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ORIGINAL RESEARCH

Assessment Of Risk Factors, Clinical Presentation And Management Of Ectopic Pregnancy

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ABSTRACT

Background: To assess risk factors, clinical presentation and management of ectopic pregnancy.

Materials and Methods: One hundred ten ectopic pregnancies were selected for this study. Parameters like risk factors, symptoms, signs, USG findings and management were studied**.**

Results: Symptoms observed were pain abdomen in 93, bleeding PV in 45, amenorrhea in 81, syncope in 12, vomiting in 30, shoulder tip pain in 7 and fever in 4 patients. The difference was significant (P< 0.05). Signs observed were abdominal tenderness in 54, fullness in fornix in 12, tenderness in fornix in 48, cervical motion tenderness in 32, adnexal mass in 6 and abdominal distension in 4 patients. The difference was significant (P< 0.05). Risk factors observed were ART in 8%, infertility in 4%, previous abdominal surgery in 52%, spontaneous abortion in 12%, previous ectopic pregnancy in 3% and dilatation and curettage in 2% cases. The difference was significant (P< 0.05). USG findings were adnexal mass in 45%, gestational sac in 17%, cardiac activity in 2%, free fluid in POD in 68% and normal in 5% cases. The difference was significant (P<0.05). Management done was salpingectomy in 90, salpingectomy and metroplasty in 12 and salpingo-oophorectomy in 8 cases. The difference was significant (P< 0.05).

Conclusion: Common risk factors observed were ART, infertility, previous abdominal surgery, spontaneous abortion, previous ectopic pregnancy and dilatation and curettage. Management done was salpingectomy, salpingectomy and metroplasty and salpingo-oophorectomy.

Keywords: Ectopic pregnancy, Fallopian tube, dilatation and curettage, infertility.

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INTRODUCTION

Ectopic pregnancy is an important cause of maternal morbidity and mortality especially in developing countries, where the majority of patients present late with rupture and hemodynamic compromise.[1] It is also a cause of fetal wastage and has been associated with recurrence and impairment of subsequent fertility.[2]

Fallopian tube is the most common location for ectopic pregnancy (95%). In Fallopian tube, most common site is the ampulla, followed by isthmus, infundibulum and interstitium. Other less common sites are abdomen, ovary and cervix.[3] Ectopic pregnancy is the most common

life- threatening emergency which can lead to maternal death. Increase in incidence of pelvic inflammatory disease, smoking in reproductive age group.[4]

The etiology of ectopic pregnancy is not well understood. However, multiple risk factors have been associated with ectopic pregnancy.[5] Pelvic inflammatory disease, puerperal sepsis, postabortion sepsis, appendicitis, and the use of intrauterine contraceptive devices have been identified as sources of pelvic infection and major risk factors.[6]

The clinical presentation of ectopic pregnancy has changed from life threatening disease requiring emergency surgery to a benign condition and in asymptomatic women nonsurgical treatment options are available now.[7,8] We performed this study to assess risk factors, clinical presentation and management of ectopic pregnancy.

MATERIALS & METHODS

One hundred ten ectopic pregnancies were selected for this study. We obtained approval from ethical review committee and written consent from patients before starting the study.

Data such as name, age, etc. was recorded. Parameters like age, blood group, parity, history of previous ectopic pregnancy, previous abdominal surgery, history of dilatation and curettage, pelvic inflammatory disease, usage of intrauterine device, risk factors, symptoms such as bleeding per vagina, amenorrhea, pain abdomen and shock, signs and USG findings etc. were studied. The results were compiled and subjected for statistical analysis using Mann Whitney U test. P value less than 0.05 was set significant.

RESULTS

Table I Assessment of symptoms

Symptoms	Number	P value
Pain abdomen	93	0.01
Bleeding PV	45	
Amenorrhea	81	
Syncope	12	
Vomiting	30	
Shoulder tip pain	7	
Fever	4	

Symptoms observed were pain abdomen in 93, bleeding PV in 45, amenorrhea in 81, syncope in 12, vomiting in 30, shoulder tip pain in 7 and fever in 4 patients. The difference was significant ($P< 0.05$) (Table I).

Table II Assessment of Signs

Signs	Number	P value
Abdominal tenderness	54	0.04
Fullness in fornix	12	
Tenderness in fornix	48	
Cervical motion tenderness	32	
Adnexal mass	6	
Abdominal distension	4	

Signs observed were abdominal tenderness in 54, fullness in fornix in 12, tenderness in fornix in 48, cervical motion tenderness in 32, adnexal mass in 6 and abdominal distension in 4 patients. The difference was significant (P< 0.05) (Table II).

Table III Assessment of risk factors

Risk factors	Percentage	P value
ART	8%	0.01
Infertility	4%	
Previous abdominal surgery	52%	
Spontaneous abortion	12%	
Previous ectopic pregnancy	3%	
Dilatation and curettage	2%	

Risk factors observed were ART in 8%, infertility in 4%, previous abdominal surgery in 52%, spontaneous abortion in 12%, previous ectopic pregnancy in 3% and dilatation and curettage in 2% cases. The difference was significant (P< 0.05) (Table III).

Table IV USG findings

USG findings	Percentage	P value
Adnexal mass	45%	0.05
Gestational sac	17%	
Cardiac activity	2%	
Free fluid in POD	68%	
Normal	5%	

USG findings were adnexal mass in 45%, gestational sac in 17%, cardiac activity in 2%, free fluid in POD in 68% and normal in 5% cases. The difference was significant (P< 0.05) (Table IV).

Table V Management done

Management	Number	P value
Salpingectomy	90	0.01
Salpingectomy and metroplasty	12	
Salpingo-oophorectomy	8	

Management done was salpingectomy in 90, salpingectomy and metroplasty in 12 and salpingo-oophorectomy in 8 cases. The difference was significant (P< 0.05) (Table V).

DISCUSSION

Ectopic pregnancy is a condition of immense gynecological importance because of the high morbidity and mortality associated with it and the enormous threat to life.[9] When ruptured, ectopic pregnancy is a true medical emergency. It is the leading cause of maternal mortality in the first trimester and accounts for 10%–15% of all maternal deaths.[10,11] The true incidence of ectopic pregnancy is difficult to determine. It varies significantly among institutions and countries, depending on the denominator used in its calculations and the facilities available for diagnosis. Currently, the overall incidence is increasing worldwide, but the case-fatality rate has decreased.[12,13] This might be due to a combination of increasing pelvic inflammatory

disease (PID) and better antibiotics that permit tubal patency with luminal damage following infection, and an increase in ovulation induction, assisted reproductive technology, and improved diagnostic techniques.[14,15] We performed this study to assess risk factors, clinical presentation and management of ectopic pregnancy.

Our results showed that Symptoms observed were pain abdomen in 93, bleeding PV in 45, amenorrhea in 81, syncope in 12, vomiting in 30, shoulder tip pain in 7 and fever in 4 patients. Saketha et al[16] determined the risk factors, clinical features at presentation, diagnostic tools, management modalities and outcome of 90 ectopic pregnancies. Majority of the patients belonged to 21-30 years age group. Maximum number of cases (57%) had a history of previous abdominal pelvic surgery. The predominant symptom was amenorrhea (96.6%) and classical triad of amenorrhea, bleeding per vagina and abdominal pain was seen in 30% of the study population. Majority of the patients i.e 76.7% underwent surgical intervention

Our results showed that signs observed were abdominal tenderness in 54, fullness in fornix in 12, tenderness in fornix in 48, cervical motion tenderness in 32, adnexal mass in 6 and abdominal distension in 4 patients. Jennifer Y Hsu et al[17] found that among 62,588 women with ectopic pregnancy 49,090 women (78.4%) underwent surgery and 13,498 women (21.6%) received medical management with methotrexate.

Our results showed that risk factors observed were ART in 8%, infertility in 4%, previous abdominal surgery in 52%, spontaneous abortion in 12%, previous ectopic pregnancy in 3% and dilatation and curettage in 2% cases. In the study done by Kirk et al.[18], 75% of tubal pregnancies were diagnosed during the first trans vaginal ultrasound.

Our results showed that USG findings were adnexal mass in 45%, gestational sac in 17%, cardiac activity in 2%, free fluid in POD in 68% and normal in 5% cases. Management done was salpingectomy in 90, salpingectomy and metroplasty in 12 and salpingo-oophorectomy in 8 cases. Lawani et al[19] determined and evaluate the incidence, clinical presentation, risk factors, and management outcomes of ectopic pregnancies. There were 4,610 gynecological admissions and 9,828 deliveries, with 215 cases of ectopic pregnancies. Ectopic pregnancy constituted 4.5% of all gynecological admissions, and its incidence was 2.1%. The mean age of the patients was 27 ± 2 years, 196 of 205 (95.6%) had ruptured ectopic pregnancies, and the remaining nine (4.4%) were unruptured. The commonest (166 of 205, 80.0%) clinical presentation was abdominal pain, and the commonest (105 of 205, 51.2%) identified risk factor was a previous history of induced abortion. Three deaths were recorded, giving a case-fatality rate of 1.4% (three of 205).

CONCLUSION

Common risk factors observed were ART, infertility, previous abdominal surgery, spontaneous abortion, previous ectopic pregnancy and dilatation and curettage. Management done was salpingectomy, salpingectomy and metroplasty and salpingo-oophorectomy.

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