

# Acute urinary retention in pyometra secondary to endocervical adenocarcinoma

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## Abstract

An elderly 76 years old grandmultipara (P<sub>10</sub>) post menopausal for several years, presented with acute urinary retention, believed to be a case of pelvic abscess underwent repeated attempt of sterile pus aspiration amounting to more than 1300ml. Finally at hysterectomy, acute retroversion and pelvic impaction of pyometra was found to be the main cause of urinary retention which is described in this case report with rare conjugal findings of coexistent ovarian cystadenoma. In conclusion, any cystic lesion suspected as pelvic abscess may instead be a pyometra, reasonably in an elderly post menopausal woman with high parity where cervical carcinoma stands as a predisposing factor for cervical os stenosis.

**Key word:** Cervical carcinoma, pelvic abscess, pyometra

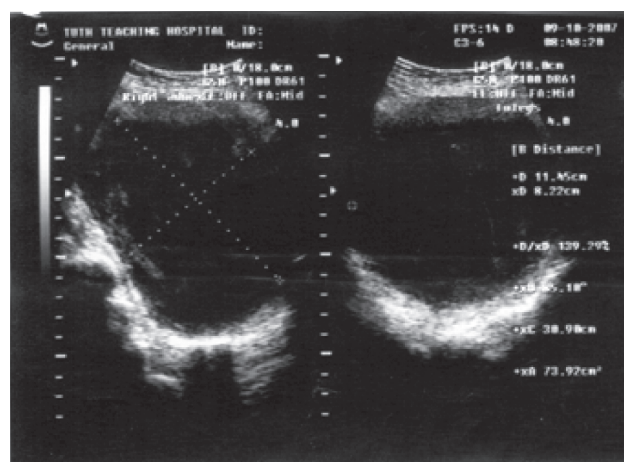
## Introduction

It is interesting to note that a simple presentation of acute urinary retention is not clinically analyzed. In the case described below, we realized the harassment given to a sick elderly citizen who was referred from one to the other outpatient clinic; from indoor admission to discharge and readmission which shows how imperative it is to exercise our brain or have floor discussion, so that women receive standard treatment. This article will guide its readers to recapitulate pyometra as a cause of urinary retention.

## Case

Mrs SG, a 76 year old post menopausal multipara (P<sub>10</sub>) was brought to the emergency on 9<sup>th</sup> Oct 2007 (2064-6-22) with acute urinary retention due to an obvious abdomino-pelvic mass with the history of excessive vaginal discharge for a year. Indwelling Foley catheter was inserted to drain the retained urine after which she was subjected for Ultrasound that showed diffused low echogenicity in an enlarged uterus measuring 11x8cms, having echogenic endometrial strip

thickness of 8 mm, supplemented by an ovarian cyst (3.4 cms) with right sided hydronephrosis suggestive of endometrial carcinoma. (fig 1) With this finding she was referred to Outpatient clinic of Gynecology and Urology.



**Fig. 1:** USG showing pus collection

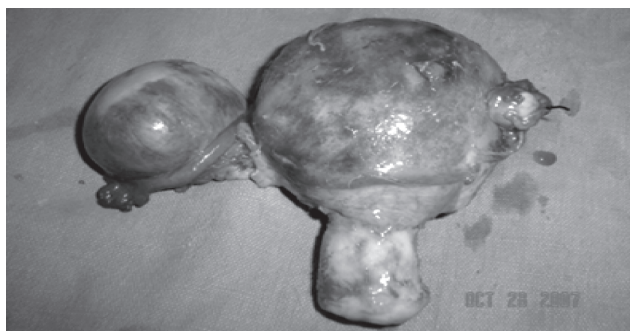
In the Urology OPD, antibiotics (ofloxacin and dalacin) were prescribed and CT pelvis was advised. Gynecology review determined a cystic central mass palpable suprapubically equal to 14 weeks pregnancy size during vaginal examination whereas the cervix pushed high up retropubically could not be visualized on speculum examination.

Two days after the initial assessment she was brought again to the emergency department with acute retention of urine due to the blockage of catheter on 11<sup>th</sup> Oct 2007 (2064-6-24). After recatheterization, she was admitted in the Gynaecology Department and kept on the same line of management. During her stay, CT scan of pelvis was done in an indoor basis but she was discharged on the 4<sup>th</sup> day without collecting or reading the CT report with an advice to attend Gynaecology OPD with CEA and CA 125 report.

Two days after being discharged, on 17<sup>th</sup> Oct 2007 (2064-06-30) she developed high fever with chills and rigor for which she again came to the Emergency Department. This time in the Emergency, CT scan report was studied in depth which conferred a well defined cystic mass compressed between urinary bladder and recto sigmoid areas with rim enhancement, measuring 13x11x11cms resulting in bilateral hydronephrosis. Therefore, USG guided aspiration of the pelvic pus collection was done in two seating draining about 1300ml of frank pus which when sent for culture and sensitivity came as negative for growth.

Her hemoglobin (Hb) was 10.3gm%, WBC 22,300cmm with N 86%, L 14%. Her LFT, RFT both were normal. One week later laparotomy was planned with the provisional diagnosis of pelvic abscess.

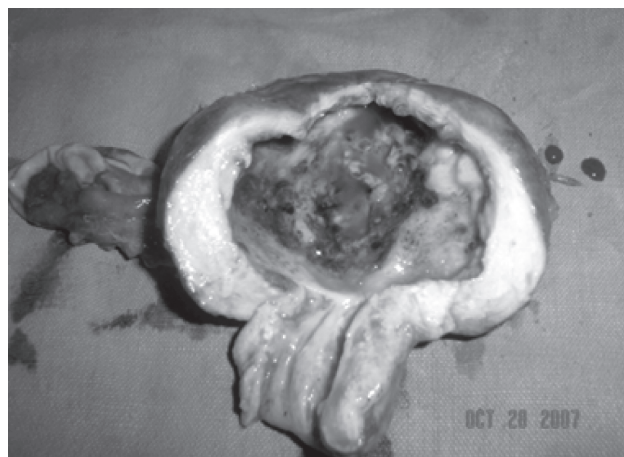
On opening the abdomen, to our surprise, uterus was acutely retroverted and impacted in pouch of Douglas (POD) with an enlargement equivalent to twelve weeks pregnancy size and felt soft in consistency. Bladder was pulled up and adherent up to the fundus. Bilateral tubes and ovaries were adherent to the lateral pelvic wall and intestinal loops. There was a cystic right ovarian enlargement of 3x3cm. (fig2)



**Fig. 2:** Gross specimen showing uterus and ovarian cyst

The uterus was noted to gradually shrink in size during total abdominal hysterectomy and bilateral salpingo-oophorectomy (TAHBSO). This must have been due to the decompression of uterus throughout the intraoperative period and resulted in overfilling of the vagina with collected pus which soiled the Operation Table. Patient received two units of whole blood per operatively.

Uterus on cut section (fig3) showed enlarged cavity filled with blood mixed pus, thinned out endometrium, atrophic myometrium especially near the fundus; elongated cervical canal which was sloughed and filled with pus. HPE report showed well differentiated endometrioid adenocarcinoma of cervix involving whole cervical canal and 4/5 of the thickness of the cervix. She was referred to Bharatpur Cancer Hospital as she lived close by.



**Fig. 3:** Cut section of uterus showing enlarged uterine cavity with a small pus pocket.

Postoperative period was uneventful and she was discharged on 9<sup>th</sup> postoperative day after removal of stitches.

## Discussion

In this case, acutely retroverted (pus filled) uterus impacted in the POD was the reason for acute urinary retention; the pyometra thus confused for pelvic abscess had been drained abdominally under ultrasonic guidance.

CT-guided transabdominal drainage of pyometra have formed valuable alternative in case of cervical os obstruction following recurrent post radiation carcinoma cervix.<sup>1</sup> When the cervix externally looks healthy, cervical carcinoma as a possibility may be overlooked. But in this case cervix was pulled high up by huge collection of pus (1300ml). Under the circumstances of missed diagnosis, spontaneous rupture of pyometra have been the leading cause of extensive pyoperitoneum or shock.<sup>2,3</sup>

## Acute urinary retention in endocervical adenocarcinoma

The endocervical adenocarcinoma was obstructive lesion to account for pyometra, which in turn was coexistent with ovarian tumor, another rarity in this case.<sup>4,5</sup>

In our case pyometra was diagnosed while performing hysterectomy as the uterus was seen to diminish in size, getting smaller and smaller towards the end of surgery and the vagina being over filled with pus. It is ridiculous to have >1L of pus drained ultrasonologically and yet not have the right diagnosis come to mind, then and there. This questions how appropriate CT diagnosis can be.<sup>6</sup>

If the pyometra and its cause were known in advance, vaginal drainage of pyometra followed by radiotherapy could have provided a better therapeutic modality. Staging could not be done too.

## Conclusions

Whenever an elderly post menopausal women with cystic lesion in the pelvis present with acute urinary retention, a possibility of pyometra secondary to cervical carcinoma must always be borne in mind.

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