

## Abdominal Pregnancy- A Case Report

M.M Begum, S. Sultana, M. Quddus, G. Hoque

<sup>1</sup>Dr. Mst. Moonmoon Begum, Resident Surgeon, Obstetrics & Gynecology, Rangpur Medical College Hospital.

<sup>2</sup>Dr. Sharmin Sultana, Associate Professor, Obstetrics & Gynecology, Rangpur Medical College Hospital.

<sup>3</sup>Dr. Maliha Quddus, Assistant Register, Obstetrics & Gynecology, Rangpur Medical College Hospital.

<sup>4</sup>Dr. Georgia Hoque, Assistant Register, Obstetrics & Gynecology, Rangpur Medical College Hospital.

**Correspondence Author:** Dr. Mst. Moonmoon Begum, Resident Surgeon, Rangpur Medical college hospital.  
Mobile: 01712-263846.

**ABSTRACT:-** Abdominal pregnancy is a rare form of ectopic pregnancy with very high morbidity and mortality for both the mother and the fetus. Diagnosis and management can pose some difficulties especially in low resource centers. High index of suspicion is vital in making prompt diagnosis in such situations. A case of live abdominal pregnancy that diagnosed at 15 weeks of gestation at a Regional Hospital in Bangladesh is presented.

**Keywords:-** Abdominal pregnancy, ectopic pregnancy, placenta.

### I. INTRODUCTION

It is normal for implantation of the fertilized ovum to occur within the uterine cavity. When implantation take place anywhere outside the uterine cavity, it is referred to as an ectopic pregnancy. Abdominal pregnancy is a rare type of ectopic pregnancy where the developing embryo implants and nourishes within the peritoneal cavity.

Ectopic pregnancy represent about 1-2% of all pregnancies with 95% occurring in the fallopian tube. Abdominal pregnancies represent just about 1% of ectopic pregnancies.<sup>1</sup> The incidence of abdominal pregnancy differs in various publications and ranges between 1:10000 pregnancies and 1:30000 pregnancies.<sup>1,2</sup> Multiparity and poor socio-economic condition are implicated as epidemiological factors.<sup>3</sup>

Abdominal pregnancy can further be classified as being primary or secondary. Primary abdominal pregnancy which is extremely rare occurs when a fertilized ovum implants itself initially on some abdominal organ. Most of the cases of abdominal pregnancies are secondary in that the fertilized ovum first implants in the fallopian tube, ovary or uterus and subsequently escapes through a rent into the peritoneal cavity.

In most of these cases, the diagnosis is made on the basis of the ensuing complications such as hemorrhage and abdominal pain. Maternal mortality and morbidity are also very high especially if the condition is not diagnosed and managed appropriately. These pregnancies generally do not reach term gestation and usually the end result is extraction of a dead fetus and also very high incidence of congenital malformations.

### II. CASE REPORT

A 25-year-old women Gravida 3, Para 2 (vaginal delivery) was attend in Gynae OPD on 10<sup>th</sup> October 2017 with the complaints of 15 + weeks pregnancy with severe lower abdominal pain and per vaginal bleeding. Her menstrual cycle was regular and her pregnancy was confirmed by urinary b-hcg. She was not on antenatal check-up before.

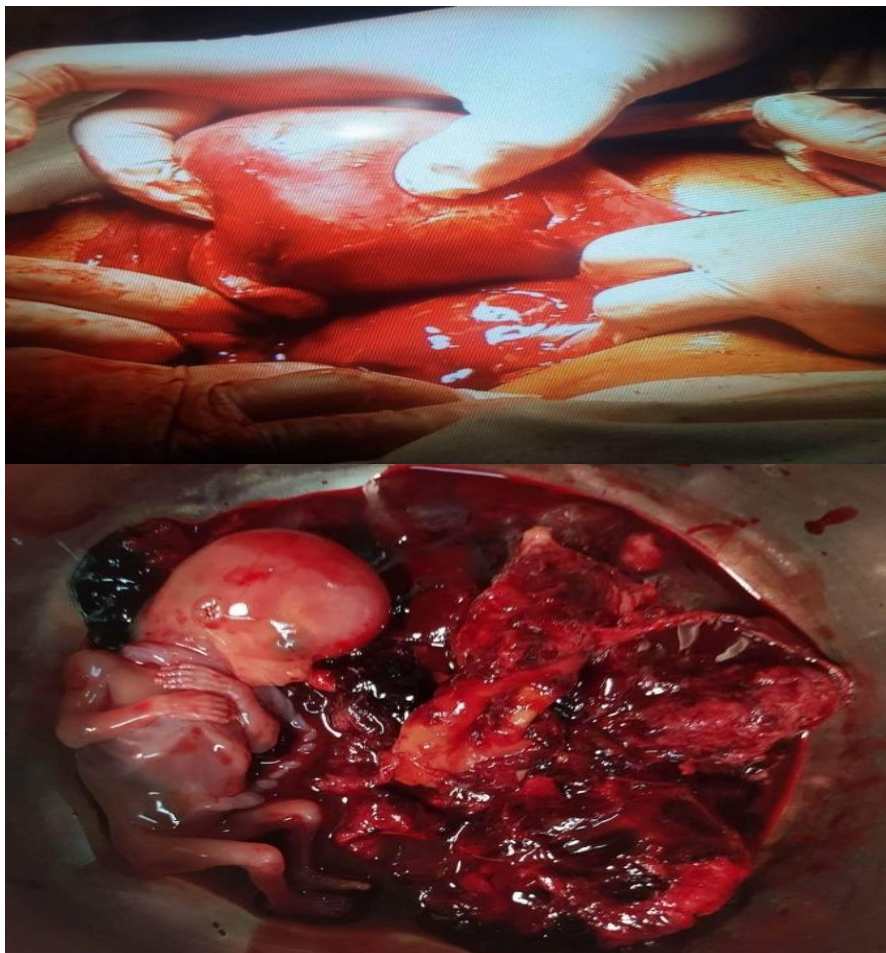
On examination, she looked generally stable. She was not pale; vital signs were within normal limits. Cardiovascular and respiratory systems did not reveal any abnormalities. Per abdominal examination revealed tender lower abdomen and height of the uterus could not well delineated. On per vaginal examination a tender mass felt through posterior fornix. Urgent transabdominal Ultrasonography was done which revealed a large gestational sac with live fetus in the pouch of Douglas. BPD measuring about 26 mm corresponds about 14 weeks and 4 days of pregnancy. Cardiac activity was present. Uterus was bulky with moderate endometrial collection. There was no free fluid seen at that time. Her blood group was B positive and Hemoglobin level was 9.00 g/dl. So, emergency laparotomy was done after counseling with the patient and patient's party.

On laparotomy, uterus was about 10 weeks size, both sided fallopian tubes and ovaries were intact and there was no blood or free fluid in the peritoneal cavity. There was a mass about 12×12 cm adherent with uterus and right adnexae with intact sac. During separation of the mass from pouch of Douglas and uterus and right adnexae the sac ruptured and a live fetus of about 15 weeks size came out along with placenta. Right fallopian tube was distorted and teared during manipulation and left sided tubectomy was done according to patient's

request. Oozing of blood from placental bed was controlled by hot mopping and haemostatic sutures. There was no rent in the uterus. After peritoneal toileting and hemostasis, abdomen was closed in layers after keeping a drain tube in-situ. Per operative blood loss was estimated to be 200 ml and the patient received 1 unit of fresh blood. Inj. Methotrexate 50 mg IM stat was given for autolysis of any residual placental tissue. Her post operative period was uneventful and she was discharged at 7<sup>th</sup> post operative day. The patient was reviewed after six weeks with no complaints.



**Figure 1:** Ultrasonography picture at 14 weeks gestation showing a showing a single alive fetus corresponding to date in size.



**Figure 2:** (a) Laparotomy findings of large gestational sac in the pouch Of Douglas separated from uterus, (b) The fetus and the placenta.

### III. DISCUSSION

A high index of suspicion is needed to make a first time diagnosis of abdominal pregnancy.<sup>4</sup> diagnosis is missed in one-fourth of reported cases.<sup>5</sup>

Clinical presentation can be variable with abdominal pain occurring at 16-17 weeks gestation<sup>6,7</sup> as was observed in our patient. The diagnosis of early abdominal pregnancy is by B- hCG estimation and Ultrasonography. In our case, Ultrasonography was the single test used to diagnose abdominal pregnancy.

Allibone GW et al<sup>8</sup> described major criteria for sonographic diagnosis of intra-abdominal pregnancy. These include: 1) demonstration of fetus in a gestational sac outside the uterus or depiction of an abdominal or pelvic mass identifiable as the uterus separate from the fetus; 2) failure to see a uterine wall between the fetus and the urinary bladder; 3) recognition of a close approximation of the fetus to the maternal abdominal wall; and 4) localization of the placenta outside the confines of the uterine cavity. All of these features were recognized in our patient. Most recent literature listed other additional criteria such as oligohydromnios, abnormal fetal lie, placenta previa appearance and maternal bowel gas impending fetal visualization.<sup>5</sup>

The outlook for the fetus in abdominal pregnancy is poor.<sup>9</sup> The perinatal mortality varies from 85 to 95%<sup>10</sup>, and the rate of fetal deformations reported to range from 20 to 90%<sup>11,12</sup>. The most common deformations and malformations were observed in the exposed areas of the fetus such as the head and the extremities<sup>12</sup>.

Current concepts on management of abdominal pregnancy support immediate active surgical intervention with termination of the pregnancy if diagnosed before 24 weeks gestation<sup>13-15</sup>. In patients who present after 24 weeks, the appropriateness of conservative treatment is debatable<sup>13</sup>. There is need to assess each individual case and adopt the most appropriate method with a view to minimizing fetomaternal morbidity and mortality. A conservative approach requires close surveillance of the patient and regular monitoring with ultrasonography. The patient should be admitted into hospital where blood bank facilities and resources needed for rapid surgical intervention are obtainable. Intra-operative management of the placenta poses another dilemma for the clinician. Although removal of the placenta offers a better prognosis<sup>16</sup>, this should not be attempted if there is any risk of massive hemorrhage with a fatal outcome. Placentas left in-situ usually regress gradually and are monitored with serial serum B-hCG and ultrasonography. The prophylactic use of Methotrexate in management of residual placental tissue is no longer advocated by some clinicians<sup>17</sup>. In their view, the necrosed placental tissue is a potent culture medium with increased risk of serious intra-peritoneal infection.

### IV. CONCLUSION

Early accurate diagnosis of abdominal pregnancy remains vital for reducing morbidity and mortality in this potentially life-threatening entity. Ultrasonography in experienced hand has very high sensitivity and specificity as a diagnostic tool and continues to play a significant monitoring role in the pre-operative and post-operative periods. The management method is influenced by adequate patient counseling and the overall clinical picture. Prompt surgical intervention with careful evaluation of the placenta before its removal offers the best prognosis.

### REFERENCES

- [1]. Nwobodo EI. Abdominal pregnancy. A case report. *Ann Afr Med* 2004; 3(4): 195-6.
- [2]. Badria L, Amarín Z, Jara dat A, Zahawi H, Gharaibeh A. Full term viable abdominal pregnancy. A case report and review *Arch Gynecol Obstet* 2003; 268(4): 340-2.
- [3]. Sfar E, Kaabar H, Marrakechi O, Zouari F, Chelli M, Kharouf M, Chelli M. Abdominal pregnancy, a rare anatomoclinical entity. 4 case reports (1981-1990) *Rev Fr Gynecol Obstet*. 1993 apr; 88(4): 261-5.
- [4]. Lamina MA, Akinyemi BO, Fakoya TA, Shorunmu TO, Oladapo OT: Abdominal pregnancy: A case of failed induction of labour. *Niger J Med*. 2005 April-June: 14(2): 213-7.
- [5]. Stanley JH, Horger EO 3rd, Fagan CJ, Andriole JG, Fleischer AC: Sonographic findings in abdominal pregnancy *AJR Am J Roentgenol* 1986 Nov, 147 (5): 1043-6.
- [6]. Bertrand G, Le Ray C, Simand-Emond L, Dobojs J, Leduc L. Imaging in the management of abdominal pregnancy: a case report and review of the literature *J. Obstet Gynecol Can*. 2009 Jan; 31(1): 57-62
- [7]. Zhang J, Li F, Sheng Q: Full-term abdominal pregnancy: a case report and review of literature *Gynecol Obstet Invest*. 2008; 65(2): 139-41.
- [8]. Allibone GW, Fagan CJ, Porter SC: The Sonographic features of intra-abdominal pregnancy. *J Clin Ultrasound* 1981 Sep; 9(7): 383-7.
- [9]. Rahman MS, Al Suleiman SA, Rahman J, Al-Sibai MH (1982) Advanced abdominal pregnancy-observation in 10 cases. *Obstet Gynecol* 59: 366-372.
- [10]. Strafford JC, Ragan WD (1977): Abdominal Pregnancy- review of current management. *Obstet Gynecol* 50: 548-552.

- [11]. Cathy A, Stevens. Malformations and deformations in abdominal pregnancy; American Journal of Medical Genetics; 47(8), Dec 1993; 1189-1195.
- [12]. Bright AS, Maser AH (1961): Advanced Abdominal Pregnancy- review of the recent literature and report of a case. Obstet Gynecol 17: 316-324.
- [13]. Paternoster DM, Santarossa C: Primary Abdominal Pregnancy- a case report. Minerva G inecol. 1999 Jun; 51(6); 251-
- [14]. Brandt AL, Tolson D: Missed abdominal ectopic pregnancy J. Emerg Med. 2006 Feb; 30(2): 171-4.
- [15]. Hsich CH, Hsu TY, Changchien CC: Abdominal pregnancy- report of two cases and review of literature. Changgeng Yi Xue Za Zhi, 1994 Sep; 17(3): 268-75.
- [16]. Ayinde OA, Aimakhu CO, Adeyanju OA, Omigbodun AO: Abdominal pregnancy at the University College Hospital, Ibadan: a ten-year review. Afr J. Reprod Health. 2005 Apr; 9(1): 123-7.
- [17]. 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 Dec; 6(4): 425-7.

**Correspondence Author: Dr. Mst. Moonmoon Begum,**  
*Resident Surgeon, Rangpur Medical college hospital. Mobile: 01712-263846.*