CASE REPORT

Intrauterine Twin Gestation with Tubal Ectopic: A Rare Spontaneous Heterotopic Pregnancy

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Abstract

Heterotopic pregnancy is a condition in which an ectopic pregnancy coexists with an intrauterine pregnancy. It can be a life-threatening condition and can be easily missed, with the diagnosis being overlooked. A very high degree of suspicion is required to reach the diagnosis. Some of the known risk factors associated are assisted reproductive techniques, infertility, and previous history of pelvic inflammatory disease. The diagnosis is still challengeable in patients with heterotopic pregnancy without identifiable risk factors and with spontaneous pregnancy and those who usually attend first with uncomplicated heterotopic pregnancy, are usually overlooked.

Keywords: Heterotopic, Intrauterine twin gestation, Pregnancy.

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Introduction

Heterotopic pregnancy is a condition in which an ectopic pregnancy coexists with an intrauterine pregnancy. Incidence was very rare in the past being 1 in 30,000 pregnancies.[1] Its incidence has increased to 1 in 8000 pregnancies due to assisted reproduction.[2] It can be a life-threatening condition and can be easily missed, with the diagnosis being overlooked. A very high degree of suspicion is required to reach the diagnosis. Some of the known risk factors associated are assisted reproductive techniques (ART), infertility, and previous history of pelvic inflammatory disease.[3] Heterotopic pregnancy is more common with ART than spontaneous conception, with possible etiologies including multiple embryo transfers and previous tubal damage.[4,5] The diagnosis is still challengeable in patients with heterotopic pregnancy without identifiable risk factors and with spontaneous pregnancy. Those who attend first with uncomplicated heterotopic pregnancy, are usually overlooked. We are hereby presenting a case report of heterotopic pregnancy with twin gestation after spontaneous conception. Our aim is to raise awareness for such a rare event to ensure better patient outcome.

Case Description

A 38-year-old P1011 with previous cesarean section (5 years ago) with day 1 post dilatation and curettage (D&C) done for twin gestation in a private hospital, presented to the OPD with complaints of pain abdomen and bleeding per vaginam since a day. Pain was sudden onset, severe, and radiating downwards, associated with abdominal distension. Attendants gave history of D&C for twin pregnancy at a private hospital for absent cardiac activity in the second twin on a day before admission. After D&C, she was stable for 8–10 hours. At night she started having pain in abdomen along with abdominal distension. The intensity of the pain was increasing. Attendants took her to the same private clinic, from which she was referred to our hospital.

On admission, she was conscious but sick. Peripheral pulses not felt, carotid pulsations felt @116 beats/min, blood pressure (HP) was 90/60 mm Hg, RR 22/min, temperature was 97.2 degrees F, Pallor +++, P/A: Abdominal distension +, tenderness +, bowel sounds absent.

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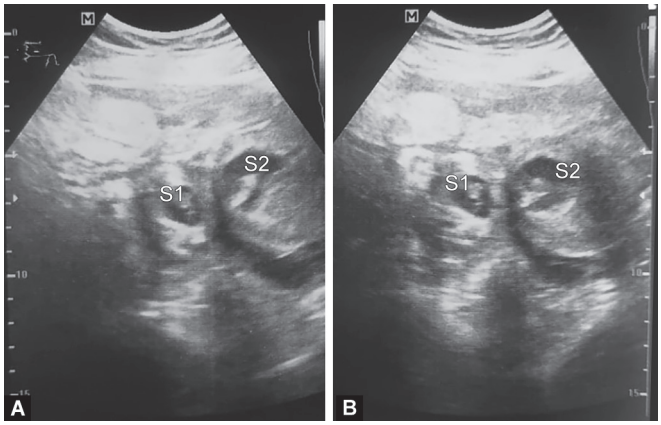
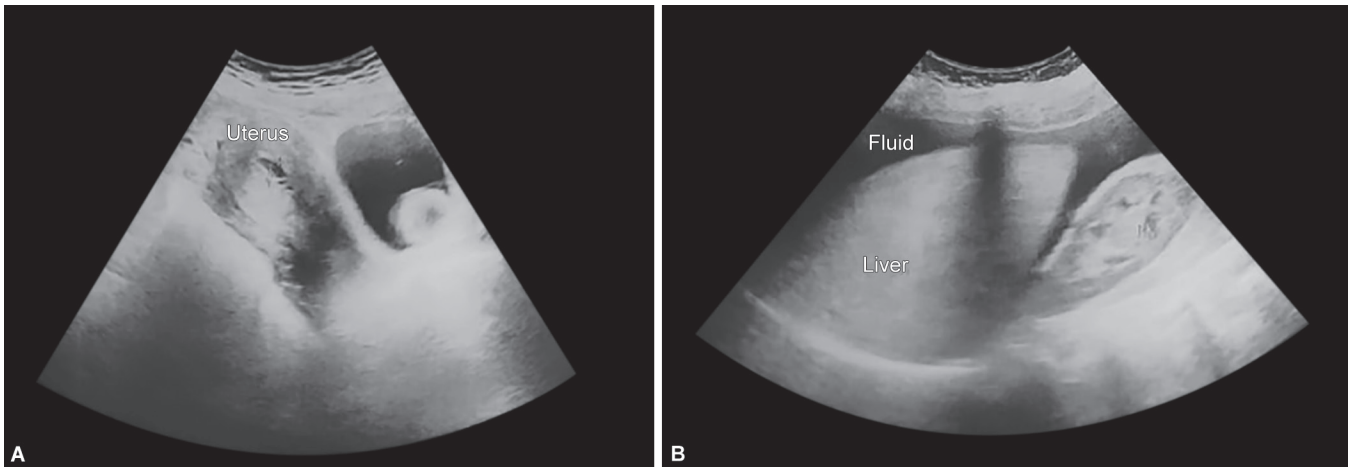
Conflict of interest: None

L/E: no bleeding P/V; P/S: cervix normal looking, no bleeding per vaginam. Her **lab parameters** were hemoglobin (Hb) 4.5 g, total leukocyte count-22,200/mm^3, differential leukocyte count 84/10/02/01, platelets count 1.73 lacs/mm^3, liver function tests were within normal limits; renal function tests (—BUN 22.5, S. creatinine 2.43, βHCG 12,660 U/mL.

Radiological findings are USG before D&C showed 2 G.sacs with embryo in gravid uterus (Fig. 1). Fetus 1: MGA 6 weeks + 5 days, EDOD 28/8/21, cardiac activity present, decidual reaction was



Figs 1A and B: USG before D&C showing twin intrauterine gestation



Figs 2A and B: USG on admission showing well-defined, thick-walled cystic area with small lumen, outside uterine cavity and mild to moderate fluid in pelvis (A) and peritoneal cavity (perihepatic region–B)

good. Fetus 2: MGA 8 weeks + 3 days, fetal node is seen, cardiac activity was absent, decidual reaction was poor. An echogenic area measuring 28 × 30 mm seen in the right adnexal region. No echoes and septae are seen.

Management

The patient was resuscitated in the emergency. Intravenous access was gained with difficulty. Noradrenaline infusion started @5mL/hr and increased up to 8mL/hr as BP dropped to 80/40 mm Hg. Samples collected and sent for routine investigations immediately. Samples for cross match were also taken simultaneously. Foley's catheterization was done, urine output monitored along with vitals.

After stabilization, USG was done which showed features suggestive of right-sided tubal ruptured ectopic pregnancy, hemoperitoneum ++ (Fig. 2).

After counseling and informed written consent, emergency laparotomy and right salpingectomy were done.

Intraoperatively

Massive hemoperitoneum was present. Right-sided ruptured tubal ectopic near ampulla, kidney tray full of clots was removed. Right-sided salpingectomy done and sent for histopathological examination in formalin.

Three units of packed red blood cells and four units of fresh frozen plasma were given intra-operatively. After laparotomy, the patient was shifted to the High Dependency Unit for stabilization and monitoring.

The histopathological report confirmed products of conception.

Discussion

First USG before D&C showed a twin gestation with echogenic area in the right adnexal region, without echoes and septa. As it was spontaneous conception, without any infertility treatment, diagnosis of heterotopic pregnancy was missed by the treating obstetrician. Missed heterotopic pregnancy landed the patient in near miss situation. While being rare, it has potentially grave implications for both the mother and fetus.[6] It still remains a diagnostic and therapeutic challenge to practitioners despite the increased medical knowledge and use of improved reproductive technologies.[4,7] This case report reiterates that uterine pregnancy with coexisting adnexal mass should always raise suspicion of heterotopic pregnancy.

Similar type of case reported in the literature where a 28-year-old woman presented to the emergency room with acute severe abdominal pain and diagnosed with spontaneous heterotopic pregnancy in natural conception, with strong family history of multiple gestations.[3] The patient was also reported to be born as a consequence of a multiple gestation pregnancy.[8] Ectopic pregnancy was successfully removed surgically to conserve the uterine pregnancy. Early diagnosis and treatment of heterotopic pregnancy has great significance to avoid both fetal and maternal morbidity and mortality.

Conclusion

Heterotopic pregnancy is a potentially life-threatening condition. Our case is a ruptured tubal heterotopic pregnancy after spontaneous conception. Heterotopic pregnancy is a rare event with a reported incidence of 1 in 8000 pregnancies. The fallopian tube is the most frequent site for extrauterine pregnancy, as was our case. Accurate and early diagnosis of heterotopic pregnancy is challenging and life-saving.

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