

Diagnostic Dilemma of Ectopic Pregnancy

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ABSTRACT

The objective of this study is to present diagnostic dilemma of ectopic pregnancy. It is a complication of early pregnancy where the developing embryo attaches outside the uterine cavity. Woman may be asymptomatic with recent menstrual disturbance. Symptoms may be like abnormal uterine bleeding (AUB). In all cases sharp waves of abdominal pain is the major presenting symptom. Pain is sharp or dull, crampy or colicky in nature. Although risk factors of ectopic pregnancy are common in developing countries, the issue is increasing day by day throughout the world including developed country as well. The causes are increasing due to the increased incidence of pelvic inflammatory diseases, STD, history of termination of pregnancy and miscarriage, smoking, and IUCD users.

Keywords: Ectopic pregnancy, Abnormal uterine bleeding.

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INTRODUCTION

Ectopic Pregnancy is a complication of early pregnancy where the developing embryo attaches outside the uterine cavity. The incidence of ectopic pregnancy is 10/1000 delivery.¹ Majority of the cases were multigravida and usually present at 6-9 weeks of gestation.¹ It is the leading cause of the maternal mortality in the first trimester of pregnancy. After one ectopic pregnancy there is 10 fold increases in the rise of subsequent ectopic pregnancy.

COMMON SITES

The possible sites are:

1. Fallopian Tube(70%)²
2. Uterine Cornua (2.4%)
3. Ovary (<1%)
4. Cervix (<1%)
5. Abdominal Cavity (rare)

RISK FACTORS³

- 1) Pelvic Inflammatory Disease (6-7 folds)
- 2) Use of IUCD (3-5%)
- 3) Smoking (2.5%)
- 4) ART (3-5%)
- 5) Tubal surgery
- 6) Prior ectopic pregnancy (10 folds)
- 7) Age risk of ectopic pregnancy is 35-44 yrs
- 8) Developmental errors

CLINICAL FEATURES

The clinical presentation of ectopic pregnancy is variable. Woman may be asymptomatic with recent menstrual disturbance. Symptoms may be like abnormal uterine bleeding (AUB). In all cases sharp waves of abdominal pain is the major presenting symptom. Pain is sharp or dull, crampy or colicky in nature. There may be shoulder tip and neck pain.⁴ In acute cases there is tachycardia, hypotension, pallor, fainting attack or shock present.

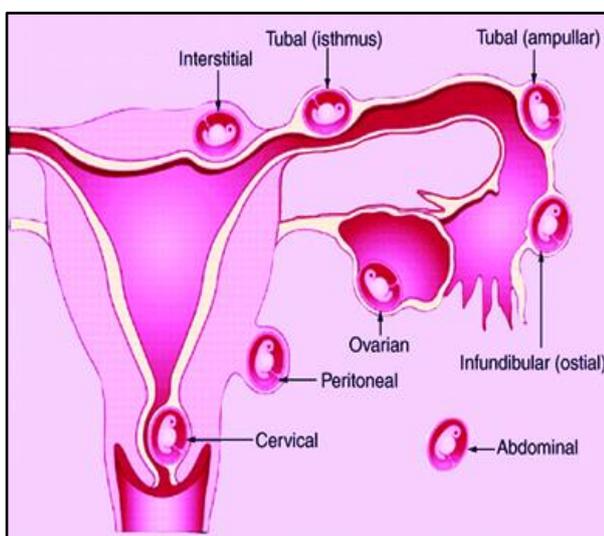


Figure 1: Common sites of Ectopic Pregnancy

Features of shock or H/O fainting attack at home, appendicitis like symptoms, torsion of ovarian cyst, miscarriage or degenerated uterine fibroid are the situations which may confuse the clinician in diagnosis of ectopic pregnancy. With these above features patient may get admitted to other discipline as misdiagnosed case. The

condition may cause serious health complications if left undiagnosed.

So, immediate evaluation and proper management is highly recommended. In spite of these, sometimes difficulty in diagnosis makes a dilemma.

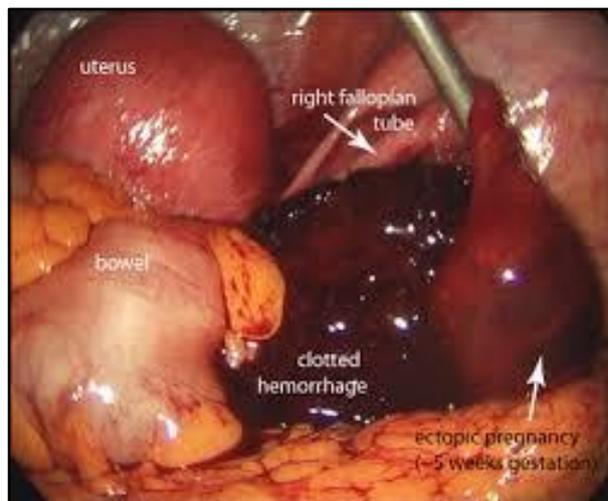


Figure 2: Ectopic pregnancy 5 weeks of gestation

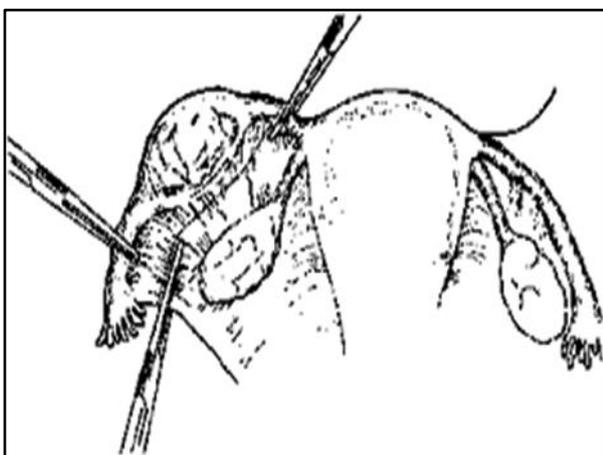


Figure 3: Salpingectomy

DIAGNOSIS

Mostly diagnosis is based on clinical triad of pelvic pain, vaginal spotting and amenorrhea of 5-9 weeks. A bimanual pelvic examination can help the clinician to identify the area of pain or tender adnexa. However in spite of vigilant clinical examination one can easily missed ectopic pregnancy clinically. So, a supportive investigation is essential to confirm ectopic pregnancy.

INVESTIGATIONS

- Urine for Pregnancy test⁵
- Serum β -hCG
- Serum progesterone
- Ultrasonography-TV S

CLASSIC PICTURES OF TV S ARE

- a) Empty uterus (no IUP) with decidual reaction/pseudo sac
- b) Adnexal mass/Live pregnancy can be seen in adnexae
- c) Collection of fluid (variable amount) in Pouch of Douglas or peritoneal cavity.

By TV S with serum β -hCG level (if 2400IU/L) we must exclude Intra uterine pregnancy.⁶ By per abdominal ultrasonography with serum β -hCG level (if 6500IU/L) we must exclude intrauterine pregnancy. β -hCG should be repeated after 48 hrs. In normal intra uterine pregnancy doubling time of β -hCG is seen. But in 14% cases it is not applied even intrauterine pregnancy there is no doubling time, So it is a dilemma. Serum progesterone level greater than 25ng/ml is suggestive of viable intrauterine pregnancy whereas level <5ng/ml suggest an ectopic pregnancy.

MANAGEMENT & TREATMENT OPTIONS

In all cases of suspected ectopic pregnancy patient should be hospitalized and quick assessment of the case should be done. Management depends on:

- Condition of the patient(haemodynamic stability)
- Acute rupture ectopic pregnancy⁷
- Chronic Ectopic pregnancy

By proper counseling to patient's guardian in a sympathetic attitude informing about the condition and complications of the case. They should be advised for arrangement of fresh blood as early as possible. Resuscitation of the patient if haemodynamically unstable. Resuscitation and operation at the same time can be life saving. Immediate laparotomy and clamping of the bleeding vessels may be the only means of saving the life of a moribund patient. Before deciding the surgical treatment of the affected tube, opposite fallopian tube and ovary should be examined. Surgical treatment depends upon the patients' age and desire for future fertility.

MEDICAL TREATMENT

The use of methotrexate to treat ectopic pregnancy was first cited in 1982. Several studies followed this one and demonstrated successful treatment of ectopic pregnancy using alternating doses of methotrexate and leucovorin⁹, although there are some limitations with the level of serum β -hCG, TV S findings and patients general conditions.

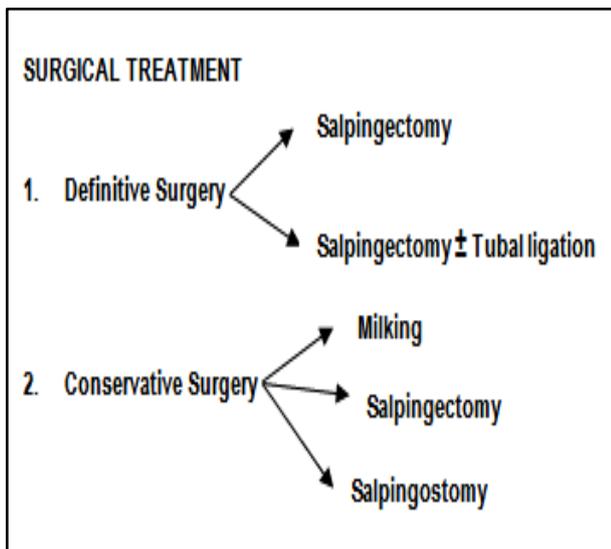


Figure 4: Surgical Treatment

DISCUSSION

Ectopic Pregnancy is an acute gynaecological condition wherein the implantation of the pregnancy occurs outside the normal uterine cavity. Usually sites are different parts of fallopian tubes but it may occur in ovaries, uterine cornu, cervix, and pouch of Douglas. In rare cases the ectopic pregnancy may occur within the abdominal cavity and may reach about to term.⁸The diagnosis may be difficult due to variable presentation of the case but the main presenting features are pain almost in the majority of the cases and short history of amenorrhea, variable amounts of per vaginal bleeding. The pain is sharp and agonizing. Sometimes patient gives history of fainting attack of several kinds with or without shock.¹⁰ There are a very few other disorders in obstetrics that has so many different presentations. The presentation of the patient may vary, some with minimal symptoms to a patient in a state of shock with massive haemoperitoneum. Some may present as a case of mass abdomen as in chronic ectopic. Vasomotor symptoms causing vertigo and syncope may be the presenting complaint.⁸The case may mimic as a case of acute appendicitis, twisted ovarian cyst, and rupture of the follicular cyst. Hypotension, tachycardia, severe anemia and shock are the feature of ruptured ectopic pregnancy, which is a very serious condition where the patient may die if the diagnosis and management is delayed. So management should be done resuscitation with blood transfusion and laparotomy. After opening the abdomen there may be huge amount of haemoperitoneum. Immediate laparotomy and clamping of the bleeding vessels may be the only means of saving the life of a moribund patient. The process should not be delayed. Sometimes patients may need ICU support if the diagnosis and management is delayed, which increases the maternal mortality especially in first trimester of pregnancy.

Although risk factors of ectopic pregnancy are common in developing countries, the issue is increasing day by day throughout the world including developed country as well. The causes are increasing due to the increased incidence of pelvic inflammatory diseases, STD, history of termination of pregnancy and miscarriage, smoking, and IUCD users. Still due to early diagnosis by increased facilities of diagnostic procedures such as TVS, the rate of incidence is a bit slower.

CONCLUSION

Ectopic Pregnancy is not rare. Incidence is increasing. It is a life threatening condition, if is not diagnosed earlier. It is still a leading cause of pregnancy related death in 1st trimester. A young lady with/without history of amenorrhea, abdominal pain, with/without vaginal bleeding, early diagnosis can help for early intervention. So early identifying of underlying risk factors, diagnosis with the essential aids like transvaginal ultrasound and -hCG and timely intervention in the form of medical or surgical treatment will definitely help in reducing the morbidity and mortality associated with ectopic pregnancy and to improve the future reproductive outcome.⁹

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