



A DIAGNOSTIC DILEMMA OF NON PUERPERAL UTERINE INVERSION SECONDARY TO SUBMUCOSAL FIBROID

Obstetrics & Gynaecology

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ABSTRACT

Non puerperal uterine inversion is a condition as rare as gold dust that a gynecologist encounters. Puerperal inversion is way more common than non-puerperal inversion and every obstetrician has encountered at least once in their career. Non-puerperal uterine inversion is almost always secondary to some uterine pathology like fibroid, endometrial polyp. Here we present a case report of 31 year female who came in emergency with heavy menstrual bleeding with hypotension and shock. Though at first there was dilemma in diagnosis but finally with the help of ultrasonography and clinical experience we could reach to the final diagnosis of uterine inversion. Multiple approaches were applied for management but at the end we could preserve the uterus.

KEYWORDS

Non puerperal uterine inversion, Fibroid, Endometrial Polyp

INTRODUCTION

Uterine inversion is a rare condition in which the uterus is essentially turned inside out. It is of 2 types – 1) Puerperal (within 6 weeks of childbirth) 2) Non-puerperal. Acute uterine inversion presents immediately following vaginal delivery. Prevalence is 1 in 20000 – 50000 cases. Non puerperal chronic uterine inversion is a very rare condition. Estimates to be only one sixth of all inversion cases. It is almost always associated with some uterine pathology like fibroid, leiomyosarcoma, endometrial polyp and uterovaginal prolapse. Factors which are proposed to be contributing for uterine inversion are: - 1) sudden emptying of the uterus, which was previously distended by a tumor 2) thinning of the uterine walls due to an intrauterine tumor 3) dilatation of cervix

CASE REPORT

A 31 year married female presented to our emergency with complaint of profuse bleeding per vagina and something coming out per vagina since 8 hours. Patient has been referred from private hospital to our emergency for heavy menstrual bleeding with? Endometrial polyp with hypotension, shock and severe anemia. She used to have heavy menstrual bleeding associated with clots with no separate recognizable menstrual cycle for last 3 months. She has been married for 12 years and had two full term vaginal deliveries at a government hospital. Her last delivery was 7 years back. She had no history of MTP, abortion or contraception. She had no significant medical or surgical illness in the past.

On examination, she was well built, pale with vital signs suggestive of hypotension and tachycardia. Her abdomen was soft and non-tender. On per speculum examination, there was a 6*5 cm mass seen. On bimanual per vaginal examination, 6*5 cm firm globular mass felt within the vaginal canal. Separate cervical os could not be appreciated. The fundus of uterus could not be palpated and significant bleeding was present. We were at a tight corner as we were perplexed whether it was a case of endometrial polyp or uterine inversion. Ultrasonography showed us some silver lining. In USG, we saw the uterine fundus is upside down which is known as the fallen fundus sign. Provisional diagnosis of uterine inversion made. Confirmation with CT / MRI couldn't be done, as patient was hemodynamically unstable. On investigation, her hemoglobin was 6.2 gm%. Platelet and coagulation profile were within normal limits. She was resuscitated with IV fluids and urgent transfusion of 3 units of PCV done. Physician and anesthetic assessment done for major operation.

Patient was taken up for emergency operation. Lithotomy position given. (6*5) cm submucosal fibroid myomectomy done vaginally. Manual reduction of uterus tried but failed.

Figure 1: picture of submucosal uterine fibroid myomectomy which is being done vaginally



On table decision for Huntington's procedure taken and abdomen opened with transverse incision layer wise. Traction on bilateral round ligament given for restoration of inversion but failed. With sustained traction on bilateral round ligament, a vertical incision was given in the anterior cervical ring as posterior cervical ring couldn't be well appreciated, fundus was pushed from vaginal end and uterine inversion was corrected. The incision later on found to be extended to anterior uterine wall. Anterior uterine wall repair done by barbed suture.

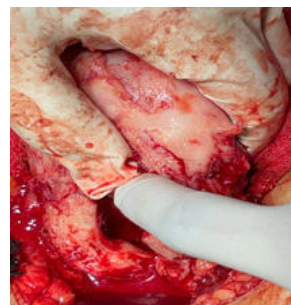


Figure 2: anterior uterine wall incision

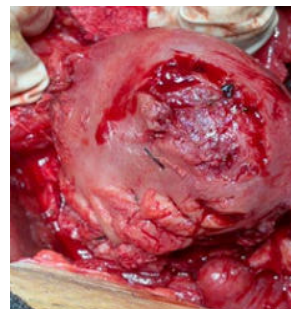


Figure 3: final view after repair of uterus.

As her family was complete and she no longer wished for any further

pregnancy, tubal ligation done with written consent. Hemostasis achieved and abdomen closed in layers. Intra op 1 unit PCV given. The specimen sent for histopathological examination and it was confirmative of leiomyoma. Postoperative period was uneventful. 2 unit PCV transfused postoperatively. Total 6 unit PCV transfused, after which her hemoglobin was 9.7gm/dl on day 3. She was discharged on day 6. Patient came to us after 15 days for follow up. On per speculum examination, cervix was normal. On bimanual per vaginal examination, uterine fundus felt at its anatomical position.

DISCUSSION

Non puerperal uterine inversion is a very rare event with only few case reports. Uterine inversion may be misdiagnosed if the inversion is not complete and is chronic. The degree of uterine inversion is classified into:-

- 1) First degree (incomplete): the top part of uterus has collapsed inside uterine cavity.
- 2) Second degree (complete): the top part of uterus folds into the opening of uterus i.e cervix
- 3) Third degree (prolapsed): the top part of uterus enters the deepest part of vaginal canal.
- 4) Fourth degree (total): both uterus and vagina protrude outside.

In our case, it was a complete type. The diagnosis is always not easy especially the chronic forms. Chronic uterine inversions can be asymptomatic or associated with pelvic pain or sensation of heaviness or per vaginal bleeding. On examination, a vaginal mass can be detected but the uterus is not palpable by bimanual examination. Uterine inversion can be corrected abdominally or vaginally.

Abdominal surgeries include:-

- 1) Huntington's procedure: in this surgery, the abdomen is opened and gentle upward traction on round ligament is given with Allie's forceps. Another forceps placed on advancing fundus of uterus and slowly by gentle traction uterus is restored to normal anatomic position

- 2) Haultain's procedure: in this surgery, the cervical ring is incised posteriorly with a longitudinal incision. Traction is given on round ligament with Allie's forceps. Sometimes an upward thrust may be given vaginally to the inverted fundus of uterus till uterus is restored to normal anatomic position.

Vaginal surgeries include:-

- 1) Kustner procedure: it is a vaginal surgery in which Pouch of Douglas is entered and posterior aspect of uterus and cervix is splitted to reinvert the uterus.

- 2) Spinelli procedure: in this an incision is made on the anterior aspect of cervix and uterus is reinverted.

Many a times, repositioning of uterus is not possible and then the need of hysterectomy arises. In our case scenario, we could save the uterus, fallopian tubes and ovaries. It is challenging to diagnose non puerperal, chronic uterine inversion cases timely. Even if the case is diagnosed, management is a challenge and multiple approaches needs to be applied.

CONCLUSION

Uterine pathology leading to uterine inversion is a very rare condition. Early diagnosis and management has an excellent prognosis. Though non-surgical procedures may be tried, but surgical procedures are ultimate answers.

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