

A rare case of post-abortion collapse

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Abstract

Confirmation of intra-uterine pregnancy as early as possible should be made a routine and a part of ideal antenatal care which most of the rural areas in India lack now a days. Post-abortion collapse is one of the deadly nightmares of the obstetrician.

The abortion related complications rate including all sources of care including emergency department and the original abortion facility is estimated to be about 2%.^[1]

Mostly, common complications encountered are minor complications such as pain, bleeding, infection, and post-anesthesia complications. Major complications include namely uterine atony and subsequent hemorrhage, uterine perforation, injuries to adjacent organs (bladder or bowels), cervical laceration, failed abortion, septic abortion, and disseminated intravascular coagulation (DIC).^{[2][3][4]}

Due to lack of early trimester scan and intra uterine pregnancy confirmation, unnecessary interventions like evacuation are being done for mis-diagnosed ectopic pregnancy landing the patient into life threatening complications.

In our case study, we report a case of 36 years old female, G5P2L2A2 who presented to our emergency department with severe abdominal pain and bleeding per vaginum post D&E for first trimester abortion. No prior ultrasonographic detection of intra-uterine pregnancy was done before D&E. on arrival patient was in a state of shock. Her Beta-HCG level measured 8000 mIU/ml and ultrasound showed massive hemoperitoneum with uterine perforation. Patient was taken for emergency laparotomy and intra-operatively ruptured right tubal ectopic pregnancy was seen with uterine and gut perforation. Patient was successfully managed through resuscitative efforts and emergency laparotomy followed by right salpingectomy and left tubal ligation.

Keywords: ectopic pregnancy, ruptured, mis-diagnosed pregnancy, early trimester scan

Case Summary

36 years old female, G5P2L2A2 with history of MTP intake 1 month back, presented to our emergency department with complain of pain abdomen and bleeding per vaginum since 7-8 hrs. Patient's attendants

gave history of suction and evacuation for incomplete abortion 1 day back at some private hospital in Saharanpur. Patient was discharged on the same day in stable condition. No prior ultrasound was done to confirm the location of pregnancy. Next day, post D&E, patient developed severe pain abdomen and bleeding per vaginum. Patient was then referred to our tertiary care hospital in a state of shock. On arrival, patient was sick, severely anemic with feeble pulse of 150bpm, B.P. 70/40mmhg, Respiratory rate of 30cpm, SPO2 of 88% on room air and 100% on 8litres O2. Chest was clear with no added sounds. On examination, abdomen was distended, tense and tender. Guarding and rigidity were present and bowel sounds were absent. On per vaginal examination, uterus was 6 weeks gravid size, mobile, bleeding present, cervical movements were tender. Bilateral fornices were tender and boggy. Ultrasound done and was suggestive of massive hemoperitoneum with uterine perforation. Urgent resuscitative efforts were started and patient was started on ionotropic support. Patient was taken for emergency laparotomy after initial resuscitative efforts. All initial investigations including CBC, Blood group, Viral markers, RFT, LFT, cross match and Beta- HCG were sent on urgent basis. Adequate blood products were arranged. Intra-operatively, around 400ml of hemoperitoneum was seen. Uterus was 6 weeks size. There was uterine perforation of approx. 3x3cm at fundal region which was not actively bleeding. Right tubal ectopic rupture was seen at infundibular region. Right ovary was normal. Left tube and ovary were found normal. About 4x3cm sub-serosal fibroid was also seen at the anterior wall of uterus. Right salpingectomy with repair of uterine perforation was done. Left tubal ligation was done. There was rectal perforation of 3x3cm and recto-sigmoid perforation of

size 1x2cm along with fecal peritonitis. Primary gut exploration followed by loop colostomy was done by surgery team. Hemostasis achieved. Abdominal drain kept in-situ. Specimen was sent for histopathological examination. Beta HCG report came out to be 8000mIu/ml.



Fig 1: Ruptured Tubal Ectopic

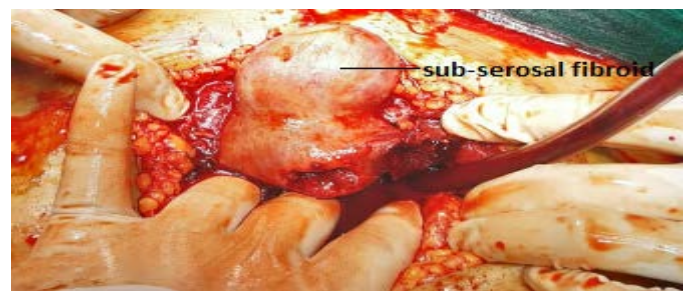


Fig 2: Sub – Serosal Fibroid

Patient was admitted in critical care unit, on ventilatory support with triple ionotropes, broad spectrum antibiotics and was managed by multi-disciplinary approach. Patient was extubated on post-operative day-2 and ionotropes were discontinued on day 8. Patient had purulent collection in the abdomen for which abdominal drain was kept in-situ and removed on day-10. Patient was encouraged deep breathing exercises, passive leg and hand movements, high protein diet and chest physiotherapy. Patient developed abdominal wound gaping, for which secondary suturing was done. Patient was discharged on post-operative day 18 with stoma bag in-situ. Patient advised to follow up in OPD after 1week with Beta-HCG report. Histopathological

report confirmed the diagnosis of ruptured ectopic pregnancy.

Beta- HCG after 2 weeks came out to be 12mIU/ml, and after 4 weeks 0.1mIU/ml.

Clinical Diagnosis

36 years old female, G5P2L2A2 with ruptured ectopic/heterotopic pregnancy with uterine perforation with bowel perforation with post-abortal shock.

Differential Diagnosis

- Ruptured ectopic pregnancy
- Heterotopic pregnancy
- Ruptured ovarian cyst
- Ovarian torsion
- PID
- Appendicitis
- Pyelonephritis

Discussion

The overall prognosis after suffering a complication from an abortion depends on the gestational age. The younger the gestational age, the lower the risk of complications. The highest risk of death is from a septic abortion; the majority of these cases are a result of illegal abortions in developing countries. Based on WHO data, nearly 70,000 women die each year as a result of complications from illegal or unsafe abortions. An ectopic pregnancy occurs when the implantation of fertilized ovum occurs anywhere outside the uterine cavity⁽⁵⁾. Extra-uterine pregnancy is estimated to account for 1.3% to 2.4% of all pregnancies⁽⁶⁾. Most common site being the fallopian tube⁽⁷⁾. In fallopian tube, most common location is ampulla (70%), followed by isthmus and fimbria. Other potential sites can be abdominal, ovarian or cervical, which are rare. It is an increasingly common and potentially catastrophic condition. A female presenting with amenorrhea, pain abdomen and bleeding, ectopic should always be kept

in mind due to increasing incidence as a cause of Pelvic inflammatory disease, genital T.B., increasing age of marriage and first conception, use of Artificial reproductive methods.

Ectopic pregnancy remains a challenging diagnosis in an emergency department setting. Early detection of ectopic pregnancy before 6 weeks by ultrasonography is difficult. Proper history and clinical examination must be done for all antenatal patients during their first antenatal visit. Transvaginal sonography is considered as gold standard for diagnosing early ectopic pregnancy⁽⁸⁾. Therefore, biochemical investigation (Beta-HCG) and skilled sonographic evaluation of the pelvis in a patient with a suspected ectopic pregnancy play a vital role in accelerating the management of patients⁽⁹⁾. A combination of ultrasound and HCG has a 96% sensitivity and 97% specificity for ectopic pregnancy⁽¹⁰⁾. Thus the condition is diagnosed by a transvaginal ultrasound and elevated HCG, as recommended by the American Congress of Obstetricians and Gynecologists^(11,12).

Measurement of beta-HCG levels along with transvaginal sonography showing no evidence of intra-uterine sac help in making definitive diagnosis of ectopic pregnancy. However, the chances of heterotopic pregnancy must also be ruled out. Presence of intra-uterine sac on ultrasonography does not completely rule out the chances of extra-uterine pregnancy. Heterotopic pregnancy is rare, but potentially life threatening. Hence, proper history and clinical examination followed by early pregnancy ultrasonography plays important role in imparting good antenatal care, which is lacking in developing countries like India.

In our case report, the ectopic pregnancy was misdiagnosed due to lack of early first trimester scan and

confirmation of intra-uterine pregnancy, which endangered the life of the patient.

There is a dire need of awareness and education regarding regular antenatal check-ups and early scanning among women, especially in developing countries like India, to ensure safe and healthy motherhood. In case of high suspicion of ectopic pregnancy, immediate and early referral to tertiary care centre is must.

This case points out the necessity of an early first trimester scan for the diagnosis of pregnancy, to determine the exact location of pregnancy, especially in developing countries like India where there is higher incidence of abortions and ectopic pregnancies.

Management

Medical management with methotrexate can be considered for women with a confirmed or high clinical suspicion of ectopic pregnancy who are hemodynamically stable, who have an un-ruptured mass, and who do not have absolute contraindications to methotrexate administration⁽¹⁴⁾. The administration route is intramuscular. Although oral methotrexate therapy for ectopic pregnancy has been studied, the outcomes data are sparse and indicate that benefits are limited⁽¹⁵⁾.

In a clinically stable women with un-ruptured ectopic pregnancy, laparoscopic surgery or intramuscular methotrexate administration are safe and effective treatments.

Surgical management of ectopic pregnancy is required in following conditions: hemodynamic instability, symptoms of an ongoing ruptured ectopic mass (such as pelvic pain), or signs of intraperitoneal bleeding.

Surgical management generally is performed using laparoscopic salpingectomy (removal of part or all of the affected fallopian tube) or laparoscopic

salpingostomy (removal of the ectopic pregnancy while leaving the affected fallopian tube in situ). Laparotomy typically is reserved for unstable patients, patients with a large amount of intraperitoneal bleeding, and patients in whom visualization has been compromised at laparoscopy.

Final Diagnosis

36 years old female, G5P2L2A2 with ruptured ectopic pregnancy/heterotopic pregnancy in shock with uterine perforation with bowel perforation post D&E.

References

1. Upadhyay UD, Desai S, Zlidar V, Weitz TA, Grossman D, Anderson P, Taylor D. Incidence of emergency department visits and complications after abortion. *Obstet Gynecol.* 2015 Jan;125(1):175-183. doi: 10.1097/AOG.0000000000000603. PMID: 25560122.
2. Carlsson I, Breeding K, Larsson PG. Complications related to induced abortion: a combined retrospective and longitudinal follow-up study. *BMC Womens Health.* 2018 Sep 25;18(1):158. doi: 10.1186/s12905-018-0645-6. PMID: 30253769; PMCID: PMC6156848.
3. Shannon C, Brothers LP, Philip NM, Winikoff B. Infection after medical abortion: a review of the literature. *Contraception.* 2004 Sep;70(3):183-90. doi: 10.1016/j.contraception.2004.04.009. PMID: 15325886.
4. Paul ME, Mitchell CM, Rogers AJ, Fox MC, Lackie EG. Early surgical abortion: efficacy and safety. *Am J Obstet Gynecol.* 2002 Aug;187(2):407-11. doi: 10.1067/mob.2002.123898. PMID: 12193934.
5. American College of Obstetricians and Gynecologists. ACOG Practice Bulletin No. 94:

- Medical management of ectopic pregnancy. *Obstetrics and gynecology*. 2008 Jun;111(6):1479-85.
6. Taran FA, Kagan KO, Hübner M, Hoopmann M, Wallwiener D, Brucker S. The diagnosis and treatment of ectopic pregnancy. *Deutsches Ärzteblatt International*. 2015 Oct;112(41):693.
 7. Panelli DM, Phillips CH, Brady PC. Incidence, diagnosis and management of tubal and nontubal ectopic pregnancies: a review. *Fertility Research and Practice*. 2015 Dec;1(1):1-20.
 8. Odejinmi F, Huff KO, Oliver R. Individualisation of intervention for tubal ectopic pregnancy: historical perspectives and the modern evidence based management of ectopic pregnancy. *European Journal of Obstetrics & Gynecology and Reproductive Biology*. 2017 Mar 1;210:69-75.
 9. Santos LT, de Sousa Oliveira SC, Rocha LG, dos Santos Sousa N, de Sousa Figueiredo R. Interstitial pregnancy: case report of atypical ectopic pregnancy. *Cureus*. 2020 May;12(5).
 10. Alkatout I, Honemeyer U, Strauss A, Tinelli A, Malvasi A, Jonat W, Mettler L, Schollmeyer T. Clinical diagnosis and treatment of ectopic pregnancy. *Obstetrical & gynecological survey*. 2013 Aug 1;68(8):571-81.
 11. American College of Obstetricians and Gynecologists. ACOG Practice Bulletin No. 94: Medical management of ectopic pregnancy. *Obstetrics and gynecology*. 2008 Jun;111(6):1479-85.
 12. Gracia CR, Barnhart KT. Diagnosing ectopic pregnancy: decision analysis comparing six strategies. *Obstetrics & Gynecology*. 2001 Mar 1;97(3):464-70.
 13. Belics Z, Gérecz B, Csákány MG. Early diagnosis of ectopic pregnancy. *Orvosi hetilap*. 2014 Jul 1;155(29):1158-66.
 14. Medical treatment of ectopic pregnancy: a committee opinion. Practice Committee of American Society for Reproductive Medicine. *FertilSteril* 2013;100:638-44.
 15. Lipscomb GH, Meyer NL, Flynn DE, Peterson M, Ling FW. Oral methotrexate for treatment of ectopic pregnancy. *Am J ObstetGynecol* 2002;186:1192-5.