

Spontaneous Hematometra: A Rare Cause of Pain Lower Abdomen

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ABSTRACT

Hematometra is a rare condition that is most commonly associated with congenital anomalies and prior surgical procedures. This is an unusual case of spontaneous hematometra occurring in 32 years old healthy woman with no prior medical or surgical history. Till now only five cases of spontaneous hematometra without any risk factors have been reported.

Keywords: : abdominal pain, depot medroxyprogesterone acetate, hematometra

INTRODUCTION

Hematometra is a collection or retention of blood or blood clots inside the uterus. It is a rare condition that is most commonly associated with congenital anomalies of the cervix or uterus. Less commonly it can be acquired due to processes that cause obstruction of the endo-cervical canal like cone biopsy, LEEP, post radiation, cervical cancer, senile atrophy of the endo-cervical canal, post abortion, endometrial ablation or resection.¹

Hematometra in premenopausal women typically presents with secondary amenorrhea and cyclic, cramping pain in lower abdomen. Bleeding, if present is scant and erratic-rusty, dark brown or even black in colour. Patients may also report urinary frequency and urinary retention. Due to the accumulation of blood in the uterus, patients may develop low blood pressure or vasovagal response, as well as acute abdomen in the setting of uterine rupture. When palpated, the uterus will typically feel firm and enlarged. Postmenopausal women are more likely to be asymptomatic.²

This is a case of spontaneous hematometra in a healthy and active female where cause of hematometra is not found. Only five cases of spontaneous hematometra has been reported till date.

CASE

Our patient is a 32-year woman from Nuwakot. She presented in clinic on 29th January 2018 with amenorrhea for 6 months after intake of depot

medroxyprogesterone acetate (DMPA) and lower abdominal pain for 10 days. Lower abdominal pain was continuous, dull aching, initially mild, gradually increasing in severity, aggravated on squatting position while micturating and defecation, relieved on taking analgesics. She had uneventful normal vaginal delivery at hospital 9 years ago. Post-delivery she used norplant for 7 years, no contraception for two years then injection DMPA only one dose 6 months ago on 3rd August 2017. She had no significant prior medical or surgical history. Per speculum examination showed cervical erosion. Bimanual examination revealed bulky uterus.

Workup with ultrasonography showed moderate amount of free fluid with few septations in uterine cavity likely hematometra [Figure-1].



Figure-1: Ultrasound showing collection in uterine cavity

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She was treated with dilation, drainage and endometrial biopsy. No obvious cervical stenosis was noted during procedure. Approximately 20 ml of thick dark coloured blood was drained [Figure-2].

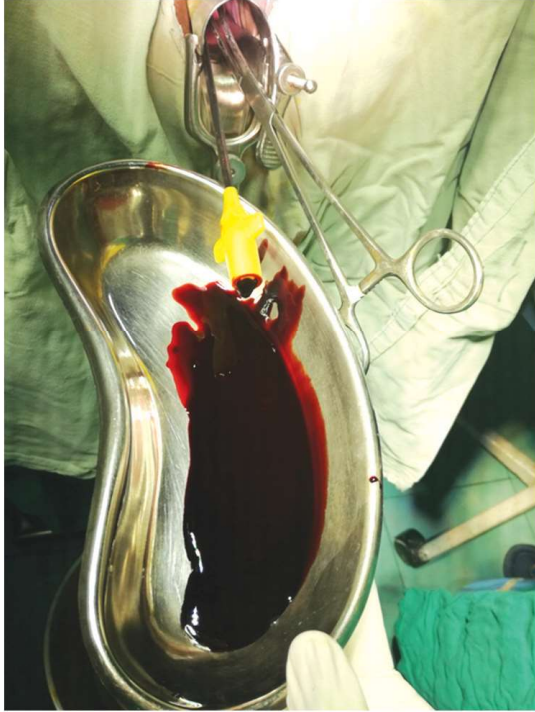


Figure-2: Drainage of collected blood

Endometrial tissue was sent for histopathology, gram stain, bacterial culture, AFB stain but everything came to be negative. Pap smear was negative for intraepithelial lesion. Ultrasound pelvis done on second post-op day showed normal uterine cavity [Figure-3].



Figure-3: Ultrasound post-drainage of hematometra showing normal uterine cavity

She was symptom free without recurrence of hematometra at 3-month follow-up.

DISCUSSION

Spontaneous hematometra is a condition where etiology of hematometra is not well found. It is a diagnosis of exclusion. Hematometra presenting as abdominal pain can be a challenging diagnosis. This difficult diagnosis could be further compounded in patients lacking congenital abnormalities and those who have not undergone a prior gynecologic procedure, such as in our patient.

Only five cases have been reported till date. Chou et al had reported spontaneous hematometra in 2016 in 18 years adolescent girl without any prior risk factors.³ Thorne JG et al presented case series of four cases with spontaneous hematometra in 2018. First case was 16 years girl who developed hematometra after one-year treatment with DMPA for menstrual suppression in context of global developmental delay. Second case was 21 years girl treated with DMPA for 5 years for endometriosis. Third case was 18 years girl treated with DMPA for 1 year 3 months for dysmenorrhea. Fourth was 23 years girl who had been treated with DMPA for 7 years for endometriosis.⁴ All these five cases of spontaneous hematometra had used DMPA as contraception for prolong duration.

There are few reports showing association of DMPA and cervical stenosis/hematometra.⁵ In one study done by Martirosian TE et al in 2010, the use of DMPA resulted in a significantly higher rate of cervical stenosis following LEEP procedure.⁶ However, our patient has taken only one dose of DMPA but had kept subdermal implant for 7 years. No case reports of prolong implant use leading to hematometra has been reported. However the use of prolong progesterone contributing to or causing hematometra cannot be ruled out and warrants further investigation.

CONCLUSIONS

Although rare, hematometra should be on the differential diagnosis of lower abdominal pain in females.

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