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Original research article

Clinical diagnosis of ectopic pregnancy

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Abstract

Background and Objectives: In order to better understand the clinical presentation of ectopic pregnancy, which is one of the most prevalent acute abdominal crises encountered by gynaecologists in their daily practise. intent: to investigate the causes of ectopic pregnancies and the short-term health consequences of such pregnancies.

Methods: After receiving approval from the Hospital Ethics Committee, this study was conducted at GGH, Kakinada from March 2022 to February 2023. Those with a confirmed ectopic pregnancy diagnosis were included. Clinical history and evaluation were performed in great depth. The data was acquired using a tried and true proforma. In this study, 30 cases of suspected ectopic gestation were observed.

Results: Amenorrhea, abdominal discomfort, and bleeding make up the classic triad and were present in 83.3% of patients. 13 individuals also had additional symptoms such wooziness, nausea, vomiting, and syncope. A total of 5 patients (16.6%) were found to be in shock upon arrival.

Conclusion: For this reason, it is crucial that all doctors be aware that any woman of childbearing age who presents with lower abdominal discomfort should be evaluated for an ectopic pregnancy, regardless of whether or not she has amenorrhea or has been sterilised.

Keywords: Clinical diagnosis, ectopic pregnancy

Introduction

An ectopic pregnancy is one in which the embryo implants outside of the uterine cavity, most frequently in one of the fallopian tubes. Although though ectopic pregnancies only account for around 2% of all pregnancies, they are one of the most prevalent gynecologic emergencies seen by family doctors in the community. In the first trimester of pregnancy, ectopic pregnancies that rupture are a leading cause of maternal death [1] because to the substantial bleeding that can result from the rupture [2]. Thus, diagnosing an ectopic pregnancy quickly is crucial for saving lives of mothers and their children.

Risk factors can be identified in only around half of women who have an ectopic pregnancy [2]. A high index of suspicion must be maintained in all women of reproductive age who arrive with amenorrhea, abdominal discomfort, irregular vaginal bleeding, or a history of ectopic pregnancy [3]. If several risk factors are elicited during the history-taking process, this can raise the pretest chance of ectopic pregnancy and help with a speedy diagnosis.

The fatality rate in the United Kingdom has not decreased since 1991, despite extensive medical review involving patient risk assessment, clinical evaluation, and investigations. Up to 10% of women with EP don't have any symptoms at all [4, 5]. Transvaginal ultrasonography (TVS) has been shown to enhance the precision of a medical diagnosis. Nevertheless, original TVS only detected 73.9% of tubal EPs [6].

Materials and Methods

After receiving approval from the GGH, Kakinada Hospital Ethics Committee at Department of Obstetrics and Gynecology, from March 2022 to February 2023, this study was conducted. Those with a confirmed ectopic pregnancy diagnosis were included. Clinical history and evaluation were performed in great depth. The data was acquired using a tried and true proforma. Thirty women with possible ectopic pregnancies were observed.

Inclusion criteria

All diagnosed cases of ectopic pregnancy admitted to GGH, Kakinada during the study period.

Exclusion criteria

All intrauterine pregnancies.

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Results

In this analysis, ectopic pregnancies were most common among participants aged 26-30. Those as young as 18 and as old as 36 were present.

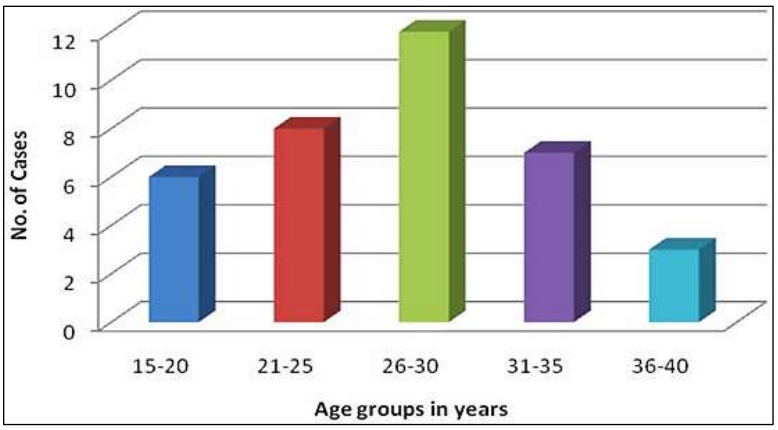

Fig 1: Age group

Thirty women with possible ectopic pregnancies were observed.

The highest rate of ectopic pregnancies was observed in women experiencing their second pregnancy. First-time pregnancies were ectopic in 11 of the 30 cases.

All but one of the patients were from a low-income background, and just 44.4% were from a middle-income one.

In my research, I found that tubal ligation was the most prevalent risk factor, accounting for roughly 36.6% of instances, whereas in 33.3% of cases there were no risk factors at all. In just 13.3% of patients did dilatation and curettage alone. 2 patients gave history of PID and they had undergone treatment with antibiotics and 1 patient had been operated previously for ectopic gestation.

Table 1: Ectopic gestation

Risk factors	No. of cases	Percentage
None	10	33.3
Tubectomy	11	36.6
PID	2	6.6
Infertility	1	3.3
D&C	4	13.3
IUCD	1	3.3
Previous ectopic	1	3.3

Seventy percent of patients presented with the classic trio of amenorrhea, abdominal discomfort and bleeding. Among 96.6% of those surveyed, abdominal discomfort was the most bothersome symptom.

For the remaining 43.3%, syncopal attacks, dizziness, and nausea accounted for the most significant percentage of symptoms.

Table 2: Symptoms

Symptoms	No. of Cases	Percentage
Amenorrhea	25	83.3
Pain abdomen	29	96.6
Bleeding	21	70
Others	13	43.3

Patients admitted with amenorrhea and intense abdominal discomfort were more likely to have a burst fallopian tube, as confirmed by laparotomy.

Whereas 38.5 percent of women who underwent a tubal abortion also reported experiencing additional symptoms including dizziness, light headedness, and nausea.

Similar symptoms were seen by a lower percentage of patients with unruptured tubal pregnancies.

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Table 3: Mode of presentation

Mode of Presentation	Ruptured	Tubal Abortion	Unruptured
Amenorrhea	14(56%)	7(28%)	4(16%)
Pain Abdomen	20(68.9%)	7(24%)	2(6.89%)
Bleeding	9(42.85%)	6(28.5%)	6(28.5%)
Others	7(53.8%)	5(38.5%)	1(7.7%)

Five individuals with shock were found to have ampullary, isthmal, or isthmo-ampullary pregnancies that had ruptured.

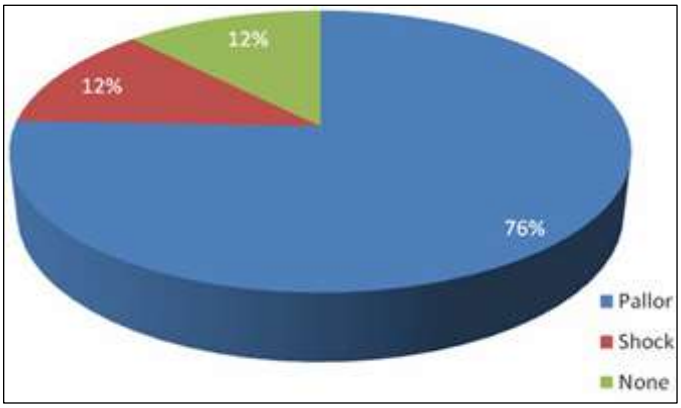

Fig 2: General physical examination

Nineteen patients (63.3%) reported painful cervical movement. This finding, together with a suggestive history and a mass or fullness in the posterior fornix, was crucial in making the right diagnosis of eccyesis.

The majority of the cases involved forniceal tenderness. Tenderness and bulk in the fornix occurred in about 22.2% of patients.

The positive result of a simple urine pregnancy test confirmed the correct diagnosis of all of the women who had an ectopic pregnancy.

Sample distribution according to ultrasound findings shows that 42.3% of cases were unruptured, 36.7% were ruptured, and 13.9% had no ultrasound findings.

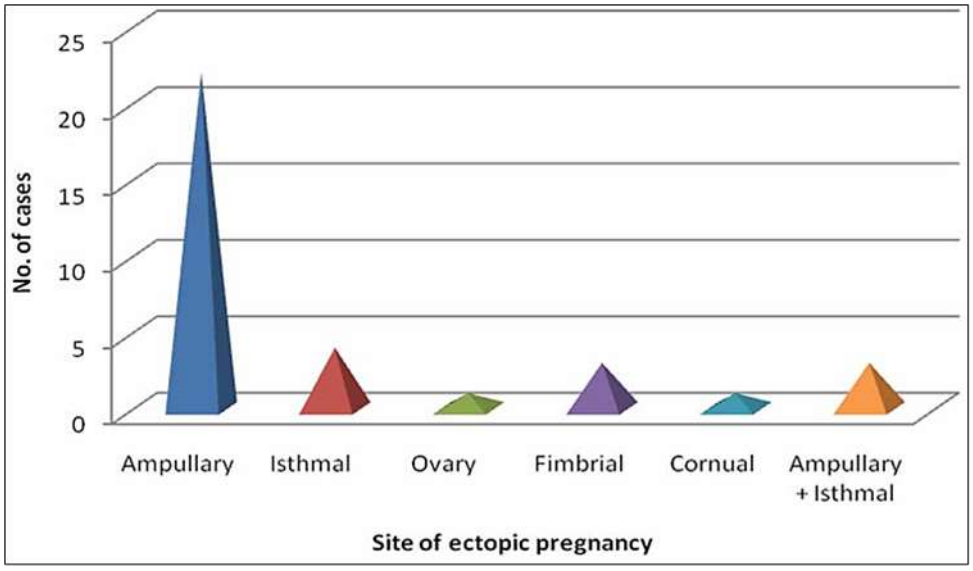

Fig 3: Site of ectopic pregnancy on laparotomy

Unilateral salpingectomy (66.6% of cases) was the most common procedure, followed by unilateral salpingo-oophorectomy. After their family were complete, 6.6% of them had a bilateral salpingectomy done.

Seventy-one percent of the cases required a blood transfusion. In nearly all cases (98%), there were no complications after surgery.

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Table 4: Procedure

Procedure	No. of Cases	Percentage
U/L Salpingectomy	20	66.6
B/L Salpingectomy	2	6.6
U/L Salpingo Oophorectomy	6	20
U/L Salpingostomy	1	3.3
Salpingo Ooporectomy with C/L Tubectomy	1	3.3
Total	30	

Discussion

Researchers set out to learn more about ectopic pregnancies, including the symptoms they cause and the variables that increase their likelihood.

There were 3,003 women with ectopic pregnancies and 97,194 women without ectopic pregnancies in the 2017 study by Jacob et al. Patients with ectopic pregnancies had a mean age of 31.4 (2 Department of Gynecology and Obstetrics, Philipps) years (SD=5.9 years), whereas those without ectopic pregnancies had a mean age of 31.1 (University of Marburg, Marburg) years (SD=5.6 years). Women between the ages of 36 and 40 had a greater chance of having an ectopic pregnancy than those between the ages of 31 and 35 (OR=1.12), and those between the ages of 41 and 45 had an even higher risk (OR=1.46) [7].

In our study three-thirds of all tubal pregnancies occur in women between the ages of 26 and 30. Thirty-five percent, or 11 of 36 instances, occurred in non-pregnant women.

As reported by Moini *et al*. (2014), the following factors were associated with an increased risk of EP: maternal age (odds ratio [OR] =1.11, confidence interval [CI] [1.06-1.16], P 0.0001), spouse's cigarette smoking (OR = 1.73, CI [1.05-2.85], P = 0.02), gravidity (OR = 1.50, CI [1.25-1.80], P 0.0001), prior spontaneous abortion [8-10].

There were a variety of risk factors, including tubectomy (36.6% of cases), D&C (13.3%), PID (6.6%), infertility (2.8%), a history of ectopic pregnancy (2.8%), intrauterine contraceptive device (IUCD) insertion (2.8%), appendicectomy (3.3%), and none (33.3% of cases).

Amenorrhea, abdominal discomfort, and bleeding make up the classic triad and were present in 83.3% of patients. 13 individuals also had additional symptoms such wooziness, nausea, vomiting, and syncope. A total of 5 patients (16.6%) were found to be in shock upon arrival.

Ampullary tubal pregnancy occurred more frequently than any other location (64.6%). Ten percent of pregnancies were isthmal. Both ovarian and cornual pregnancies accounted for 3.3%. Pregnancy was fimbrial in 10% and ampullo-isthmal in 6.6%.

Tubal rupture was the most common cause of termination, accounting for 20 pregnancies (57.14 percent). Among the pregnancies, 14 occurred in the ampulla, 2 in the isthmus, 1 in the ovary, 1 in the cornu, and 2 in both ampulla and isthmus.

Thirty patients were operated on, with salpingectomy being performed on 66.6% of them, salpingo-oophorectomy on 20%, and salpingectomy with contralateral tubectomy on 3.3%.

Conclusion

In the last two decades, both the rate of ectopic pregnancies and the rate of maternal deaths associated with them have increased. Radical surgery has given way to less invasive procedures and even medical monitoring and watchful waiting. Despite the availability of early diagnostic technologies, majority of our patients were treated as surgical emergencies because they presented late in the trial with a confirmed diagnosis of ruptured ectopic pregnancy. For this reason, it is crucial that all doctors be aware that any woman of childbearing age who presents with lower abdominal discomfort should be evaluated for an ectopic pregnancy, regardless of whether or not she has amenorrhea or has been sterilised.

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Conflict of interest: None.

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