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Case Report

A drowning abdomen-a case report on acute urinary retention due to retroverted gravid uterus

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ABSTRACT

Acute urinary retention due to retroverted gravid uterus is a rare condition, but serious complication of pregnancy. It usually occurs between 10 and 16 weeks of gestation. We report a case of 26 year old primigravida at 13 weeks of gestation presented to OPD with the complaints of abdominal distension for 30 days and lower abdominal pain associated with burning micturition for 10 days. On examination, abdomen is uniformly distended corresponding to 30 to 32 weeks of gestation which is tense and cystic, on per vaginal examination -features of retroverted uterus felt. Scan showed single intrauterine gestation corresponding to 13 weeks+5days with full bladder. Patient was catheterised and 2.5litre of urine drained. Patient was asked to lie in prone position at least 3-4 times a day. After 1 week patient was symptomatically better, on per vaginal examination uterus returned to midposition.

Keywords: Urinary retention, Retroverted gravid uterus, Distension

INTRODUCTION

Acute urinary retention due to retroverted gravid uterus is a uncommon condition. Incidence of urinary retention due to retroverted gravid uterus is 0.47 to 1.4%.[1] Incidence of retroverted gravid uterus is 10-15%.[2] It usually occurs between 10 to 16 weeks of gestation.[3] Various etiological factors causing urinary retention during pregnancy are retroverted gravid uterus, incarcerated uteri, lumbar disc herniation, paraurethral abscess, breech presentation, ectopic pregnancy, uterine malformations, intramural fibroids and endometriosis.[4,5] Main pathophysiology behind this is, in above mentioned etiological factors uterus will get trapped within the pelvis, preventing it to ascend into abdominal cavity.[5]

Symptoms includes urinary incontinence, dysuria, vaginal bleeding, constipation.[6] Management is usually conservative. Patient is advised to maintain prone position and knee chest prone position.[7] Other methods includes clean intermittent catheterization (CISC) and indwelling catheterization.[8] One of the old method which is currently not recommended is manual reposition of uterus under anaesthesia.[5] Complication encountered during pregnancy includes recurrence, miscarriage, preterm delivery, urinary tract infections, renal failure and maternal sepsis.[6]

CASE REPORT

A 26 years primigravida at 13 weeks of gestation presented to OPD with complaints of abdominal distension for 30 days which was gradually increasing in size and lower abdominal pain associated with burning micturition for 10 days. she also gave history of passing frequent small volume of urine for past one month. No history of urinary incontinence and difficulty in passing stools. First trimester was uneventful. No significant past medical and surgical history. On general examination, patient was moderately built and nourished with normal BMI. Breast and thyroid examination was normal. vitals and systemic examination was normal.

On abdominal examination, uniformly distended abdomen corresponding to 30 to 32 weeks of gestation, which is tense and cystic in consistency and non-tender with negative signs of fluid thrill and shifting dullness. On per

speculum examination -cervix and vaginal wall healthy, OS closed, no dribbling of urine noted. On per vaginal examination- cervix pointing downwards, uterus retroverted occupying pouch of Douglas, cervix hinged behind the pubic symphysis.

Figure 1: Clinically showing abdominal distension corresponding to 32 weeks size uterus in 13 weeks gestation.

On ultrasound examination single intrauterine live gestation with the gestation age of 13 weeks +5 days with full bladder found. So patient was catheterised and 2.5L of urine was drained, distension gradually decreased, and catheter left in situ. Patient was advised to lie in prone position at least 3 to 4 times a day. USG KUB done showed features of bilateral dilatation of pelvicalyceal system suggestive of bilateral hydroureteronephrosis and bladder wall was thickened to 24 mm.

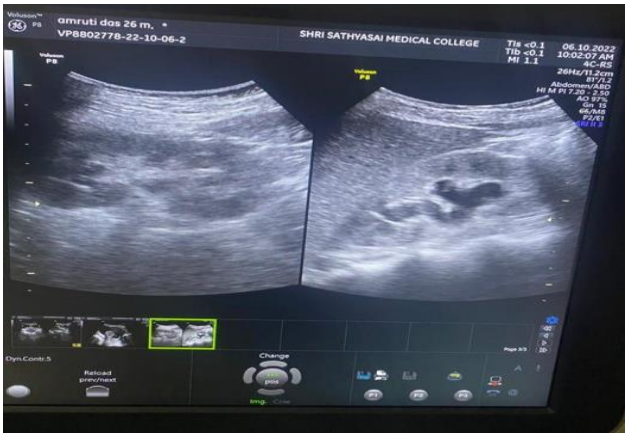

Figure 2: Ultrasound KUB showing features of bilateral dilatation of pelvicalyceal system.

Urine routine and culture was normal. RFT was elevated (Urea-42 mg/dL and creatinine-1.2 mg/dL). After one week uterus become just palpable per abdomen, catheter was removed but patient again developed retention, hence re-catheterisation done and left in situ for one more week.

After one week, catheter was clamped and removed and patient voided freely. Repeat per vaginal examination done showed uterus in midposition corresponding to 16 to 18 weeks size. RFT done found to be normal. When Patient came for anomaly scan around 20 weeks of gestation no features of retroversion was noted. No evidence of retroversion was noted in routine antenatal follow up visits.

DISCUSSION

The overall incidence of acute urinary retention due to retroverted gravid uterus is 1.4% (3 in 220).[1]

In our case it is found that the cause of urinary retention is due to retroverted gravid uterus. Likewise in a study conducted by Zhuang et al reported three cases of pregnant women with acute urinary retention developed between 10 and 18 weeks of gestation age.[9] All the three cases were managed conservatively. He concluded that retroverted uterus is the commonest cause of acute urinary retention developed during pregnancy.

Yang et al conducted a study to find out the pathophysiology of urinary retention due to retroverted gravid uterus.[10] He did a study on five women with urinary retention due to retroverted gravid uterus which was developed between late first trimester and early second trimester. He did ultrasonography for all 5 patients to find out the exact cause behind the retention. He concluded that displaced cervix would compress the lower portion of bladder which causes obstruction of internal ureteral orifice leading to bladder distension.

CONCLUSION

Most common cause of acute urinary retention during pregnancy is due to retroverted gravid uterus. It is a rare condition, if not treated may lead to serious complications to both mother and foetus. Hence when pregnant women presents with urinary retention during first and second trimester, causes of retention should be evaluated and treated properly to avoid complications during further period of gestation.

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