A RARE CASE OF CHRONIC ECTOPIC PREGNANCY

Radiodiagnosis

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ABSTRACT

Chronic ectopic pregnancy is a life threatening condition which is challenging to diagnose, occurs when trophoblastic tissue invades implanted structure causing a protracted destruction at site of attachment, leads to repeated minor bleeding. And with time a haematocele is formed, leading to inflammatory reaction and chronic pelvic adhesions which resemble complex pelvic mass¹. Here 25 year old female presented with amenorrhea for 5 weeks with pain in abdomen and was diagnosed to have chronic ectopic pregnancy on MRI.

KEYWORDS

Chronic Ectopic Pregnancy, MRI Pelvis, Adnexal Mass

INTRODUCTION

Chronic ectopic pregnancy is a life threatening condition which is challenging to diagnose, occurs when trophoblastic tissue invades implanted structure causing a protracted destruction at site of attachment, leads to repeated minor bleeding and with time a haematocele is formed, leading to inflammatory reaction and chronic pelvic adhesions which resemble complex pelvic mass¹. Chronic ectopic pregnancy is variant of ectopic pregnancy characterized by very low or absent β -hCG level due to sparing of chorionic villi. Chronic ectopic pregnancy present as an adnexal mass with necrosis, fibrosis and blood clot due to repeated and gradual fallopian tube wall disintegration. The sonographic findings in these cases can vary between an amorphous, avascular mass and a highly vascular complex. The appearance can overlap with acute pelvic inflammatory disease, pelvic abscess, vascular tumors, and endometriosis. In the appropriate clinical setting, sonographic appearance can be variable and non-specific, and thus MRI is the investigation of choice for this particular entity.

CASE REPORT

A 25 year old female patient presented to obstetrics and gynecology department with amenorrhea for 5 weeks with pain in abdomen. Systemic examination reveals tenderness in left iliac fossa region. UPT testing was done and it turn out to be positive.

ULTRASOUND

Ultrasound examination of abdomen pelvis shows a heterogeneously hypoechoic lesion of size approximately 5.7 x 7.2 cm with cystic and hyperechoic areas within, arising from left adnexa and seen abutting left ovary. Uterus was grossly normal with endometrial thickness 7mm.

Fig-1

LAB FINDINGS

Table-1

β -hCG level before Surgery	129 mIU/L
β -hCG level after Surgery	15 mIU/L
Hb	11 mg/dl
WBC	8,100/mm ³

MRI

There is evidence of a well defined oval heterogeneous left adnexal lesion measuring 5.5(AP)x 8.6(TR)x 5.3(CC) cm. Appearing as mixed signal intensity on T2WI suggestive of solid cystic areas.

Fig-2

Fig-3

Iso to hypointense on T1WI with few hyperintense areas noted within (hemorrhagic component). Anteriorly the lesion abuts postero-superior aspect of bladder wall, laterally abutting left ovary and posteriorly anterior margin of rectum.

Fig-4

LAPAROTOMY FINDINGS

A mass was seen in left fallopian tube which was adhered to left ovary on one side and it extends up to anterior border of rectum. Adhesion was very difficult and progressive, isolating the mass from the rectum. The lesion was removed with left fallopian tube.

Fig-5

DISCUSSION

Clinical features of chronic ectopic pregnancy are similar to acute ectopic pregnancy with amenorrhea, abdominal pain and vaginal bleeding but on ultrasound examination it reveals pelvic mass. Chronic ectopic pregnancy may persist without rupture; long enough for the trophoblast to degenerate.

Chronic ectopic pregnancy is thought to result from small, repeated ruptures of a tubal pregnancy that develops into a hematocele containing blood clots, and trophoblastic tissue that can be active or inactive. The hematocele is typically surrounded by adhesions and induces an inflammatory response. Usually the beta-HCG level is low, occasionally it can be normal².

The true incidence of chronic ectopic pregnancy is unknown, with the few available studies reporting a frequency of 6% to 20%³. When considered from the clinical standpoint of a low β -HCG and an initial non-diagnostic sonogram, the incidence may be even higher⁴. Nonetheless, the diagnosis is not frequently made prior to surgery. The clinical findings of pain and bleeding are subacute or even chronic and thus may overlap with many other causes of pelvic pain in women.

The sonographic appearance of chronic ectopic pregnancy is variable and nonspecific. Descriptions include a non-diagnostic sonogram, a complex heterogeneous adnexal mass, and a highly vascular adnexal complex⁵⁻⁶.

But MRI gives a better appearance of the lesion and its relation with other structures and hence helps surgeons in guiding the management protocol.

CONCLUSION

Preoperative diagnosis of chronic ectopic pregnancy is difficult but with help of MRI it can be achieved. MRI gives better visualization of lesion and also its relations with adjacent structure. Chronic ectopic pregnancy should be ruled out in sexually active patient with adnexal mass. Chronic ectopic pregnancy may present with very low or negative serum β -hCG level. Clinical presentation and ultrasound findings may be similar to those of malignant ovarian germ cell tumor or broad ligament fibroid.

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