Original Article - Gynecology

Killer of Mothers in Early Pregnancy – Ectopic Pregnancy - Case Series in Rural Medical College

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Abstract

Aim: To evaluate the importance of early diagnosis & intervention of ectopic pregnancy.

Methods: Case series of 4 patients who presented to our institution with various presentation -asymptomatic to haemodynamicaly unstable over last 6 months, they were clinically suspected & early surgical intervention was taken .Review of literature was done .Clinical presentation & different aspects of ectopic pregnancy is discussed.

Results: We discuss a wide spectrum of ectopic pregnancy with various clinical presentations, none of them presented with classical signs & symptoms. One of the case presented with only vomiting with ultrasonography finding of 11 weeks unruptured pregnancy in isthmus of right fallopian tube. This is very rare finding that such advanced unruptured ectopic pregnancy without any prior symptoms. In one case we found ruptured ectopic with expelled out fetus in abdominal cavity, following injudicious self intake of MTP kit, fetus was of crown rump length of approximately 10 weeks – this is also rare case. Two cases presented with features mimicking perforation of gut & peptic ulcer disease respectively that were atypical presentation. Early surgical intervention was done & treated accordingly depending upon the site of involvement.

Conclusion: Patients of ectopic pregnancy may present with varied presentation. Early conformation of pregnancy and early registration is very important in spite of absence of any risk factors or symptoms. Since it has varied presentation, high degree of clinical suspicion is required for early diagnosis & management, especially for unruptured ectopic pregnancy. Overall patient's education regarding sign, symptoms of ectopic pregnancy & potential of safe abortion method by trained person is required for reduction of maternal morbidity & mortality.

Introduction: Ectopic pregnancy is a potential life threatening condition if early diagnosis is missed.[1] The presentation may vary widely from being asymptomatic to haemodynamically compromised.[2] Incidence of ectopic pregnancy is 2%,[3,4] Incidence increased over past decade due to increased risk & early diagnosis. Combined approach of TVS & serum hcg estimation is gold standard for conformation & management. Ectopic pregnancy occur when implantation of fertilized ovum occur outside the uterine cavity. Most common site is ampulla of fallopian tube, others are isthmus, infundibulum,

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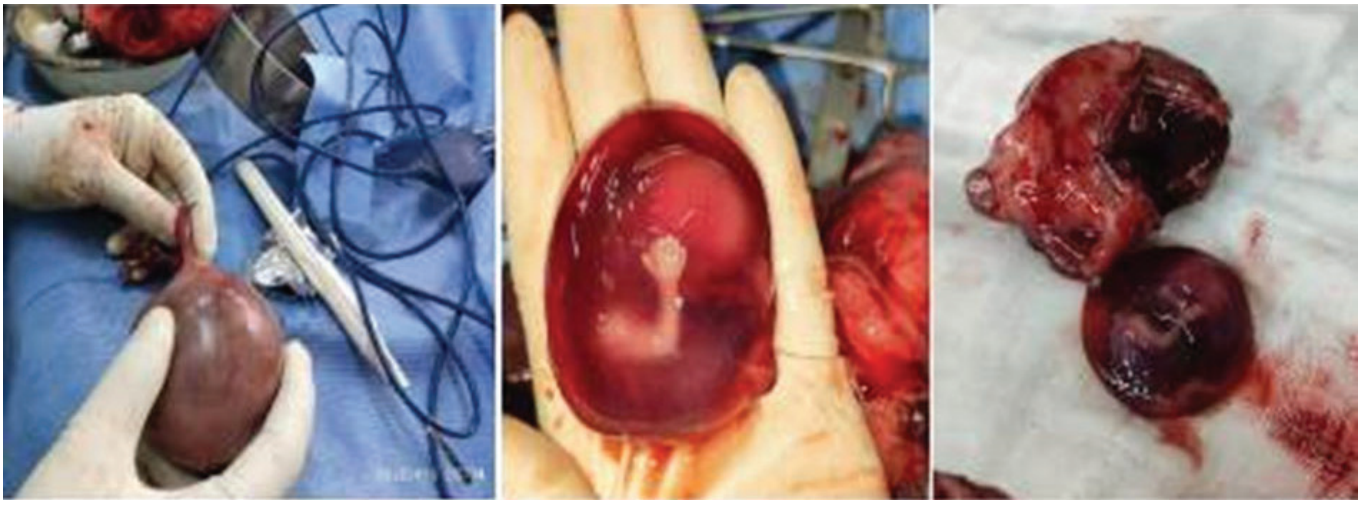


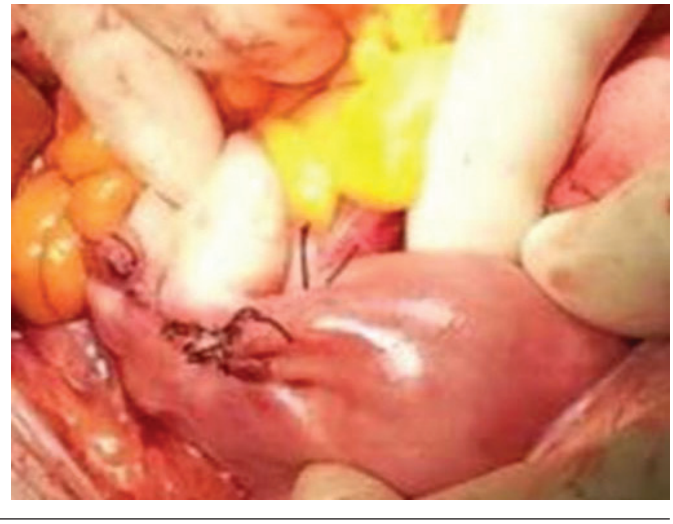
ovary, abdomen, cervix, caesarean section scar.[5,6] There are various risk factors like previous history of tubal surgery, ectopic pregnancy, IUCD insertion, tubectomy, pelvic inflammatory disease. It has different mode of presentation – asymptomatic to unconsciousness. Since various atypical presentations, clinical knowledge needs to be applied for early diagnosis and urgent intervention. Diagnosis done by clinical features, ultrasound, hcg doubling time (66 % raise over 48 hrs.). Ectopic pregnancy can be managed by different methods like medical, surgical, or expectant management depending upon the age, reproductive history & condition of contralateral fallopian tube. Here we discuss a wide spectrum ectopic cases which highlights atypical presentation, atypical finding (unruptured 11 wks. gestational fetus with intact placenta) & use of unsafe method of abortion.

Case no 1: Unruptured large ectopic pregnancy in isthmus of fallopian tube without any significant symptoms.

19 yrs. old nulliparous lady presented in emergency with complain of vomiting for 3 times within 1 hour. She had history of amenorrhea for 3 months, her urine pregnancy test was clearly positive in emergency. On admission her pulse, BP was normal, she was haemodynamically stable. Her abdominal examination revealed only slightly bulky uterus. On vaginal examination a mass was felt through the right fornices which was separated from uterus. There was no cervical motion tenderness. On searching a usg report, done 1 wk before was found from patient party which revealed : single gestational sac with collapsed fetus in right adnexa, gestational age 11 wks., no cardiac activity or vascularity noted in fetus, placenta was fundal anterior. Pt was prepared for exploratory laparotomy. On laparotomy unruptured soft mass was found in isthmus of right fallopian tube. Intra-abdominally there was no evidence of rupture. Right sided partial salpingectomy was done. Cut section of mass reveled well–defined placenta with intact gestational sac of crown ramp length 42.5 mm which corresponds approximately 11 to 12 wks.

Case 2: Ectopic pregnancy presented as uterine perforation following D & E.

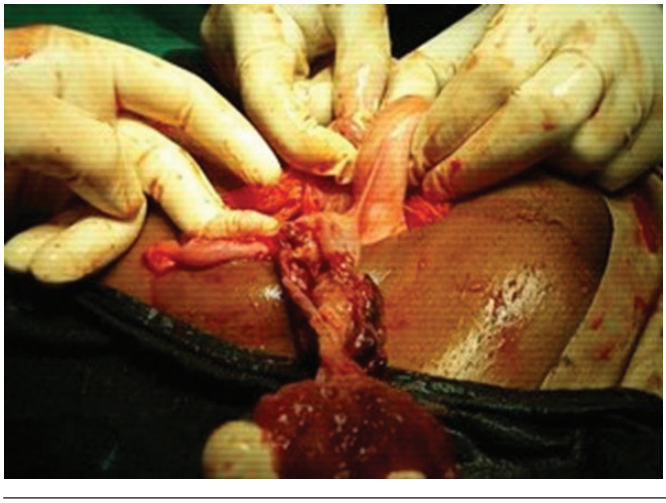
27 yrs 3rd gravida mother admitted in the department with complain of severe diffuse abdominal pain. She had history of one & half month amenorrhea & dilatation, evacuation just 24 hrs before her admission. There was no evidence of USG conformation of pregnancy. Her urine pregnancy test was faintly positive. On examination she had sever pallor (urgent Hb report was 6.5 gm.%), BP was 90/60 mm hg, pulse 122 bpm. Abdominal examination reveled distended abdomen with severe tenderness, muscle guarding and

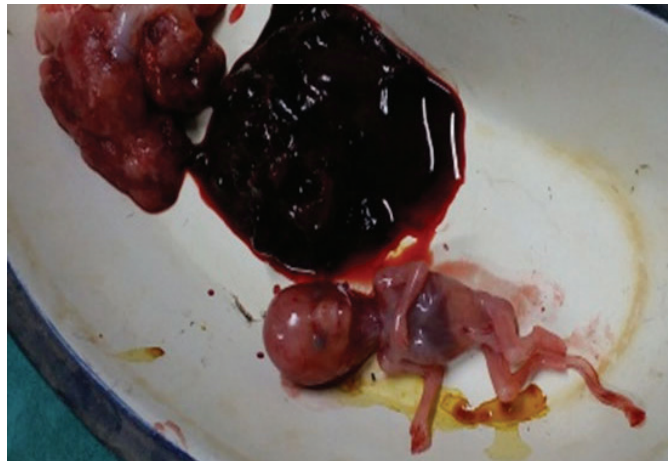


rigidity. On diagnostic paracentesis hemoperitonium found. There was mild vaginal bleeding, sever cervical motion tenderness and fullness of left fornices on vaginal examination. On exploratory laparotomy hemoperitonium (approximately 2 litters) with left sided ruptured cornual ectopic pregnancy was found. Repair of cornual area combined with bilateral tubal ligation was performed with proper hemostasis. Patient was haemodynamicaly unstable even after operation and was shifted to CCU; she was transfused 3 units blood and ultimately discharged in stable condition. Ectopic pregnancy was confirmed by histopathological examination.

Case 3: Ruptured ectopic pregnancy following self intake of MTP kit.

25 yrs 4th gravida patient presented with complain of abdominal pain & mild irregular bleeding per vagina. Date of LMP was not known to patient but history of about 3 month's amenorrhea. On enquiry she gave history of self intake of abortificient two times in a month and last one was 5 days before of admission. There was no USG documentation of pregnancy. Her urine pregnancy test was faintly positive on admission. She was hemodynamicaly unstable – had pallor (urgent Hb report 5 gm.%), pulse 128 bpm, BP 90 /50 mm hg. Tenderness and muscle guarding was present on abdominal examination. Diagnostic paracentesis revealed hemoperitonium. On per vaginal examination fullness of left fornices and cervical motion tenderness was found. Exploratory laparotomy done which showed hemoperitonium (approximately 2.5 lit.) with ruptured ectopic pregnancy with attached placenta in right fallopian tube and expelled out fetus of approx. 10 wks. in abdominal cavity. Right sided partial salpingectomy with contralateral

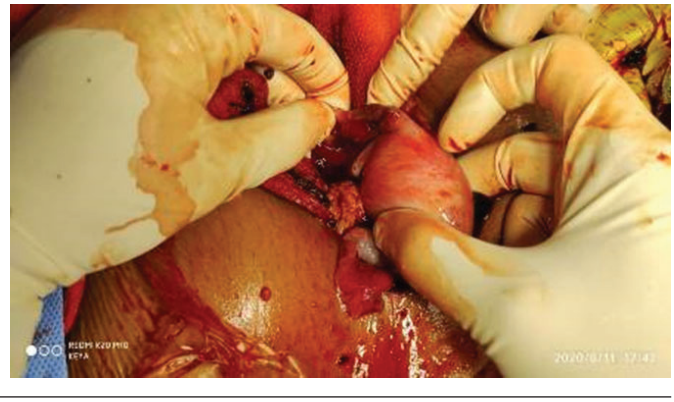




tubectomy was done. Patient was shifted to CCU, 5 units' blood transfusion done. She was discharged in stable condition. Conformation of ectopic pregnancy was done by histopathological examination.

Case 4: Ruptured ectopic pregnancy presented with upper abdominal pain mimicking peptic ulcer disease.

20 years old nulliparous patient presented in emergency with diffuse upper abdominal pain and acidity for 3 days. Pain was gradually increasing in nature. She had history of delayed menstruation of 16 days. There was no tachycardia, no pallor, BP was normal. On abdominal examination there was diffuse tenderness without any muscle guarding or rigidity. Per vaginal examination revealed no diffinit mass or tenderness in fornices, uterus was just bulky. Ultrasonography was done which showed right sided adnexal mass with empty uterine cavity. So patient was prepared for exploratory laparotomy which revealed hemoperitonium (approximately 1 lit.) and ruptured ectopic pregnancy in isthmus of left fallopian tube. Left sided partial salpingectomy done. 2 units blood transfusion was done and discharged in stable condition. Confirmation of ectopic pregnancy was done with histopathological examination.



Discussion

Ectopic pregnancy affects approx. 2% of gestation.[3] Fallopian tube is the commonest site of involvement and others includes ovaries, abdomen, caesarean section scar, and cervix. Ectopic pregnancy may be initially missed in diagnosis and remains a significant contributor to pregnancy related death and decreased fertility.[7] In general ectopic pregnancy causes largest morbidity and mortality in earlier pregnancy.[8] Approximately 5% of all maternal deaths are directly related to ectopic pregnancy and half of those cases not being evaluated for diagnosis.[1] Classical presenting symptoms include lower quadrant abdominal pain, vaginal bleeding and short period of amenorrhea,[7] but half of patient present atypically and may asymptomatic at earlier gestation.[3,7] In case of ruptured ectopic pregnancy severe abdominal pain and bulged vaginal fornices may found but unruptured ectopic pregnancy can be confused with normal intrauterine pregnancy.[9] So it has varied presentation and high degree of clinical suspicion is required for early diagnosis and management, especially for unruptured ectopic pregnancy. Early intervention carries better prognosis.[3] Ectopic pregnancy not only causes future pain and impaired fertility, it can also acutely causes intraperitoneal bleeding, anemia, potential necessitating of blood transfusion.[4,10] Transvaginal sonography along with serum hcg estimation is gold standard diagnostic approach. Serum hcg level > 2000 IU / l with no intrauterine pregnancy in TVS is treated as extra uterine pregnancy.

Typically tubal ectopic pregnancies in the isthmus ruptured within the first few weeks of gestation, ampullary pregnancy being slightly more expandable, cornue and abdomen may allow for further gestational development due to ability to distend.[3] One of our presented case described as unruptured ectopic pregnancy in isthmus of about 11 weeks. with no significant signs, symptoms of ectopic. Our 2 cases had diagnostic dilemma – one presented with features mimicking uterine perforation, one with features of peptic ulcer disease. Other case indicates injudicious use of MTP kit herself followed by ruptured ectopic pregnancy with expelled out fetus.

Caitlin Gauvin, Melissa Amberger et all reported cornual ectopic pregnancy with exposed fetus of 17wks [USG findings].[11] They also reported ruptured ampullary ectopic of 11wks 1 day gestation.[11] On 2015 D Goswami, N Agrawl et all reported a non-ruptured twin tubal ectopic pregnancy with fetal crown rump length of 2 cm.[12] Pinkee Saxena, Poonam Laul reported a case of ruptured twin tubal ectopic in left ampulla of size 6* 6 cm.[13]

All of this reported cases were ruptured ectopic pregnancy with advance gestation like our case No 3. None of these are like our case of unruptured ectopic of 11wks gestation with intact placenta without any prior symptoms. A Funamizu, A Fukui et al. reported a case of bilateral tubal ectopic pregnancy with unruptured gestational sac of 4 cm[14] like our case No 1.

Agarwal Shubhra, Kaur Satwant et al. reported a case of ruptured ampullary ectopic pregnancy due to injudicious use of MTP kit like our ruptured ectopic in ampulla with expelled out fetus following self intake of MTP kits.[15]

Ectopic pregnancy can be managed medically and surgically. Surgery may be laparotomy or laparoscopy depending on expertise, facility of laparoscopy and patient's hemodynamic conditions. Our two cases were hemodynamically unstable so exploratory laparotomy was performed. Another two cases, though was stable but due to lack of laparoscopic facility we opted for laparotomy.

Conclusion

This is a case series of ectopic pregnancy with varied presentation and management in modern obstetrics with aim of improving fertility outcomes. These case series highlights the importance of early confirmation of pregnancy and early registration inspite of absence of any risk factors or symptoms. It also revealed the importance of patient's education regarding signs and symptoms of ectopic pregnancy and also perception of safe abortion method by trained person. This series also emphasizes the overall importance of early and consistent prenatal care for quick detection of ectopic pregnancy and reduction of maternal morbidity as well as mortality.

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