

A case series of four cases of atypical ectopic pregnancies

Pravin Kumar Thakare^{1*}, Rupali Sitaram Patil², Narendra Bachewar³

¹Associate professor in Obstetrics and Gynecology, GMC, Nandurbar, Maharashtra, India

²Assistant professor in Anesthesiology, SBHGMC, Dhule, Maharashtra, India

³Associate professor in Pharmacology, SVNGMC, Yavatmal, Maharashtra, India

Received: 03-06-2021 / Revised: 27-06-2021 / Accepted: 23-07-2021

Abstract

Background: Atypical ectopic pregnancies need high level of suspicion. Early diagnosis and timely intervention can save future complications. Ruptured ectopic pregnancy is a nightmare sometimes, however high index of suspicious can help to diagnose and manage patients uneventfully.

Objective: The incidence of atypical ectopic pregnancy seems to have increased. We are presenting our experience of such rare presentations of atypical ectopic pregnancy successfully managed at our tertiary care center. **Case report:** a 24-year-old woman at the gestation stage of 8 weeks presented with pain in the lower abdomen and slight per vaginal bleeding. On detailed investigations and laparotomy was found to have primary abdominal pregnancy. A 23-year-woman, with complaints of pain in abdomen and nausea, vomiting at estimated gestational age of 8 weeks was found to have interstitial pregnancy. A 30 yr P2L2 with history of dilatation and evacuation twice for early pregnancy complaining of pain in abdomen since 2 months was having chronic interstitial pregnancy. And a 32yr P2L2 presented with pain in abdomen with HCG 50000 and USG report of right (rudimentary horn) ruptured ectopic pregnancy was managed successfully. **Conclusion:** Atypical ectopic pregnancies need high level of suspicion. Early diagnosis and timely intervention can save future complications.

Keywords: Cornual pregnancy, interstitial pregnancy, Abdominal pregnancy, Ruptured ectopic, Rudimentary horn.

This is an Open Access article that uses a fund-ing model which does not charge readers or their institutions for access and distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>) and the Budapest Open Access Initiative (<http://www.budapestopenaccessinitiative.org/read>), which permit unrestricted use, distribution, and reproduction in any medium, provided original work is properly credited.

Introduction

The incidence of atypical ectopic pregnancy seems to have increased during the last two decades, as has the incidence of other forms of ectopic pregnancy, as a result of the widespread use of assisted reproductive techniques. Abdominal pregnancy, with a diagnosis of one per 10,000 births, is an extremely rare and serious form of extrauterine gestation[1]. It has reported incidence of one in 2200 to one in 10,200 of all pregnancies[2]. We confirmed the diagnosis of primary abdominal pregnancy according to Studdiford's ectopic pregnancy criteria[3]. We report the management of a primary abdominal pregnancy. Interstitial pregnancy is also a rare condition occurring once in every 2500–5000 live births. Despite being used as a synonym, interstitial and cornual pregnancy represent two distinct conditions. Originally, cornual implantation described implantation in the lateral and upper portion of the uterine cavity, in a horn of a bicornuate uterus, in a rudimentary horn of a unicorn uterus or on the side of a septate uterus. The interstitial denomination, on the other hand, refers to implantation in the intramural proximal portion of the tube. Given the low incidence of interstitial pregnancy, no clear consensus has been established regarding the best management. We described our experience in surgical management by laparoscopic cornuostomy in two cases of interstitial pregnancies and excision of rudimentary horn in rudimentary horn pregnancy has its effectiveness in terms of preservation of fertility.

Early diagnosis in atypical ectopic pregnancy is required in order to reduce maternal mortality and maintain fertility; the mortality rate is seven to ten times greater than that of other forms of ectopic pregnancy and 50 times greater than from intrauterine pregnancy[2].

*Correspondence

Dr. Pravin Kumar Thakare

Associate professor in Obstetrics and Gynecology, GMC, Nandurbar, Maharashtra, India

E-mail: drpravin30@gmail.com

Case 1: Primary abdominal ectopic pregnancy

The patient was a 24-year-woman, gravida 2 para 1 with a normal vaginal delivery 2 years ago. She was transferred to our hospital from her gynecologist at the gestation stage of 8 weeks, for pain in the lower abdomen and slight vaginal bleeding. She did not know when her last menstrual period had been, due to irregular periods. At admission, she presented with a history of abdominal distention together with steadily increasing abdominal and back pain, weakness, lack of appetite, and restlessness with minimal vaginal bleeding. She denied a history of pelvic inflammatory disease, sexually transmitted disease, surgical operations, or allergies. Her general condition was very poor with severe pallor and tachycardia of 120/min with blood pressure of 80/40 mmhg. Her hemogram was showing a hemoglobin concentration of 4.0 g/dl. Transvaginal ultrasonographic scanning revealed an empty uterus with an moderately thick endometrium and meager endometrial collection. Right ovary was normal. A well defined thick walled gestational sac like structure was noted in left adnexa with internal foetal pole without cardiac activity.

A transabdominal ultrasound examination demonstrated an amount of free peritoneal fluid in pouch of Douglas and lower abdomen with multiple low level echoes 800-900cc, suggested possibility of rupture ectopic pregnancy.

Immediately patient was posted for emergency laparotomy with 3 units of whole blood transfusion. Under general anesthesia, a median laparotomy was performed and a massive amount of intra-abdominal sero-hemorrhagic fluid was evident. Gestational sac along with foetus was attached tightly to the mesentery of sigmoid colon and was loosely adhered to the left abdominal sidewall. (fig1)

The gestational sac along with placenta (Fig 2) was dissected away completely and safely from the mesentery of sigmoid colon & abdominal sidewall. Small residual rent on sigmoid was sutured with vicryl 3-0. Both ovaries and fallopian tubes were normal and conserved. After closure of the abdominal wall, dilatation and curettage were also performed, however no trophoblastic tissue was

found in the uterine cavity. Intraperitoneal drain was kept. The patient was discharged on post-operative day five with the standard of care at our hospital.

Case 2: Interstitial pregnancy

A 23-year-old, gravida 2 para 0, with complaints of pain in abdomen and nausea, vomiting and with an estimated gestational age of 8 weeks according to the last menstrual period, presented to her gynaecologist. She had a history of left tubal ectopic pregnancy 2 years ago, which had been treated by salpingostomy. There were no other medical or surgical antecedents. Clinical and vaginal examinations were normal. Her b-HCG level had been 88,650 mIU/ml. Transvaginal ultrasound revealed an empty uterus with an endometrial thickness of 14 mm. After preoperative evaluation, laparoscopy was done. There was a left ectopic gestation sac in left uterine cornua, and no free fluid in the pouch of Douglas. The ovaries were normal. After creating pneumoperitoneum with veress needle, 10mm primary port was inserted. Three ports of 5 mm each were used as accessory ports. We found a 3.5cm mass in the left uterine cornua.(fig 3) The other pelvic organs were without particularity. Inj Vasopressine 20 unit diluted in 400ml normal saline was injected at junction of cornual pregnancy and uterus. 2 cm incision was taken with monopolar hook. Products of conception were evacuated with grasper (fig 4) .The uterine incision was closed using Vicryl 1. Hemostasis was achieved successfully. Patient was managed with cornuostomy. All ports were closed with ethilone 2-0.

Case 3: Chronic interstitial pregnancy

A 30 yr P2 L2 with history of dilatation and evacuation, twice for early pregnancy had came to our tertiary care center, complaining of

pain in abdomen for 2 months. Ultrasonography was showing cystic mass of 2cm on right cornu. After creating pneumoperitoneum with veress needle, 10mm primary port was inserted. 3 ports of 5 mm each were used as accessory ports. We found a 3.5-cm mass in the right uterine cornua. The other pelvic organs were without particularity. Vasopressine 20 unit diluted in 400 ml normal saline was injected at junction of cornual pregnancy and uterus. 2 cm incision with monopolar hook. Pregnancy evacuated with grasper. The uterine incision was closed using Vicryl .Hemostasis was achieved. Patient was managed with cornuostomy. All Ports were closed with ethilone 2-0.

Case 4: Rudimentary horn pregnancy

A 32 yr P2L2 with completed family was presented to our department with complaints of pain in abdomen. Her b-HCG level was 50000 mIU/ml, with ultrasonography report of right ruptured ectopic pregnancy. After creating pneumoperitoneum with veress needle, 10mm primary port was inserted. 3 port of 5 mm size were used as accessory port. Uterus malformation present in the form of rudimentary horn on right side(fig 5). However, left horn of uterus was well developed. Left fallopian tube was arising from well developed left horn. Right fallopian tube was coming from right horn. Middle part of right fallopian tube could not be visualized Left salpingectomy was with shearer. Left horn was separated from uterus and round ligament and ovarian ligament. Haemostasis was confirmed. Drain kept. Ports were closed using ethilone 2-0.. Laparoscopic Bilateral Salpingectomy and excision of left uterine horn was performed. Patient was discharged uneventfully on day 2.

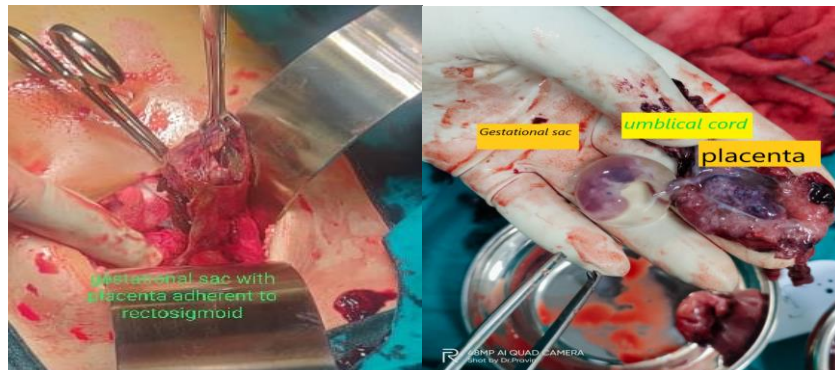


Fig 1: Gestational sac and placenta adherent to rectosigmoid

Fig 2: Placenta , umbilical cord and gestational sac



Fig 3: Left cornual pregnancy

Fig 4: Gestational sac



Fig 5: Right horn ectopic

Discussion

In the first case, we were able to demonstrate primary abdominal pregnancy according to Studdiford's criteria[3]. In our case, both fallopian tubes and ovaries were intact. With regard to the second criterion, we did not observe any uteroplacental fistulae in our case. The clinical presentation of an abdominal pregnancy can differ from that of a tubal pregnancy. Transvaginal ultrasound is superior to transabdominal ultrasound in the evaluation of ectopic pregnancy since it allows a better view of the adnexa and uterine cavity. Such investigations are dependent on the examiner's experience and the quality of the ultrasound. MRI provided additional information for patients who needed precise diagnosing. In our case radiologist couldn't confirm on ultrasound. Laparoscopic treatment must be considered for early abdominal pregnancy[4,5], if patient is haemodynamically stable. Complete removal of the placenta should be done only when the blood supply can be identified and careful ligation performed[5]. In our case we completely removed gestational sac with placenta. A prompt diagnosis of interstitial pregnancy is necessary to avoid life-threatening hemorrhage or uterine rupture and permits conservative treatment conducive to a better fertility outcome. Various approaches have been described to treatment; however no clear consensus has been established[6]. Moawad et al. proposed methotrexate as first-line therapy in hemodynamically stable patients, but no clear guidelines about dosage or application mode exist. Even though alternative conservative approaches have been described, cornual resection is the most commonly used method[7]. Although cornuostomy is less damaging to the fallopian tubes and the authors favored the use of laparoscopic cornuostomy in place of the laparoscopic wedge resection in the management of the patients with interstitial pregnancy. Laparoscopic cornuostomy might be a better choice in the management of women with interstitial pregnancy than laparoscopic wedge resection.

Conclusion

Atypical ectopic pregnancies need high level of suspicion. Early diagnosis and timely intervention can save future complications.

Conflict of Interest: Nil

Source of support: Nil

Ruptured ectopic pregnancy is really nightmare sometimes but high index of suspicious can help to diagnose and manage patients uneventfully.

Ethical issues

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards.

Ethical approval

This article does not contain any research-studies with human participants or animals performed by any of the authors. All the procedures described in above cases were performed as a part of patient care and not as research study. We are publishing our clinical experience in rare cases for the benefit of humanity, with maintenance of complete confidentiality.

References

1. Yildizhan R, Kurdoglu M, Kulusari A, Erten R: Primary omental pregnancy. Saudi Med J 2008, 29:606-609.
2. Alto WA. Abdominal pregnancy. Am Fam Physician. 1990; 41: 209-214.
3. Studdiford WE. Primary peritoneal pregnancy. Am J Obstet gynecol. 1942;44:487-491.
4. Pisarska MD, Casson PR, Moise KJ, Di Maio DJ, Buster JE, Carson SA. Heterotopic abdominal pregnancy treated at laparoscopy. Fertil Steril. 1998;70:159-160.
5. Hallatt JG, Grove JA. Abdominal pregnancy: a study of twenty-one consecutive cases. Am J Obstet Gynecol. 1985; 152 :444 -449.
6. Royal College of Obstetricians and Gynaecologists. The management of tubal pregnancy. 2004; Guideline no. 21. May 2004. Reviewed 2010. Available at: <http://www.rcog.org.uk/womens-health/clinical-guidance/management-tubal-pregnancy-21-may-2004>. (Accessed 14 May 2012)
7. Moawad N, Mahajan S, Moniz M, Taylor S, Hurd W. Current diagnosis and treatment of interstitial pregnancy. Am J Obstet Gynecol. 2010;202:15-29