is usually asymptomatic. Suspect cervical stenosis according to signs and symptoms or due to inability to obtain endocervical samples for tests. Inability to pass 1-2mm diameter probe into uterine cavity confirms complete stenosis<sup>[1]</sup>.

If symptoms persist or uterine abnormalities like hematometra or pyometra are present, then exclude cancer by doing cervical cytology and endometrial biopsy and do procedures to dilate the cervix<sup>[4]</sup>.

Cervical dilation to relieve stenosis is often only a temporary success<sup>[2]</sup>. The cervix can become stenotic again with recurrence of hematometra. Consequences of recurrent stenosis because of failed therapy can lead to even hysterectomy. Alternative treatment options like transcervical insertion of a 16-22Fr Malecot catheter coated nitinol stent and absorbable adhesion barrier are reported in literature<sup>[3]</sup>.

#### 5. Conclusion

Hematometra and pyometra in a postmenopausal woman with cervical stenosis is common in cancer which should be screened with endometrial sampling and cervical biopsy. But like in this case we can see that hematometra can occur even in benign cervical stenosis.

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**7. Ethics approval and consent to participate:** Not applicable

**8. Consent for publication:** Not applicable

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**11. Availability of data and materials:** Data will be made available on request

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