

A Case Report of Cornual Pregnancy

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Abstract: Cornual pregnancy is a rare type of ectopic pregnancy in which embryo implants in the junction between the fallopian tube and uterus. In about 4% of ectopic pregnancy, it can involve cornua. Cornual (interstitial) pregnancy is more dangerous than other ectopic as it may result in severe hemorrhage, shock with mortality rates ranging between 2-2.5%. Early diagnosis and management of cornual pregnancy remains mainstay for handling maternal mortality. Management of cornual pregnancy includes medical or surgical management. In these modalities includes methotrexate therapy, laparoscopic technique such as cornuostomy and cornual resection and hysterectomy.

Keywords: cornual pregnancy, laparotomy

1. Introduction

Ectopic pregnancy is a pregnancy outside the uterine cavity. Cornual pregnancy is a rare type of ectopic pregnancy in which embryo implants in the junction between the fallopian tube and uterus.^{1,2} In about 4% of ectopic pregnancy, it can involve cornua.^{3,4} 95% of ectopic pregnancies occur in fallopian tube and ampullary region of fallopian tube is most common site for ectopic pregnancies. Fallopian tubes are structures which connect peritoneal cavity to uterine cavity. It is 10 cms long, intramural (interstitial) part which is located within myometrium of uterus, 1cm long and 0.7cm wide. Cornual (interstitial) pregnancy is more dangerous than other ectopic as it may result in severe hemorrhage, shock with mortality rates ranging between 2-2.5%.

2. Case Report

A 29 year old G3P2L2 presented with an episode of acute abdominal pain following 12 weeks amenorrhea in our emergency. Pain was colicky in nature and aggravated on lying down, and radiate to both shoulders. Her previous two pregnancies were full term vaginal delivery and were uneventful.

On general examination moderately built and moderately nourished and severe degree of pallor was seen and patient was in shock. She was hemodynamically unstable. Her BP-90/50, pulse-124/min. Her abdomen was distended and tenderness present. In per vaginal examination revealed cervical tenderness and uterus size couldn't made out. Culdocentesis showed hemoperitoneum. An assessment of rupture ectopic was made, two wide bore intravenous accesses were made and whole blood and fluid resuscitations were started. Patient's consent taken for emergency exploratory laprotomy.

Intra operative findings were:-Haemoperitoneum with bulky uterus. The right cornua was distended. Right, and left ovary and left tube were normal. The right tube was dilated. The estimated blood loss was around 500 ml. She had right cornual resection and salpingectomy. Histopathological evaluation of the specimen confirmed the diagnosis of ectopic pregnancy. Post operative period was uncomplicated

and she was discharged home on fifth day. She was advised for caesarean section in subsequent pregnancy to reduce the risk of uterine rupture.

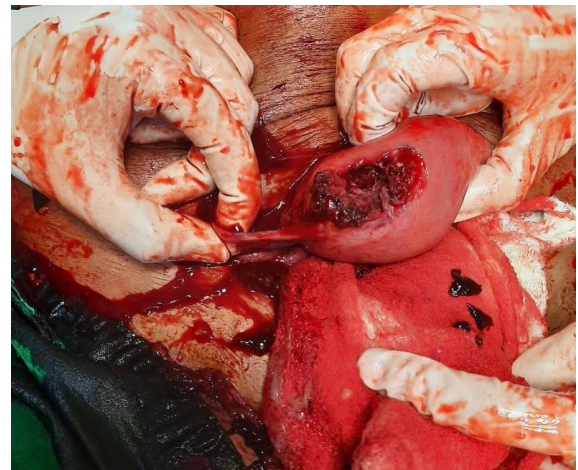


Figure 1: Right rupture cornual ectopic pregnancy



Figure 2: 12 weeks fetus extraction following procedure

3. Discussion

Ruptured ectopic pregnancy present with classical symptoms of delayed menses, vaginal bleeding, and haemorrhagic shock due to severe intra peritoneal

bleeding⁵. Early diagnosis of ectopic pregnancy is very important before it ruptured. Risk factors for tubal ectopic pregnancy are: previous tubal pregnancy, IVF therapy, tubal surgery and a history of sexual infection⁶.

Diagnosis is made by β HCG assay and USG. Serum test of β HCG can detect low level up to 5 IU/L, while urine test can only detect at low level up to 20-50 IU/L.⁷ Serial measurement of β HCG is used for women with bleeding or pain in first trimester. In normal pregnancy, β HCG concentration rises rapidly in first trimester and double in 48 hours. In ectopic there is slow or no rising of β HCG but this is not always true. So serial measurement of β HCG is also very valuable not only to identified an ectopic pregnancy but to assure fetal viability.

USG criteria for making a diagnosis of ectopic includes-

- An empty uterine cavity
- A gestational sac which is separate from uterine cavity
- A myometrial thinning of less than 5 mm around the gestational sac, typically the interstitial line sign- an echogenic line from the endometrial cavity to the corner which is next to the gestational mass is seen.⁸

Paucity of the myometrium around the gestational sac is diagnostic, while in contrast an angular pregnancy has at least 5 mm of myometrium on all its sides.⁹

Conservative management for cornual ectopic pregnancy with asymptomatic patients is methotrexate therapy. In rupture cornual ectopic pregnancy surgical management is necessary. Hysterectomy may be needed due to hemorrhage. Hysteroscopic management can be used in women who are non compliant with treatment with methotrexate. In this technique, cornual endometrium is removed (including tubal ostium) under laparoscopic guidance.¹⁰

4. Conclusion

There is difficulty in early diagnosis of cornual pregnancy. Risk increases with rupture of cornual pregnancy and profuse hemorrhage can be life threatening and leads to increase in maternal mortality. Management of cornual pregnancy includes medical or surgical management. In these modalities includes methotrexate therapy, laparoscopic technique such as cornuostomy and cornual resection and hysterectomy. Early diagnosis and management of cornual pregnancy remains mainstay for handling maternal mortality. Our patient had cornual resection with salpingectomy with no post-operative morbidity.

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