

Endoscopic Management of Cornual Pregnancy

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Abstract

Cornual/interstitial pregnancy is a rare form of ectopic pregnancy. It usually has catastrophic presentations but in this case patient presented as missed abortion and was diagnosed as degenerating cornual myoma on ultrasound. This case was managed endoscopically by cornual evacuation of small friable ball of tissue which on histopathology was confirmed to be products of conception. Endoscopic management has many advantages over conventional methods.

Key Words

Cornual pregnancy, Interstitial pregnancy, Endoscopy

Introduction

The word ectopic means 'out of place'. Pregnancy in which implantation of blastocyst occurs outside the endometrium of the uterine cavity. Incidence of ectopic pregnancy is 1 in 100 to 1 in 200 diagnosed pregnancies.

Depending on the site of implantation, ectopic pregnancy are of following types:

1. Ampullary 80-90%
2. Isthmic pregnancy 5%
3. Fimbrial 5%
4. Cornual/Interstitial 1-2%
5. Abdominal 1-2%
6. Ovarian <1%
7. Cervical <1%

Cornual pregnancy/Interstitial pregnancy is by definition located in the intramural part of the fallopian tube. This is the part of the tube that traverses the uterine wall. Cornual and Interstitial pregnancy are now a days considered to be the one entity. Incidence of cornual pregnancy is 1 in 2500 to 1 in 5000 live births.

Case Summary

Mrs. X 28 years old female with no live issue and with a past history of 3 spontaneous abortions came to the out patient department of Moolchand Hospital. She also complained of spotting off and on per vaginum following an evacuation on 2nd May 2001 done at Manipal. Patient was advised at Manipal to take norethisterone tablet three times a day for 21 days for irregular periods. She was taking it since July 2001.

On examination, patient was haemodynamically stable. Pelvic examination did not reveal any tenderness or mass and uterus was multiparous size, anteverted and slight bleeding was present per vaginum. Her ultrasound examination done on 22nd August 2001 revealed a space occupying lesion in uterus with numerous vascular channels with high velocity blood flow. The diagnosis suggested was either degenerated cornual myoma or trophoblastic disease. She also had previously undergone a hysterosalpingography on 23rd August 2001. The film showed a bicornuate uterus (Fig. 1). Her serum β HCG levels were as follows:

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23rd August 2001	70mlU/ml
1st September 2001	180mlU/ml
10th September 2001	2mlU/ml

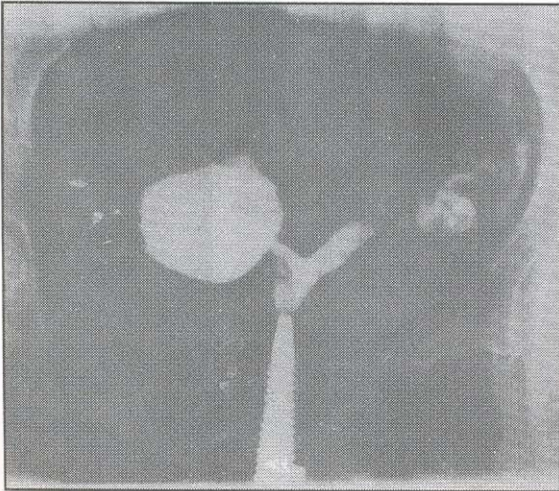


Fig. 1. Bicornuate uterus on hysterosalpingography

With the view of treating the patient with methotrexate therapy, a repeat β HCG was done at Moolchand Hospital and was found to be normal and a diagnosis of degenerating myoma was made and the patient was taken up for laparoscopic and hysteroscopic evaluation. Laparoscopy revealed both ovaries and tubes normal. Left cornua appeared normal. There was no fluid in pouch of Douglas. Right cornua was seen bulging and the attachment of fallopian tube on that side could not be clearly demarcated. The round ligament was anterior to the mass.

A linear incision was made after cauterizing the bulge. A friable ball of products of conception degenerating myoma protruded through the incision. As there was no capsule, the mass was thought to be the products of conception instead of degenerated myoma. As the cornua was very friable and thin, a minilaparotomy uterine suturing was considered to be better than endoscopic suturing. The tissue was sent for histopathology examination which confirmed the report of degenerating chorionic villi

and products of conception and hence the diagnosis of cornual pregnancy was confirmed (Fig. II). Post operative period was uneventful and the patient was discharged on the third post operative day.

Histopathology



Fig. 2. Degenerating chorionic villi and products of conception (X-10)

Discussion

Cornual pregnancy can proceed upto 16 weeks of gestation as compared to tubal ectopic pregnancy. Myometrium is distensible, hence it may not rupture upto 16 weeks. Rupturing of cornual pregnancy would be life threatening if not diagnosed earlier. In this case, the pregnancy resulted in missed abortion, hence rupture did not take place, the patient was haemodynamically stable and could be treated laparoscopically. Conventional treatment of interstitial pregnancy is by surgical resection of cornua, followed by repair or hysterectomy may be necessary at times.

In recent times, successful endoscopic management of cornual pregnancy has been reported (2,3). Correct diagnosis in this case was difficult because patient had undergone evacuation previously. Her Salpingography done elsewhere showed a picture of bicornuate uterus. Ultrasonography had reported degenerating myoma trophoblastic disease at the cornua. Differential diagnosis to be made between sacculatation of uterus, degenerating

cornual myoma, normal 12 weeks pregnancy, asymmetry of uterus. It was only possible to diagnose her correctly by a laparoscopic examination. Such patients can be managed either surgically or medically. If size of gestation sac is <3cm, medical treatment can be successful. The choice of treatment between medical and surgical treatment depends on:

1. Size of gestation sac (if <3cm then medical treatment is preferred)
2. Extent of trauma occurring to the uterine wall.
3. Preserving the child bearing function for future

Medical treatment includes local injection of methotrexate, hyperosmolar glucose, KCL, PGF2 α injection under ultrasound/Laparscopic guidance(5).

Meyer and Mitchell (4) reported a case of interstitial pregnancy managed by hysteroscopically guided curettage under laparscopic control. The technique of evacuation of cornual pregnancy can be difficult as the uterine wall is thinned out, soft but in experienced hands it gives good results. Closure of myometrium by minilaparotomy was though superior than by endoscopic suture, which was done in this case. Moon and coworkers in 2000 (1) described 24 women with cornual pregnancies

who were successfully treated by endoscopic surgery. Followup in all such patients would be by repeated β HCG levels till it come to less than 5 mlU/ml and pregnancy in future should be managed by an elective caesarean at 36 to 37 weeks. Although it is difficult to reach any conclusions from such limited published experience, still it appears that cornual pregnancy should be treated by conservative surgical needs. In our opinion, interstitial pregnancy should be treated by laparoscopy only in the hands of an experienced surgeon. Shorter length of hospitalization, early recovery, less blood loss, cosmetically beneficial are some of the advantages of laparoscopy.

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