

Case Report,

Case Report: - Cornual Pregnancy

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Abstract:

Introduction: Ectopic pregnancy is a condition where gestation sac is located outside the uterine cavity; it is a major life threatening situation in early pregnancy. Cornual pregnancy is rare condition; its incidence remains 2-4% of all ectopic pregnancies. We are hereby reporting a case of cornual pregnancy managed by laparotomy.

Case Presentation: The case was presented with pain abdomen at around four month of amenorrhoea, patient was in shock. On usg, right adnexa showed hyperechoic mass 5.5X3.8 cm and free fluid in POD and hepatorenal pouch. We performed the right cornual resection with right salpingectomy by laparotomy.

Conclusion: Cornual pregnancy is a very rare and potentially dangerous condition. Early diagnosis and timely management are key to the management of and cornual ectopic pregnancy.

Keywords: Cornual pregnancy, laprotomy, cornual resection, ectopic pregnancy.

Introduction:

Interstitial and cornual pregnancy is a rare and most dangerous form of ectopic pregnancy¹. Clinician often uses the term cornual ectopic pregnancy interchangeably with interstitial pregnancy. By definition, a cornual pregnancy refers to the implantation and development of a gestational sac in one of the upper and lateral portions of the uterus. Conversely, an interstitial pregnancy is a gestational sac that implants within the proximal, intramural portion of the fallopian tube that is enveloped by the myometrium.²⁻³ Cornual pregnancies account for 2-4 % of ectopic pregnancies and that 20 % of cases that advance beyond 12 weeks of gestation end in rupture. Here we report a case, which was admitted in RPG

Medical College and Hospital, Tanda, HP. In that patient cornual pregnancy was ruptured and profound hemorrhage occurred.

Case Report:

A 27-year-old lady, para-1 at her 16 weeks of pregnancy was admitted to the Obstetric and Gynae emergency of Dr. RPG Medical College Hospital, Tanda, HP, India. The lady had a previous uneventful vaginal delivery about 3 years back. She was a unbooked case. Patient developed lower abdominal pain which was acute on onset, severe lancinating in nature starting from lower abdomen then spreading all over the abdomen. On examination, the lady was in hypovolemic shock with severe pallor and rapid feeble pulse. The

abdomen was tense and distended and the uterine size was not made out. Pelvic examination revealed extreme paleness of vagina and fullness in the fornices. There was no vaginal bleeding. Urgent ultrasound examination was done. On ultrasonography, right adnexa showed hyperechoic mass 5.5X3.8 cm and evidence of free fluid in POD and hepatorenal pouch. As the patient was in shock, she was taken for immediate laparotomy after resuscitation. On opening the abdomen, the peritoneal cavity was filled with huge amount of fresh and clotted blood. The uterus on the right side of the cornua was found ruptured. A fetus was found in the peritoneal cavity and the cord was attached with placenta which was protruding through the ruptured cornua. The left cornu of the uterus was normal in size. The right cornu was resected and repaired. Per-operatively, the patient received 4 units of whole blood. Her post-operative period was uneventful and she was discharged on 5th postoperative day in good condition.



Figure 1- Ruptured cornual pregnancy

Discussion:

These pregnancies implant within the proximal tubal segment that lies within the muscular uterine wall. Risk factors are similar to others for tubal ectopic pregnancy; although previous ipsilateral salpingectomy is a specific risk factor for cornual pregnancy undiagnosed cornual pregnancies usually rupture following 8 to 16 weeks of amenorrhea, which is later than for more distal tubal ectopic pregnancies. This is due to greater

distensibility of the myometrium covering the interstitial fallopian tube segment. Because of the proximity of these pregnancies to the uterine and ovarian arteries, there is a risk of severe hemorrhage, which is associated with mortality rates as high as 2.5 percent.⁴ With TVS and serum β -hCG assays, cornual pregnancy can now be diagnosed early in many cases, but diagnosis can be challenging. These pregnancies sonographically can appear similar to an eccentrically implanted intrauterine pregnancy, especially in a uterus with a müllerian anomaly. Criteria that may aid differentiation include: an empty uterus, a gestational sac seen separate from the endometrium and > 1 cm away from the most lateral edge of the uterine cavity, and a thin, < 5 -mm myometrial mantle surrounding the sac (Timor-Tritsch, 1992). Moreover, an echogenic line, known as the “interstitial line sign,” extending from the gestational sac to the endometrial cavity most likely represents the interstitial portion of the fallopian tube and is highly sensitive and specific. In unclear cases, three-dimensional sonography, magnetic resonance (MR) imaging, or diagnostic laparoscopy may also provide clarification. Laparoscopically, an enlarged protuberance lying outside the round ligament coexistent with normal distal fallopian tubes and ovaries is found.⁴ Surgical management with either cornual resection or cornuostomy may be performed via laparotomy or laparoscopy, depending on patient hemodynamic stability and surgeon expertise. With either approach, intraoperative intramyometrial vasopressin injection may limit surgical blood loss, and β -hCG levels should be monitored postoperatively to exclude remnant trophoblast. Cornual resection removes the gestational sac and surrounding cornual myometrium by means of a wedge excision alternatively, cornuostomy involves incision of the cornua and suction or instrument extraction of the pregnancy.⁴ With early diagnosis, conservative medical management may be considered. However, because of the low incidence, consensus regarding methotrexate route or regimen is lacking. Importantly, because these women

typically have higher initial serum β -hCG a level at diagnosis, longer surveillance is usually needed. The risk of uterine rupture with subsequent pregnancies following either medical or conservative surgical management is unclear. Thus, careful observation of these women during pregnancy, along with strong consideration of elective cesarean delivery, is warranted.⁴

Conclusion:

The difficulty in early diagnosis of cornual pregnancy remains a challenge. Cornual pregnancies can be managed conservatively either medically or surgically. Common modalities of treatment include local or systemic methotrexate, laparoscopic techniques such as cornuostomy and cornual resection, and hysterectomy. Early diagnosis and timely management is the key to management of cornual ectopic pregnancy. After corneal resection caesarean section is usually done in next pregnancy due to the risk of uterine rupture.

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