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Case Report

A Case Report of Pyometra in Post-Menopausal Women

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Abstract: Pyometra is defined as the accumulation of pus in the uterine cavity. It is very uncommon disease with incidence of less than 1 % which occurs mostly in post-menopausal women with underlying malignancy. Here the authors report a case of a 67 years old female patient who presented with excessive foul smelling discharge from vagina and lower abdominal pain since more than 1 week. Biopsy revealed carcinoma of cervix. MRI of the pelvis showed a large heterogenous fluid collection with air fluid level showing restricted diffusion seen filling the endometrial cavity.

Key words: Pyometra, fluid collection, uterine cavity, MRI.

INTRODUCTION

Pyometra is an rare disease that can be seen as collection of purulent material in the uterine cavity [2, 4]. The causes of pyometra includes cervical or uterine malignancy in post-menopausal women [2, 5]. Other causes are endometritis/pelvic inflammatory disease, endometrial polyps, cervical stenosis, (most commonly post- operative) and structural anamolies (imperforate hymen) [1, 2]. Patients with pyometra clinically present with history of whitish discharge per-vaginum and pelvic pain and bleeding PV [4]. The incidence of pyometra cases are usually < 0.01% and clinically reported in post-menopausal women with associated malignancy [2, 5]. The hormonal replacement therapy with added post-operative cervical occlusion is most common cause of pyometra. The pathology identified in the uterine collection of pus includes, endometrial hyperplasia with cystic changes and endometrial polyps.

METHODS

It is a observational study and is carried out in the department of Radio-diagnosis at Sree Balaji Medical college & hospital, Chennai. A female patient aged 67 years presented with excessive foul smelling discharge from vagina and lower abdominal pain since more than 1 week. The patient voluntarily included in the study and the patient was neither supported nor additionally burdened financially.

CASE REPORT

A 67 years old female patient with history of excessive foul smelling discharge from vagina and lower abdominal pain since more than 1 week. The patient also had a history of fever since more than 1 week.

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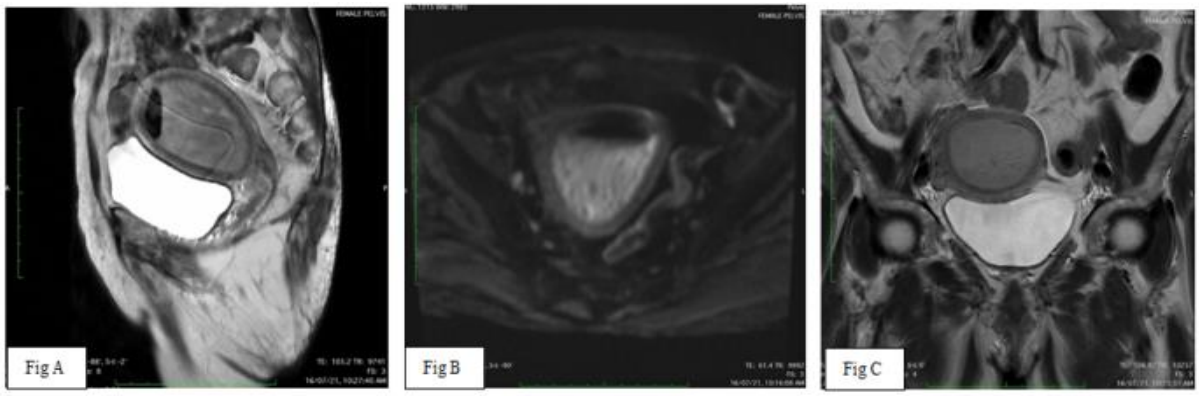

Fig A, B, C: Showing a large heterogenous fluid collection

MRI of the pelvis showed enlarged uterus measuring ~ 96 x 72 x 60 mm and a large heterogenous fluid collection with air fluid level showing restricted diffusion measuring ~ 71 x 41 x 58 mm seen filling the endometrial cavity. Mild eccentric prominence of anterior and left lateral wall of cervix measuring ~ 8-9 mm. Minimal fluid seen in the cervix and vagina. No parametrial fat stranding noted. No pelvic side wall involvement noted. Hypogastric nodes seen on both sides measuring ~ 7-8 mm. Right common iliac node seen measuring ~8 mm in short axis.

DISCUSSION

Pyometra is an rare disease defined as uterine pus collection mostly occurring in post-menopausal elderly women usually secondary to carcinoma cervix, where cervical canal stenosis due to radiation therapy [4, 6]. Other causes includes PID/Endometritis, endometrial polyps, retained products of conception and other urogenital anamolies. The clinical features of pyometra includes whitish discharge per-vaginum, post-menopausal bleeding, pelvic pain, pyometra may rupture spontaneously but it is very rare complication and it is much difficulty preoperatively to diagnose, symptoms usually similar to the GI perforation and peritonitis. Currently we have various imaging modalities to diagnose pyometra. But TVS plays a major role in diagnosis of pyometra and as well perforation of pyometra uterine fundus is the most common site for perforation [3, 4]. Imaging finding in ultrasound include uterine cavity distended with hyperechoic complex fluid, echogenic free fluid in POD. CT-findings include distension of uterine cavity with complex fluid, inflammatory fat strandings in the parametrium and complex free fluid moles in posterior end-di-sac [5, 6]. Gas bubbles on an air fluid level may be seen within the endometrial canal. MRI findings include heterogenous fluid collection with air fluid level restriction diffusion seen filling the endometrial cavity [7, 8]. Dynamic TVS is useful in perforated pyometra. Detection of movement endometrial collection and endometrial collection through defect [9, 10]. Treatment option of pyometra includes drainage of collection. Patient with spontaneously rupture pyometra should undergo emergency laparotomy or hysterectomy or peritoneal lavage and drainage [11, 12].

CONCLUSION

In conclusion, although pyometra is rare, it should be considered as one of the differential diagnosis in all cases. MRI of the pelvis showed a large heterogenous fluid collection with air fluid level showing restricted diffusion seen filling the endometrial cavity.

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Ethical Approval: All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Informed consent: Informed consent was obtained from individual participant included in the study.

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