A Rare Case of A Secondary Abdominal Pregnancy- A Case Report.

Dr Pia Muriel Cardoso¹, Dr Farzanabegaum Dharwad², Dr Viraj Naik², Dr Sarika Arsekar³.

¹MD, FICS, FICOG, Ph.D, Associate Professor,²Junior Resident, ³Lecturer.Department Of Obstetrics And Gynaecology, Goa Medical College, Bambolim, Goa.

Abstract: Rupture of the Ectopic pregnancy is a life threatening obstetric emergency. The plethora of symptoms and signs it can present with, plenty of diagnostic pit falls and management options available makes ectopic pregnancy a very challenging problem. Herewith we are reporting a case of a multigravida with an early pregnancy who presented to us in shock.

Keywords: Ruptured Ectopic Pregnancy, Secondary Abdominal Pregnancy.

I. Introduction

Ectopic pregnancy refers to the pregnancy occurring outside the uterine cavity that constitutes 1.3-2 % of all reported pregnancies.¹Ectopic pregnancy is a pathology which never fails to surprise the obstetrician. All identifiable risk factors of ectopic pregnancy are maternal. The diagnosis of ectopic pregnancy can now often be made by non-invasive methods due to sensitive pregnancy tests (in urine and serum) and high resolutiontransvaginalsonography (TVS), which have been integrated in diagnostic algorithms. These algorithms, in combination with the increased awareness and knowledge of risk factors among both clinicians and patients, have enabled an early and accurate diagnosis of ectopic pregnancy.

There are several risk factors studied in the etiology of Ectopic pregnancy. Most common being history of PID, previous ectopic, history of smoking, use of IUCD, previous history of tubal surgery, previous LSCS, previous abortions, IVF treatment, previous evacuation and curettage²⁻⁵.

II. Case report

A 32 year oldgravida 2 para 1, married for 12 years, was admitted in Goa Medical College as a referred patient from a private hospital in Goa with the diagnosis of ectopic pregnancy with hemoperitoneum and anemia. She had a history of 10 years of secondary infertility for which she had not taken any treatment. 10 years ago, she had delivered a stillborn by caesarean section. She had conceived the present pregnancy spontaneously. She gave history of some abdominal surgery for an abdominal desmoids tumourin the recent past, details of which were not available.

The patient had history of normal menses prior. Urine pregnancy test done was positive. The gestational age of the present pregnancy was12.6weeks. The patient had come with complaints of pain in her abdomen for one day and bleeding per vaginum for 10 days. On examination, the patient was pale and in shock. Per abdomen examination revealed distention of abdomen with guarding, rigidity, tenderness and free fluid. Per vaginum examination showed bulky, anteverted uterus with fullness in right fornix and tenderness in left fornix, cervical excitation test was positive. Investigations revealed Hb-7.4g%, Ultrasound showed features of right sided tubal ectopic pregnancy, fetal pole 67.8mm \approx 13weeks and a right sided ovarian cyst.

In view of hemodynamic instability patient was directly shifted to the operation theater for laparotomy under general anesthesia. There was evidence of a secondary abdominal pregnancy with fetus ≈ 12 to 13 weeks within gestational sac in peritoneal cavity with placental tissue adherent to omentum. Thegestational sac was separated from surrounding structures and excised out intact. The omentaltissue wasclamped, cut, ligated and removed along with placenta. Hemoperitoneum of 1.5 to 2L was evacuated. Large rentwas seen in right fallopian tube in ampullary region treated with right salpingectomy. Patient received 4 units of packed cells intra operatively and post operatively. Incidently, there was also a 20x15 centimeters, multilobular ovarian mass arising from right ovary cystic in consistency with intact capsule. The mass was fixed posteriorly with a retroperitoneal extension and also adherent to bowel. Due to hemodynamic compromised state, fixity of the mass and inability to remove the entire mass, a part was removed and sent for biopsy, and decision was taken to evaluate the mass at a later stage. The histopathology report simply was suggestive of corpus luteum tissue.

Post operatively the patient was followed up by ultrasonography and MRI, which revealed bilateral endometriotic cysts with raised CA 125 level (532 IU/mL). Patient was advised to take monthly GnRH analogue injections for six months.



Figure 1: Showing ruptured fallopian tube.

III. Discussion

Figure 2: Showing intact gestational sac with fetus inside and fallopian tube with a large rent.



The term secondary abdominal pregnancy means pregnancy that originated in the fallopian tubes(less common ovarian/rudimentary horns of uterus) and reimplanted in the peritoneal cavity. It constitutes a life threatening obstetric emergency with significant effects on the reproductive function of women.

The incidence of abdominal pregnancy is estimated at 1 in 2200 to 10,200 of all pregnancies⁶, or approximately 1% of ectopic pregnancies.⁷ The risk factors for abdominal pregnancy are similar to risks described for other ectopic pregnancies with the exception of cocaine use, which is exclusively associated with abdominal pregnancy.⁸ Although rare, abdominal pregnancy is a life-threatening condition, with maternal and perinatal mortality rates of 0.5% to 20% and 40% to 95%, respectively.⁹

Abdominal pregnancy can be classified as primary (rare) and secondary. Most abdominal pregnancies are the secondary type. Primary abdominal pregnancy is defined as direct peritoneal implantation of the fertilized ovum and is diagnosed by the Studdiford criteria: (1) normal fallopian tubes and ovaries; (2) absence of a uteroperitoneal fistula; and (3) attachment exclusively to a peritoneal surface early enough to eliminate the possibility of a secondary gestation.¹⁰ In contrast, secondary abdominal pregnancy is defined as reimplantation of a ruptured extrauterine pregnancy, most commonly tubal, in the peritoneal cavity. Furthermore, abdominal pregnancies can be divided into early (<20 weeks) and advanced (>20 weeks).

The most common presentation of patients with abdominal ectopic pregnancy is lower abdominal pain. Site of implantation may correlate with localization of pain.¹¹ Although more than 50% of cases are missed antenatally, sonography remains the main method of diagnosis.¹² Sonographic features that can suggest this diagnosis include an empty uterus adjacent to the bladder, absence of a myometrium around the fetus, a poorly visualized placenta, an unusual fetal lie, and relative oligohydramnios.¹³ Other described criteria include an extrauterine location of the placenta and fetal parts adjacent to maternal abdominal content.¹⁴

Magnetic resonance imaging can help delineate maternal and fetal anatomy and determine the exact position of the placenta for preoperative planning. Preoperative planning with magnetic resonance imaging can decrease the risk of cutting into the placenta, which can result in catastrophic bleeding.¹⁵

Different management options have been described in the literature when the accurate diagnosis is made prenatally. In early gestation when an embryo is present, laparotomy is preferred, although laparoscopic

surgical intervention remains an option in low-risk cases.¹⁶ In more advanced cases in which a fetus is present, laparotomy is the treatment of choice.¹⁷ Isolated or adjunctive treatmentswith methotrexate and preoperative embolization of the placenta have also been reported. Dahab et al described a full-term delivery of a missed abdominal gestation via caesarean section.¹⁸ Regardless of the treatment of choice, precise preoperative planning using available imaging tools is crucial to prevent complications and reduce mortality.

IV. Conclusion

With this case report we highlight that secondary abdominal pregnancy is a medical emergency and it should be diagnosed and treated promptly. It is therefore important that all the physicians should be sensitive to the fact that in the reproductive age group any women presenting with pain in the lower abdomen, diagnosis of ectopic pregnancy should be entertained irrespective of the presence or absence of amenorrhoea, whether or not she has undergone sterilization. All diagnosed cases of pregnancy should have an ultrasound in the first trimester at the earliest.

References

- [1]. Horne AW, Critchley HO. Mechanism of disease: the endocrinology of ectopic pregnancy. Expert Rev Mol Med. 2013;e7:14.
- [2]. Tay JI, Moore J, Walker JJ. Ectopic pregnancy. BMJ. 2000;320:9616-916.
- [3]. Bouyer J, Coste J, Fernandez H, Job-Spira N. Smoking and ectopic pregnancy. Arguments for a causal relationship. (In French). Rev EpidemiolSantePublique. 1998;46:93-99.
- [4]. Coste J, Fernandez H, Joye N, Benifla J, Girard S, Marpeau L, Job-Spira N.. Role of chromosome abnormalities in ectopic pregnancy. FertilSteril. 2000;74:1259-1260.
- [5]. Vessey MP, Yeates D, Flavel R, McPherson K. Pelvic inflammatory disease and the intrauterine device: findings of a large cohort study. Br Med J. 1981;282:855-857.
- [6]. Ludwig M, Kaisi M, Bauer O, Diedrich K. The forgotten child: a case of heterotopic, intra-abdominal and intrauterine pregnancy carried to term. Hum Reprod. 1999;14:1372–1374.
- [7]. Riethmuller D, Courtois L, Maillet R, Schaal JP. Ectopic pregnancy management: cervical and abdominal pregnancies [in French]. J Gynecol Obstet Biol Reprod. 2003;32(suppl):S101–S108.
- [8]. Audain L, Brown WE, Smith DM, Clark JF. Cocaine use as a risk factor for abdominal pregnancy. J Natl Med Assoc. 1998; 90:277–283.
- [9]. Studdiford WE. Primary peritoneal pregnancy. Am J Obstet Gynecol. 1942;44:45.
- [10]. Bertrand G, Le Ray C, Simard-Emond L, Dubois J, Leduc L. Imaging in the management of abdominal pregnancy: a case report and review of the literature. J Obstet Gynaecol Can. 2009;31:57–62.
- [11]. Kun KY, Wong PY, Ho MW, Tai CM, Ng TK. Abdominal pregnancy presenting as a missed abortion at 16 weeks' gestation. Hong Kong Med J. 2000;6:425–427.
- [12]. Graham D, Johnson TR Jr, Sanders RC. Sonographic findings in abdominal pregnancy. J Ultrasound Med. 1982;1:71–74.
- [13]. Angtuaco TL, Shah HR, Neal MR, Quirk JG. Ultrasound evaluation of abdominal pregnancy. Crit Rev Diagn Imaging. 1994;35:1-59.
- [14]. Malian V, Lee JH. MR imaging and MR angiography of an abdominal pregnancy with placental infarction. AJR Am J Roentgenol. 2001;177:1305-1306.
- [15]. Cristalli B, Guichaoua H, Heid M, Izard V, Levardon M. Abdominal ectopic pregnancy: limits of laparoscopic treatment [in French]. J Gynecol Obstet Biol Reprod. 1991;21:751–753.
- [16]. Rahaman J, Berkowitz R, Mitty H, Gaddipati S, Brown B, Nezhat F. Minimally invasive management of an advanced abdominal pregnancy. Obstet Gynecol. 2004;103:1064–1068.
- [17]. Bertrand G, Le Ray C, Simard-Emond L, Dubois J, Leduc L. Imaging in the management of abdominal pregnancy: a case report and review of the literature. J Obstet Gynaecol Can. 2009;31:57–62.
- [18]. Dahab AA, Aburass R, Shawkat W, Babgi R, Essa O, Mujallid RH. Fullterm extrauterine abdominal pregnancy: a case report. J Med Case Rep. 201;5:531.