

## CASE REPORT

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### RUPTURED CORNUAL PREGNANCY: A CASE REPORT

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**ABSTRACT:** Cornual pregnancy is uncommon among ectopic pregnancies. Diagnosis of cornual pregnancy remains challenging and rupture of a cornual pregnancy causes catastrophic consequence due to massive bleeding. Here we report a case of ruptured cornual pregnancy occurring at 8 weeks of gestation.

**KEYWORDS:** Ectopic, cornual pregnancy, rupture.

**INTRODUCTION:** A cornual pregnancy is an ectopic pregnancy that develops in the interstitial portion of the fallopian tube invading through the uterine wall. Cornual pregnancies often rupture later than other tubal pregnancies because the myometrium is more distensible than the fallopian tube.

Increased vascularity associated with interstitial ectopic pregnancies is more likely to result in a catastrophic hemorrhage and death. Cornual pregnancies occur in approximately 2-4% of ectopic pregnancies or 1 in every 2500-5000 pregnancies.<sup>1</sup> Cornual pregnancies are a life threatening condition with an associated maternal mortality rate of 2-2.5% compared to the overall 0.14% mortality rate for ectopic pregnancy.<sup>2,3</sup>

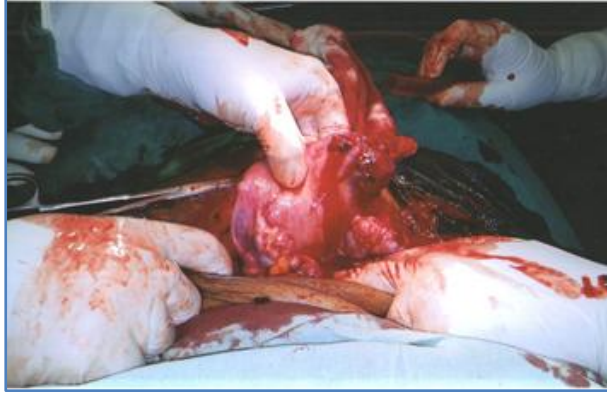
**CASE REPORT:** A 20 years lady presented to gynecology OPD at Mandya institute of medical sciences with h/o of amenorrhea since two months, vomiting since three days, pain abdomen and giddiness since one day. She was G3P2L0, both full term normal deliveries but both babies died two months following delivery, cause was not known. There was no history of contraception usage.

On examination, her general condition was good, vital signs were normal. Per abdomen examination revealed tenderness all over the abdomen. On per vaginal examination, uterus was anteverted, bulky; tenderness was present in the right fornix. Urine pregnancy test was positive. Ultrasound scanning revealed right adnexal live ectopic gestation of 8.3 weeks.

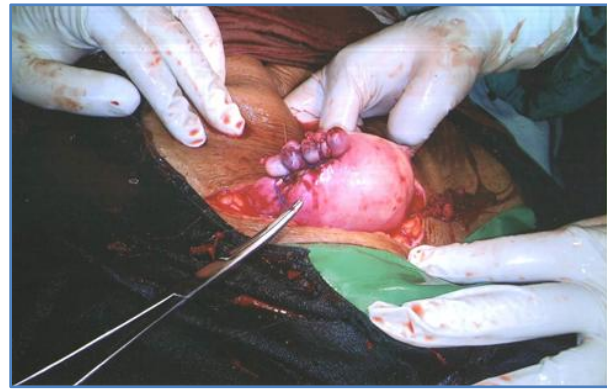
Patient was posted for emergency laparotomy after doing relevant investigations and arranging two units of B<sup>+</sup>ve blood. Per operatively haemoperitoneum of about 500ml was found. Pregnancy was found to be on the right cornual end of the uterus which was partially ruptured and active bleeding was present. Ruptured wound was extended, the products of conception were enucleated, and the edges of the uterine wall were sutured in single layer thus ensuring haemostasis.

Around 500ml of clots were removed, 2 units of B<sup>+</sup>ve blood transfused. Post-operative period was uneventful.

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**Fig. 1: Showing ruptured cornual pregnancy**



**Fig. 2: Showing repaired cornual end of the fallopian tube**

**DISCUSSION:** The incidence of cornual ectopic pregnancy is 2–4%.<sup>3</sup> Cornual ectopic pregnancy is associated with mortality rate 7 times higher than other ectopic pregnancies. Risk factors like pelvic inflammatory disease, artificial reproductive techniques, uterine anomalies, contraceptive usage, tubal surgeries and sexually transmitted diseases are associated with ectopic pregnancies.<sup>3</sup>

A cornual pregnancy is a uterine but an ectopic pregnancy, as it is located outside the uterine cavity in that part of the fallopian tube that penetrates the muscular layer of the uterus. An interstitial pregnancy is sometimes used as a synonymous name. This part of the fallopian tube is 1 – 2 cms in length and 0.7 cm in width which is supplied by Sampson's artery, which is connected to both the ovarian and the uterine arteries.<sup>4</sup>

Because of this the surrounding myometrium allows for greater dispensability before rupture and results in presentation at later stages than in a typical ectopic gestation, often as late as 12 to 16 weeks.<sup>2</sup> As it is located between the uterine and ovarian arteries, expansion and rupture of the implantation leads to increased risk of life threatening haemorrhage.<sup>5</sup>

6 to 16% of cases presenting with first trimester bleeding or pain abdomen will have an ectopic pregnancy<sup>5</sup>. Even with a high index of suspicion and advances in sonography, including transvaginal ultrasound and serum beta hCG, cornual pregnancy remains the most difficult type of ectopic

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pregnancy to diagnose.<sup>1</sup> The classic triad of ectopic pregnancy – abdominal pain, amenorrhoea and vaginal bleeding - occurs in less than 40% of patients with cornual pregnancy.<sup>5</sup>

The traditional treatment includes a surgical cornual resection. Sometimes, hysterectomy is done due to the hemorrhage. Currently, a more conservative laparoscopic treatment and even a medical treatment can be accomplished with great success and with less unfavorable effects on the future pregnancies.<sup>6</sup>

Inpatients with asymptomatic interstitial (cornual) pregnancies, methotrexate has been successfully used. However, this approach may fail and it may result in a cornual rupture of the pregnancy.<sup>7</sup> A selective uterine artery embolization has been successfully performed to treat these pregnancies.<sup>8</sup>

**CONCLUSION:** Cornual ectopic pregnancy is one of the most dangerous type of ectopic pregnancies with high mortality. Cornual pregnancy remains a rare but significant diagnostic challenge. With increasing use of assisted reproductive techniques its incidence is expected to increase. Early diagnosis and treatment has to be done to prevent maternal mortality.

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