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Diagnostic dilemmas in ectopic pregnancy

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Abstract

Aim of the study: To find out the atypical presentations of ectopic pregnancy that had lead to delay in diagnosing cases of ectopic pregnancy leading to increased morbidity and sometimes mortality.

Study design: It is a retrospective study done in the Dept. of Obstetrics &Gynecology, during September 2015 TO August2016, of the 78 cases of ectopic pregnancy admitted to Princess Esra Hospital, Deccan College of medical sciences, Hyderabad**.** Details of clinical findings and misdiagnosis were noted cases confirmed Surgically were included in this study.

Results: There were 78 cases of ectopic pregnancy diagnosed during the study period of which 14 had a delay in diagnosis. They presented with symptoms other than the classic triad of amenorrhea, pain abdomen and bleeding per vaginum. Ectopic pregnancy was confirmed by ultrasonography in all the cases. Urine for pregnancy test was positive in all the cases.

Conclusion: Ectopic pregnancy can have varied presentations and misdiagnosis can be seen in Surgical, Medical and Gynecology Departments. A young female with short period of amenorrhea, pain abdomen with or without vaginal bleeding in early pregnancy, a diagnosis of ectopic pregnancy must be kept in mind. Early diagnosis would help early intervention and thus reduce the morbidity.

Keywords: Ectopic pregnancy, Diagnosis

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Introduction

Over the last few decades, the incidence of ectopic pregnancy has increased almost to the extent of an epidemic disease because of the increased incidence of pelvic inflammatory disease. Ectopic pregnancy is one of the commonest acute abdominal emergencies.[1,2] The risk of death from an ectopic pregnancy is 10 times greater than that for an induced abortion.[3] Clinical manifestations may be diverse and diagnosis of this condition is often mistaken and delayed leading to increased morbidity and even mortality in these patients. A ruptured ectopic pregnancy is a medical emergency and a leading cause of maternal mortality in the first trimester and accounts for 10 to 15 percent of all maternal deaths.[4-6]

Recent improvements in technology have made it possible to diagnose ectopic pregnancy earlier. This has altered the clinical presentation from that of a life-threatening surgical emergency to a less severe constellation of signs and symptoms facilitating medical management. Ectopic pregnancy confers a greater risk of maternal mortality than either childbirth or legal abortion. An extra uterine gestation is 50 times more likely to result in a maternal death than a first-trimester abortion and 10 times more likely than delivery in the third trimester.[7]

Materials and Method

It was a retrospective study conducted in Dept. of Obstetrics & Gynecology, Princess Esra Hospital, Deccan College of medical sciences, Hyderabad, during September 2015 to August 2016. A detailed note was made of the past, obstetric, menstrual and medical history. Emphasis was laid on any previous consultation and the diagnosis made prior to Gynaecologist consultation. Presenting symptoms, clinical examination findings and operative findings were noted. Case sheets of these patients with ectopic pregnancy were traced through operation theatre registers.

Outcome measured in this study was to find out percentage of misdiagnosis of ectopic pregnancy as it commonly occurred and whether misdiagnosis were more prevalent if the patient reported to a doctor other than Gynecologist. Patients presenting to other departments with different diagnosis were noted. Cases diagnosed after urine for pregnancy test and sonography were included in this study. Cases managed conservatively either by expectancy or with medical management were excluded.

Results

Seventy eight cases of ectopic gestation were analyzed during a period of one year. Delay in the diagnosis was seen in 14 cases. These patients were seen once or twice by a doctor before the correct diagnosis was made in our department. These patients presented in different departments like Medicine, Surgery, Orthopedic and cardiology departments with varied complaints and a few of them were admitted in EMD.

Table 1: Patients presenting in medical and surgical departments with different diagnosis

Department	Number of Patients	Percentage
General surgery	2	14.28%
Orthopedic	3	21.42%
Urology	1	7.14%
Pulmonology	1	7.14%
Gastroenterology	1	7.14%
General medicine	5	35.71%
Cardiology	2	14.28%

Table 2: Symptoms with which patients presented

Symptoms	Number of Patients
Pain right iliac fossa	2
Backache	2
Shoulder pain	1
Loin pain	1
Shortness of breath	1
Vomits and diarrhea	1
Generalized weakness	3
Palpitations	2
Syncopal attack	2

Misdiagnosis and delayed diagnosis was seen in 14 cases (17.94%). These patients presented in different departments with varied complaints. 78.57% cases where mildly anemic where as 21.42% had severe anemia.

Discussion

The classic triad of amenorrhea, vaginal bleeding or spotting and pain abdomen occurs in less than half of patients with ectopic pregnancy. In a prospective consecutive case series, 50% of ectopic pregnancy cases were missed at initial presentation based on history and physical examination only.[8] Furthermore, ectopic pregnancy is misdiagnosed in more than 40% of patients during the initial emergency department visit.[9] If ectopic pregnancies are to be picked up early and intervened medically or with minimally invasive surgical procedures, a high index of suspicion is necessary. Ectopic pregnancy may mimic other gynecological disorders like a ruptured corpus luteum, follicular cysts, ovarian torsion, inevitable spontaneous miscarriage, acute PID and gastrointestinal diseases like appendicitis or urinary tract disease (cystitis, renal colic). Ectopic pregnancy is a potentially catastrophic condition. Misdiagnosis of ectopic pregnancy is quite common. Delayed diagnosis may endanger the life of the patient but also decreases later the likelihood of a future successful pregnancy.[10]

Brenner and associate in 1980 reported that of 300 women with ectopic pregnancy, approximately 1/3 had been seen once and 11% twice before the correct diagnosis was made.[11] In our experience 17.94% had been seen earlier and were misdiagnosed before the correct diagnosis was made. There are more chances of missing a diagnosis if the patient presents with non classic symptoms. There should be a high degree of suspicion for this condition in patients, especially in the reproductive age group and a history pertaining to menstruation will help in early diagnosis.

Conclusions

Ectopic pregnancy is a diagnosis which cannot be missed, for all the clinicians. It is a life threatening condition complicating 1 in 80 pregnancies presenting to emergency departments. The morbidity and mortality has decreased with sensitive biochemical assays and transvaginal sonography. Despite the improved diagnostic modalities, ectopic pregnancy still is frequently not diagnosed. The clinical presentations in an ectopic pregnancy may vary; some with minimal symptoms to a patient in a state of shock with massive intraabdominal bleed. Sometimes, it is difficult to diagnose an ectopic pregnancy from risk factors (as more than half of those diagnosed with ectopic do not have any), history and examination alone. Clinicians should be suspicious of an ectopic gestation in any woman who presents with abdominal or pelvic symptoms and should always bear in mind the possibility of ectopic pregnancy in any woman of reproductive age. Menstrual history should be elicited in women in the reproductive age group irrespective of their sterilization status.

A high index of suspicion and simple urine for pregnancy test (ELISA) and if facilities are available, a transvaginal ultrasound can diagnose most of the cases. Early diagnosis would help early intervention and thus reduce the morbidity.

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