

## An interesting case of a pyometra in a postmenopausal woman

Dr Prachi Bhikaji Shitut (Koranne)<sup>1</sup>, Dr Aparna Wahane<sup>2</sup>, Dr Madhuri Dhakne<sup>3</sup>, Dr Vivek Karale<sup>4</sup>

<sup>1</sup>Assistant prof, <sup>2</sup>Asso Prof, <sup>3</sup>Sr resident, <sup>4</sup>Lecturer, Dept obstetrics and gynecology, Government Medical College, Akola, Maharashtra, India

### \*Corresponding author

Dr Prachi Bhikaji Shitut

Email: [drprachikoranne@gmail.com](mailto:drprachikoranne@gmail.com)

**Abstract:** Menopause brings many changes in woman's body. Due to loss of hormonal support she is susceptible for various infections. One of the dangerous infections amongst this is pyometra which is infection of uterus. A 70 year old female presented with lower abdominal pain, fever. Her USG suggested pyometra. During her dilatation and curettage cervix was not negotiable, hence her hysterectomy was done. The specimen showed a cervical fibroid at the internal os which caused obstruction to the outlet.

**Keywords:** Menopause, Infection, Pyometra, Malignancy

### INTRODUCTION

The menopause brings about many changes in woman's life. Sometimes her life is really miserable due to sudden vasomotor changes. But most of the times there is smooth transition into menopause. Some women develop senile vaginitis or senile endometritis. If anything causes obstruction to the natural drainage from the endometrial cavity, there is infection with the accumulation of pus inside. Such a collection of pus inside the uterine cavity is known as pyometra. It is an unusual condition and occurs in about 0.01 % to 0.5% of females [1].

It is a dangerous condition as disease per se and also due to its association with malignancy of the genital tract. Sometimes if it remains undiagnosed it can rupture spontaneously leading to significant morbidity and mortality [2]. The dilatation of the cervix and drainage of the pus is the primary treatment followed by the treatment of the underlying pathology. The most common organisms found in the pus culture are *E.coli* and *B.Fragilis* [2].

### CASE REPORT

A 70 year woman presented to the OPD with the complaint of fever with chills since 7 days. She also complained of generalized malaise and lower abdominal pain off and on since 1 month which had gradually increased over past 3-4 days. She was menopausal since past 20 years. She had never received any hormonal therapy. She was not a diabetic but was a case of mild hypertension on treatment.

Her general condition was good except for high grade fever of about 102 F. Her respiratory and cardiovascular examination was normal. On per

abdominal examination there was tenderness over the hypo gastric area, but there was no organomegaly. There was also no guarding and rigidity.

On per speculum examination the cervix was inflamed with normal os. There was no evidence of any growth over it. There was also no drainage of pus from the os.

On per vaginal examination the vagina was hot and the uterus was enlarged upto 12 weeks size. The uterine movements were tender. The fornices were free.

Our differential diagnosis was

- Fibroid uterus
- Adenomyosis
- Endometrial Cancer
- Hydrometra
- Pyometra

She was admitted to the hospital. Her blood investigations were done. Hemoglobin was 10.5 gm% and complete blood count was suggestive of acute infection. Rest the liver profile and the renal profile was normal. Her pap smear was inflammatory but normal.

Her ultrasonography of upper abdomen was normal, but ultrasonography of lower abdomen was suggestive of a dilated fluid filled cavity of about 250 cc with thinning of the uterine walls. Both the adnexa were normal. Her CT scan showed a fluid filled uterine cavity without any malignancy.

As per protocol she was started on antibiotics .She was posted for the dilatation and drainage of pus. But to our surprise her cervix could not be negotiated. So she was posted for exploratory laparotomy and if required a hysterectomy.

On laparotomy her uterus was inflamed and enlarged. Rest of the organs was normal. Her total hysterectomy was done. When we cut the specimen after hysterectomy we found a large cervical fibroid which was located over the internal os .It had blocked the natural drainage from the cavity due to which there was pyometra.



**Fig 1: Our specimen showing pus filled uterus with fibroid at internal os**



**Fig 2:pus filled enlarged uterus**



**Fig 3: Showing interior of the uterus with the critical location of fibroid**

Patient's post operative recovery was good .She was discharged on the 10 Th day.

### DISCUSSION

Pyometra is the collection of the pus inside the uterine cavity. The first case was described by the John and Clark of London .The first clinical significance was stated by whitely [3].

Due to the increasing size of the older population, pyometra and its related complications will be encountered by clinicians more frequently [2]. The reported incidence of pyometra is 0.01–0.5% in gynaecological patients but is probably much higher in elderly women [1]. There obstruction generally at the level of cervical canal. It can be due to cervical canal neoplasia, infection, surgery or radiotherapy [3]. Occurrence of pyometra is relatively rare .But still due to its association with malignancy it should not be neglected [4] .Thus the etiology of pyometra can be

- senile endometritis
- endometrial cancer
- Foreign body
- Obstetrical sepsis
- Utero vagianl prolapsed
- Sub mucosal fibroid polyp

After menopause when endometrium loses its resistance and is not shed repeatedly the infection in the cavity remains an endometritis. If the drainage of the cervical canal is blocked then there is formation of pyometra [4].

Ultrasonography is useful for the diagnosis of pyometra [5]. Doppler imaging is useful for the blood flow changes for the diagnosis of malignancy. Dilatation of cervix with drainage of pus is the first step in the treatment. Later treatment of primary disease must ensue.

A review of the literature demonstrates that a large proportion of cases are associated with or follow radiotherapy for a malignant disease of the uterus and those anaerobic bacteria are frequently isolated from the uterine cavity [6]. Antibiotics effective against aerobic and anaerobic bacteria should be given to all patients with signs of systemic infection. Once the infection is controlled, the underlying problem can be treated.

Spontaneous perforation of pyometra is very rare, although it is known to occur [4]. It is a dangerous complication with a significant mortality. Prognosis of pyometra depends on the underlying cause and promptness of the treatment. Early diagnosis and correct treatment definitely improves the outcome.

#### REFERENCES:

1. Chan LY, Lau TK, Wong SF, Yuen PM. Pyometra; What is its clinical significance? *J Reprod Med* 2001; 46:952-6.
2. Muram D, Drouin P, Thompson FE, Oxorn H; pyometra: *CMAJ* September 15, 1981; 125(6).
3. Whitley PF, Hamlett JD; Pyometra: a reappraisal. *Am J Obstet Gynecol* 1971; 109:108–112.
4. Babarinsa IA, Campbell OB, Adewole IF; Pyometra complicating cancer of the cervix. *Int J Gynecol Obstet* 1999; 64:75–76.
5. Muram D, Drouin P, Thompson FE, Oxorn H; Pyometra. *Can Med Assoc J* 1981; 125:589–592.
6. Takai N, Nasu K, Miyakawa I; Management of patients with carcinoma of the cervix with anuric renal failure. *Int J Gynecol Obstet* 2005; 88:156–157.