

Clinical Profile and Outcome of Patients with Pyometra in a Tertiary Care Hospital of a Developing Country

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Abstract: Background: Pyometra occurs when the natural drainage of the uterine cavity is compromised and pus accumulates within the uterine cavity. It is seen most frequently in postmenopausal women, but can occur in premenopausal women. Various malignant and benign diseases have been shown to cause pyometra.

Aim: To find out the clinical presentation and histopathological characteristics of 25 patients of pyometra.

Methodology: This is prospective case series of 25 patients conducted in the Postgraduate Department of Gynaecology and Obstetrics, LallaDed Hospital, Government Medical College over a period of 5 years from September 2012 to September 2017 after obtaining ethical clearance from the institutional ethical committee. All the patients underwent routine investigations including screening for tuberculosis. The diagnosis was established clinically from the observation of large amounts of pus (10 ml or more) escaping from the uterus after dilatation of the cervix. All cases were confirmed by histologic examination of the endometrial curettings.

Results: All patients analysed were postmenopausal (60-80 years). Presenting symptoms included foul smelling purulent vaginal discharge (n=9), postmenopausal bleeding per vaginum (n=8), 5 patients were diagnosed as pyometra on routine USG done for unrelated conditions, acute abdomen (n=2) and 1 patient was post radiotherapy for cervical cancer. The most common histopathological finding was senile endometritis (72%) followed by endometrial cancer (16%) and cervical cancer (4%).

Conclusion: Pyometra is serious medical condition necessitating prompt treatment and evaluation.

Keywords: Pyometra, postmenopausal, senile endometritis.

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I. Introduction

Pyometra/pyometrium is defined as accumulation of pus in the uterine cavity resulting from interference with its drainage¹. It is seen most frequently in postmenopausal women, but can occur in younger age group. Various malignant and benign diseases have been shown to cause pyometra. It is uncommon condition but the incidence of associated malignancy is considerable¹. In the premenopausal female pyometra is rare; usually the cause is traumatic damage to the cervix or a congenital anomaly of the genital tract². The classic presenting signs and symptoms include postmenopausal bleeding, vaginal discharge and uterine enlargement or cramps².

AIM

To find out the clinical presentation and histopathological characteristics of 25 patients of pyometra

II. Material And Methods

This is prospective case series of 25 patients conducted in the Postgraduate Department of Gynaecology and Obstetrics, LallaDed Hospital, Government Medical College over a period of 5 years from September 2012 to September 2017 after obtaining ethical clearance from the institutional ethical committee. All the patients underwent routine investigations including screening for tuberculosis. MRI was done in all patients except 2 patients of acute abdomen who were explored immediately. Dilatation and drainage of pyometra under anaesthesia was done. Fluid was sent for culture sensitivity and cytological examination. All patients were subjected to diagnostic D and C after 2 weeks of dilatation and drainage of pyometra. The diagnosis of pyometra was established by USG and clinically from the observation of large amounts of pus (10 ml or more) escaping from the uterus after dilatation of the cervix. All cases were confirmed by histologic examination of the endometrial curettings. Data included age, clinical symptoms and histopathological findings.

III. Observations

From September 2012 to September 2017, a total of 25 patients with pyometra were studied. All patients analysed were postmenopausal (60-80 years). Presenting symptoms included foul smelling purulent vaginal discharge (n=9), postmenopausal bleeding per vaginum (n=8), 5 patients were diagnosed as pyometra on routine USG done for unrelated conditions, acute abdomen (n=2) and 1 patient was post radiotherapy for cervical cancer.(Fig.1)

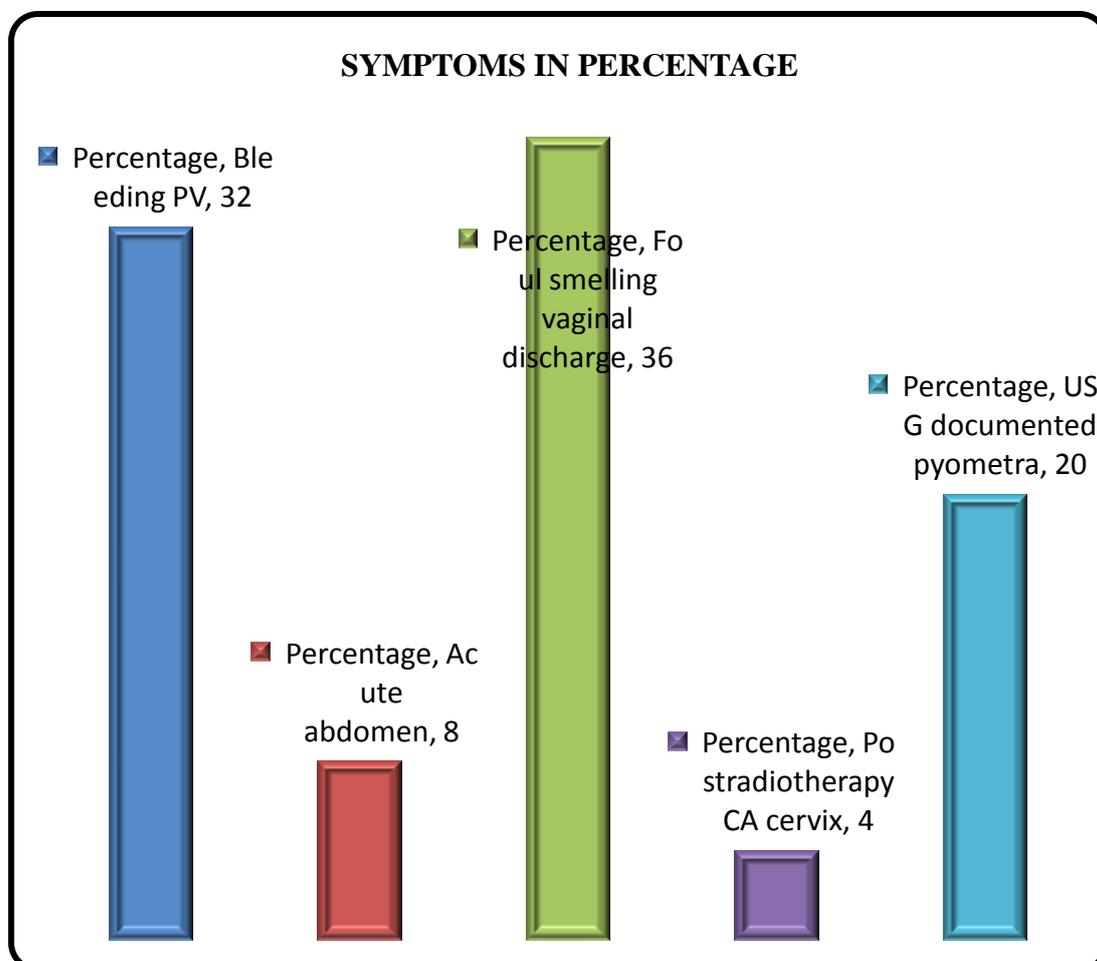


Figure 1

Of the 8 patients who had PMB with pyometra, Cervical polyp was found obstructing the cervical canal in one patient. One of the patient had bad cervix, biopsy of which revealed squamous cell carcinoma of the cervix. 2 patients had endometrial cancer on HPE of D and C specimens. Rest of them had senile endometritis on HPE. 2 patients of acute abdomen were explored immediately due to their critical condition. They had reported as pain abdomen with vomiting and fever with signs of peritonitis. They were 75 years and above. On laparotomy uterus had 2 – 3 perforations at fundus with purulent material exuding from them. Tubes and ovaries were normal. TAH with BSO was done in both. One of the patients could not survive in the immediate postoperative period. Her HPE showed endometrial carcinoma. The other patient survived and was discharged. Her HPE showed senile endometritis.

Of the 5 patients diagnosed with pyometra on USG for unrelated conditions, 1 had endometrial cancer on HPE of diagnostic D and C specimen. 1 patient while draining pyometra suffered uterine perforation. Immediate laparotomy and TAH was done on her. Her HPE showed senile endometritis.

All of the 9 patients presenting with foul smelling vaginal discharge had senile endometritis on HPE.(Fig2)

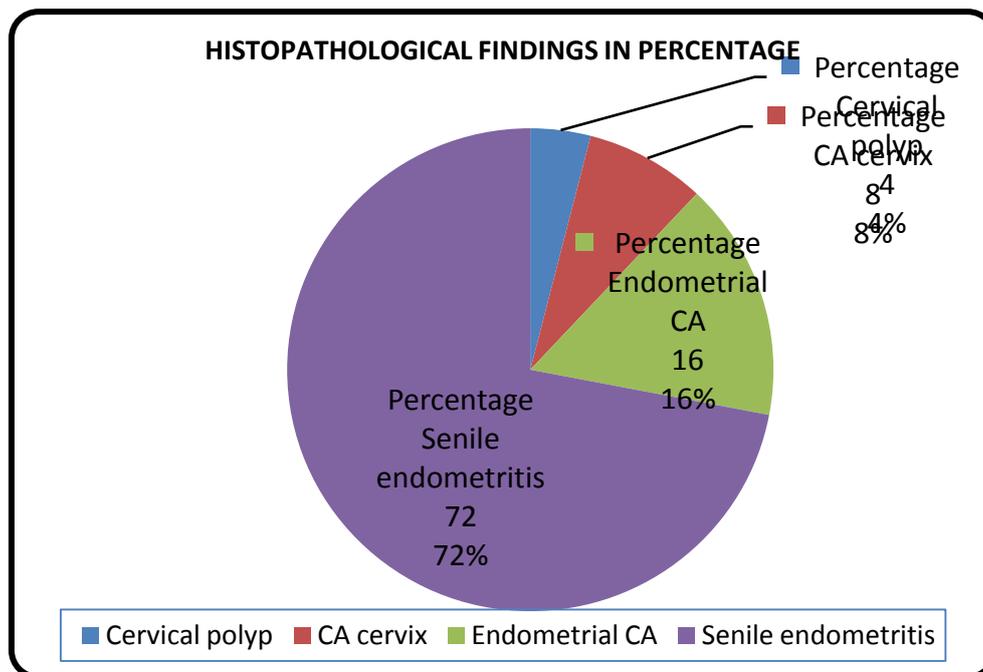


Figure 2

IV. Discussion

Pyometra is a serious medical condition because of both its association with malignant disease and spontaneous perforation which causes significant mortality and morbidity¹. Because pyometra is potentially lethal, it should be treated as an abscess and treated promptly and vigorously by evacuation and continued drainage of uterine cavity².

In our study all 25 patients were postmenopausal which was comparable to the study conducted by Chan LY et al¹.

The most common presentation was foul smelling vaginal discharge (n=9) and postmenopausal vaginal bleeding (n=8) which was comparable to the study conducted by Chan LY et al¹.

In our series of 25 patients, 72% of patients had senile endometritis contrary to the study conducted by D.Muramet al² where cervical cancer was the commonest cause of pyometra.

In our study, only 24% of patients had malignant lesion of cervix and endometrium which was contrary to the study conducted by D.Muramet al².

In our study 2 patients had spontaneous perforation of uterus and presented as acute abdomen. Such cases were reported by T.Kilaiet al³, T.Yanada et al⁴ and R. Agarwal et al⁵.

V. Conclusion

Pyometra is an uncommon condition, but the incidence of associated malignancy is considerable and the risk of spontaneous perforation is higher. Dilatation and drainage is the treatment of choice and regular monitoring after initial treatment is warranted to detect persistent and recurrent disease.

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