

ORIGINAL ARTICLE

Assessment of risk factors for ectopic pregnancy

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ABSTRACT:

Background: Ectopic pregnancy is a medical condition in which a fertilized egg implants and grows outside of the uterus, usually in the fallopian tube. The present study was conducted to assess risk factors for ectopic pregnancy. **Materials & Methods:** 90 cases of ectopic pregnancy was recorded. Risk factors, clinical features at presentation, diagnostic methods and site of ectopic pregnancy etc. was recorded. **Results:** Age group 18-28 years had 24, 28-38 years had 30 and 28-38 years had 36 patients. The difference was non-significant ($P > 0.05$). Common clinical findings were vomiting in 45, fever in 40, passage of clots in 12 patients, bleeding pv in 82, amenorrhea in 51, pain abdomen in 36 and syncope in 17 patients. The difference was significant ($P < 0.05$). Common risk factors for ectopic pregnancy was previous ectopic pregnancy in 7, spontaneous abortion in 11, ART in 15, infertility in 8, previous abdominal surgery in 41, dilatation and curettage in 6 and TB in 10 cases. The difference was significant ($P < 0.05$). **Conclusion:** Common risk factors for ectopic pregnancy was previous ectopic pregnancy, spontaneous abortion, previous abdominal surgery, infertility and ART.

Key words: ectopic pregnancy, risk factors, vaginal bleeding

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INTRODUCTION

Ectopic pregnancy is a medical condition in which a fertilized egg implants and grows outside of the uterus, usually in the fallopian tube.¹ In a typical pregnancy, a fertilized egg travels through the fallopian tube into the uterus, where it implants and develops into an embryo. However, in an ectopic pregnancy, the fertilized egg implants in a location other than the uterus, most commonly the fallopian tube.²

Ectopic pregnancies are considered medical emergencies because the fertilized egg cannot survive outside of the uterus, and as it grows, it can cause severe complications for the mother.³ Symptoms of an ectopic pregnancy may include abdominal pain, vaginal bleeding, shoulder pain, dizziness, and fainting.⁴ However, in some cases, a woman may not experience any symptoms at all. The exact cause of ectopic pregnancies is often unknown, but certain factors can increase the risk. These include a history of previous ectopic pregnancies, pelvic inflammatory disease, previous fallopian tube surgery or infections, smoking, and fertility treatments.⁵

RESULTS

Table I Age wise distribution

Age group (years)	Number	P value
18-28	24	0.09
28-38	30	
28-38	36	

Table I shows that age group 18-28 years had 24, 28-38 years had 30 and 28-38 years had 36 patients. The difference was non-significant ($P > 0.05$).

If an ectopic pregnancy is suspected, it is crucial to seek immediate medical attention. Treatment options depend on the individual's condition, the size and location of the ectopic pregnancy, and whether it has ruptured.⁶ In some cases, medication may be used to stop the growth of the ectopic pregnancy and allow the body to reabsorb it. However, if the fallopian tube has ruptured or if the pregnancy is causing severe bleeding, surgery may be necessary to remove the ectopic pregnancy and repair any damage.⁷ The present study was conducted to assess risk factors for ectopic pregnancy.

MATERIALS & METHODS

The present study comprised of 90 cases of ectopic pregnancy. All were informed regarding the study and their written consent was obtained.

Demographic profile of each patient such as name, age, etc. was recorded. A predesigned proforma was used to record the details about demographic features, risk factors, clinical features at presentation, diagnostic methods and site of ectopic pregnancy. Results were analysed statistically with p value significant below 0.05.

Table II Assessment of clinical findings

Clinical findings	Number	P value
Vomiting	45	0.05
Fever	40	
Passage of clots	12	
Bleeding pv	82	
Amenorrhea	51	
Pain abdomen	36	
Syncope	17	

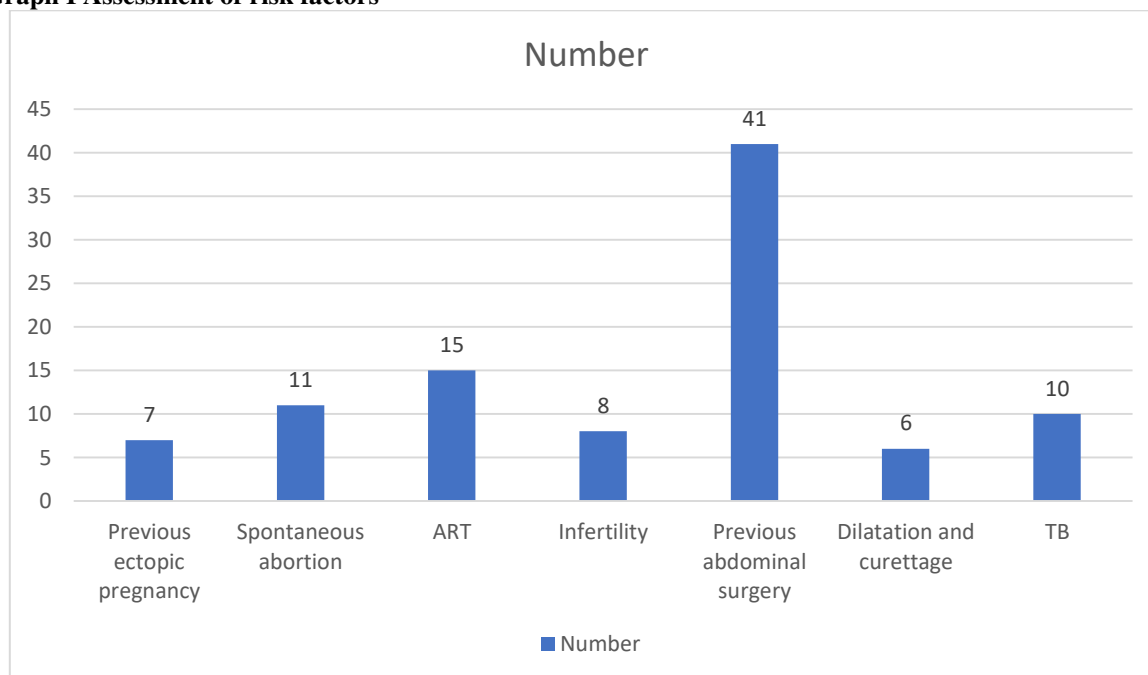
Table II shows that common clinical findings were vomiting in 45, fever in 40, passage of clots in 12 patients, bleeding pv in 82, amenorrhea in 51, pain abdomen in 36 and syncope in 17 patients. The difference was significant (P< 0.05).

Table III Assessment of risk factors

Risk factors	Number	P value
Previous ectopic pregnancy	7	0.01
Spontaneous abortion	11	
ART	15	
Infertility	8	
Previous abdominal surgery	41	
Dilatation and curettage	6	
TB	10	

Table III, graph I shows that common risk factors for ectopic pregnancy was previous ectopic pregnancy in 7, spontaneous abortion in 11, ART in 15, infertility in 8, previous abdominal surgery in 41, dilatation and curettage in 6 and TB in 10 cases. The difference was significant (P< 0.05).

Graph I Assessment of risk factors



DISCUSSION

Ectopic pregnancy refers to the implantation of a fertilised ovum outside of the normal uterine cavity. Ectopic pregnancy occurs in 1-3% of women globally. The major factor in first-trimester pregnancy-related deaths is ectopic pregnancy.⁸ Pelvic inflammatory disease (PID), the use of intrauterine contraceptives (IUCD), tubal surgery, induced abortion followed by infections, advancing age, smoking, etc. are some

potential explanations of the rise in the incidence of ectopic pregnancies. The fallopian tube is the most common location for ectopic pregnancy, and while it is generally assumed that functional or anatomical tubal damage is the reason of the zygote implanting into the tube, this is not always the case.⁹ Despite the fact that women with ectopic pregnancies frequently lack identifiable risk factors, a prospective case-controlled study has demonstrated that greater

awareness of ectopic pregnancy and familiarity with the associated risk factors aid in the identification of women at higher risk, allowing for an earlier and more precise diagnosis. The majority of risk factors raise the possibility of previous fallopian tube injury.¹⁰ These elements include pelvic infection and any prior abdominal or pelvic surgery. 30–50% of all ectopic pregnancies have been linked to Chlamydia trachomatis.¹¹ The present study was conducted to assess risk factors for ectopic pregnancy.

We found that age group 18–28 years had 24, 28–38 years had 30 and 28–38 years had 36 patients. Jophy et al¹² found that out of 93 patients, 20 patients had no hlo amenorrhoea, of whom 15 had the ectopic at the isthmic region and 5 had at the ampullary region of the tube. 28 patients had 31 to 45 days of amenorrhoea, of whom 16 had ectopic pregnancy at the isthmic and 12 had at the ampullary region of the tube. 26 patients had 46 to 60 days of amenorrhoea, of whom only 4 had at the isthmic region and the rest 22 had the ectopic at the amullary region. As the period of amenorrhoea increases, ectopic pregnancy is seen more at the ampullary site. With more than 2 months of amenorrhoea, 14 patients had ectopic pregnancy at the ampullary region and only 2 patients had at the isthmic region.

We found that common clinical findings were vomiting in 45, fever in 40, passage of clots in 12 patients, bleeding pv in 82, amenorrhea in 51, pain abdomen in 36 and syncope in 17 patients. In 90 cases of ectopic pregnancies, Tak et al¹³ identified the risk variables, clinical characteristics at presentation, diagnostic techniques, treatment options, and outcome. The majority of the patients were in the 21–30 years age range. The majority of cases (57%) had a prior history of abdominal and pelvic surgery. Amenorrhea (96.6%) was the most common symptom, and the typical trio of amenorrhea, vaginal bleeding, and abdominal pain (30%) was observed in the research sample. 76.7% of the patients had surgery, which is the majority. Ages 21 to 30 make up the majority of the presentation audience. The most significant risk factor was a history of prior abdominal surgery, and amenorrhea was the most frequent symptom. The primary method of therapy for ruptured ectopic pregnancies was surgery.

We found that common risk factors for ectopic pregnancy was previous ectopic pregnancy in 7, spontaneous abortion in 11, ART in 15, infertility in 8, previous abdominal surgery in 41, dilatation and curettage in 6 and TB in 10 cases. Etuknwa et al¹⁴ assessed the incidence of ectopic pregnancy (EP). 2,3951 pregnancies was registered out of which 72 cases of ectopic pregnancies was reported (3/1,000 pregnancies). Most of the affected females were young single women and students with 81.9% of them between 21 and 30 years of age. Mortality was 1.4% in the study. Related risk factors included pelvic inflammatory disease, previous history of abortions, infertility and a previous history of EP.

The shortcoming of the study is small sample size.

CONCLUSION

Authors found that common risk factors for ectopic pregnancy was previous ectopic pregnancy, spontaneous abortion, previous abdominal surgery, infertility and ART.

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