Abstract: Interstitial pregnancy which usually presents at a gestational age of about 7-8 weeks when diagnosed accurately by TVs can be managed by conservative approach. Late presentation may lead to rupture and hemorrhagic shock which may need laparotomy to stop bleeding and remove the pregnancy and can also end in hysterectomy.

Keyword: Interstitial pregnancy - conservative management

CASE REPORT

Mrs. Sathya 24 yrs primi, a housewife, whose LMP is on 05-06-2012 was referred to og casualty with 1st trimester scan showing unruptured ectopic pregnancy.

She had no history of lower abdominal pain, spotting, syncope attacks No history of previous pelvic surgery, PID or use of ART.

Married since 1 year
Menstrual history - 3/30 regular cycles
LMP 05-06-2012

ON EXAMINATION
Patient conscious, oriented, afebrile. not anemic, no pedal edema
CVS s1s2
RS normal vesicular breath sounds
P/A - soft no distension / tenderness
P/V cervix down, uterus anteverted, soft tender, asymmetric enlargement to 10 weeks size.
Fornices free, no abnormal discharge per vaginum.

INVESTIGATION
Hb - 10.8 gm.
Blood grouping typing - O positive
RFT - Within Normal Limits
Urine pregnancy test - positive
Beta-hcg 5000 mIU /ml
USG pelvis:- 1.uterine cavity empty
2. gestational sac is seen separate from uterine cavity and is less than 1 cm from the most lateral edge of uterine cavity- suggestive of unruptured cornual pregnancy.
3.Timor –Trisch criteria and interstitial line sign were imaged. Laparotomy - cornual resection and repair of defect was decided. patient was explained about the risks involved and proceeded.

PROCEDURE
Under spinal anesthesia, abdomen opened by suprapubic transverse incision. A 5 * 5 cms unruptured right cornual pregnancy was present. Laparotomy – cornual resection and repair of defect was done. Tubal continuity was maintained on right side and left side tube was normal. Both ovaries were anatomically normal. Perfect hemostasis obtained. Abdomen closed in layer.

She was treated with I.V antibiotics. post operative period was uneventful. Patient was discharged on 8th post operative day.

She was advised to report in opd immediately after her missed periods.

INTERSTITIAL (CORNUAL) PREGNANCY
Incidence 2-4 % of tubal pregnancy[1]
It carries 2.2% maternal mortality[2]
The condition occurs 1 in every 2500-5000 live births.[1]
The developing chorionic villi may eventually erode into the blood vessels of uterine cornua causing severe hemorrhage.

DIAGNOSIS
1.Transvaginal ultrasound –corner stone for early diagnosis.
Diagnosis may be helped with the use of Doppler studies showing increased vasculature around the gestational sac described as a ring of vessels or ring of fire.
TIMOR –TRITSCH Criteria for interstitial pregnancy.[1]
• Empty uterine cavity
• Chorionic sac seen separately and more than 1 cm from the most lateral edge of the uterine cavity.
• A thick myometrial layer surrounding the chorionic sac.
  Specificity is 88% and Sensitivity is 40%.

**INTERSTITIAL LINE SIGN**[1]

This is visualization of an echogenic line extending from the endometrial cavity into the cornual region and abutting the gestational sac.
This is 80% sensitive and 98% specific.

2. Serial serum beta- hcg is useful to establish the diagnosis of ectopic pregnancy. Has a specificity of about 77%

**MANAGEMENT**

1. Laparotomy-cornual resection and closure of defect

**RECENT ADVANCES IN TREATMENT OF UNRUPTURED CORNUAL PREGNANCY**

1. Laparoscopic procedures

1. cornual resection (>4cms)

2. salpingostomy (<3.5cms)

3. cornual resection and salpingectomy

4. endoloop and encircling sutures

The size of the cornual gestation determines the best laparoscopic approach[5].

**PROCEDURE:-**

1. Dilute vasopressin 10 IU in 100 ml Normal saline is prepared and is injected throughout cornual pregnancy by using a 20 gauge spinal needle directly through a anterior abdominal wall in midline under direct visualization with laparoscope.

2. complete blanching of cornual pregnancy is achieved.

3. A linear incision is made with monopolar cautery in the thin myometrial capsule along the long axis of cornual pregnancy. The sac is identified and expressed from the cornua using blunt, sharp and hydrodissection.

4. The thin capsule overlying the myometrium is excised at the base in an elliptical fashion with bipolar cautery and scissors.

5. Significant myometrial thickness is maintained at the base of the cornua and the myometrial bed is cauterized to obtain hemostasis.

6. The specimen is retrieved from the pelvis with a 10mm Autosuture endo catch and is sent for Histopathological examination.

The patient’s quantitative beta-hcg is closely followed until it returns essentially to zero.

**CONCLUSION:-** minimally invasive laparoscopic resection should be the standard of care. It achieves a rapid, safe and definite treatment of cornual pregnancy that assures minimal blood loss and rapid return to normal activities.
Careful patient selection and counselling regarding treatment option is essential.

2. Systemic and local methotre xate administration- single dose protocol advocated by Stovall and Ling in 1993 is preferred

Criteria - hemodynamically stable
- beta-hcg <3000 mIU/ml
- size less than 4 cms
- no fetal heart beat
- patient willing for follow up.

3. Removal by hysteroscopy

4. Selective uterine artery embolization

Regardless of the initial treatment attempted, if uncontrolled hemorrhage occurs, immediate laparotomy with uterine repair or hysterectomy is warranted to stop the blood loss.

**SUBSEQUENT PREGNANCIES:**

It is important to monitor the pregnancy by transvaginal ultrasound to assure that it is properly located and the surgically repaired area is intact. Caesarian delivery is recommended to avoid uterine rupture.

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