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Original Research

Evaluation of risk factors for ectopic pregnancy

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ABSTRACT:

Background: A fertilized egg that implants and grows outside of the uterus- typically in the fallopian tube- is known as an ectopic pregnancy.The present study was conducted to evaluate variousrisk factors for ectopic pregnancy. **Materials & Methods:** 74 cases of ectopic pregnancy was selected and parameters such as risk factors, clinical features at presentation, diagnostic methods, and site of ectopic pregnancy were recorded. **Results:** Age group 18-27 years had 31, 28-37 years had 38 and 38-47 years had 5 patients. The difference was non- significant (P> 0.05). The common clinical findings were passage of clots in 14 patients, bleeding pv in 62, amenorrhea in 58,pain abdomen in 32, syncope in 25 patients, vomiting in 41, and fever in 63 patients. Common risk factors for ectopic pregnancy wasART in 32, infertility in 12, previous abdominal surgery in 25, previous ectopic pregnancy in 11, spontaneous abortion in 31, dilatation and curettage in 23 and TB in 16 cases. The difference was significant (P< 0.05). **Conclusion:** Previous ectopic pregnancies, spontaneous abortions, prior abdominal surgeries, infertility, and antiretroviral therapy were common risk factors for ectopic pregnancy.

Key words: ectopic pregnancy, fertilized egg, vomiting

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INTRODUCTION

A fertilized egg that implants and grows outside of the uterus- typically in the fallopian tube- is known as an ectopic pregnancy.[1] A fertilized egg enters the uterus through the fallopian tube during a normal pregnancy, where it implants and grows into an embryo. In contrast, the fertilized egg implants in an ectopic pregnancy somewhere else than the uterus—most frequently the fallopian tube.[2]

Because the fertilized egg cannot live outside of the uterus and can seriously complicate the mother's health as it grows, ectopic pregnancies are treated as medical emergency.[3] An ectopic pregnancy may present with symptoms such as dizziness, fainting, shoulder pain, vaginal bleeding, and stomach pain. A woman might, however, occasionally have no symptoms at all. Although the precise origin of ectopic pregnancies is frequently unknown, several variables can raise the likelihood.[4] These consist of smoking, fertility treatments, pelvic inflammatory disease, prior fallopian tube surgery or infections, and a history of ectopic pregnancies. If an ectopic pregnancy is detected, it is imperative to obtain prompt medical assistance. The state of the patient, the location and size of the ectopic pregnancy, and whether it has ruptured all affect the available treatment options.[5] Medication may be administered in certain situations to halt the ectopic pregnancy's growth and enable the body to absorb it again. Nevertheless, surgery might be required to remove the ectopic pregnancy and fix any damage if the fallopian tube has burst or if the pregnancy is causing excessive bleeding.[6,7]The present study was conducted to evaluate variousrisk factors for ectopic pregnancy.

MATERIALS & METHODS

The present study consisted of 74 cases of ectopic pregnancy. All were informed regarding the study and their written consent was obtained.

Datasuch as name, age, etc. was recorded. A predesigned proforma comprising risk factors, clinical features at presentation, diagnostic methods, and site of ectopic pregnancy were recorded. Results thus found were entered in MS excel sheet for statistical inference. P value less than 0.05 was considered significant.

RESULTS

Table I Distribution based on age group

Age group (years)	Number	P value
18-27	31	0.05
28-37	38	
38-47	5	

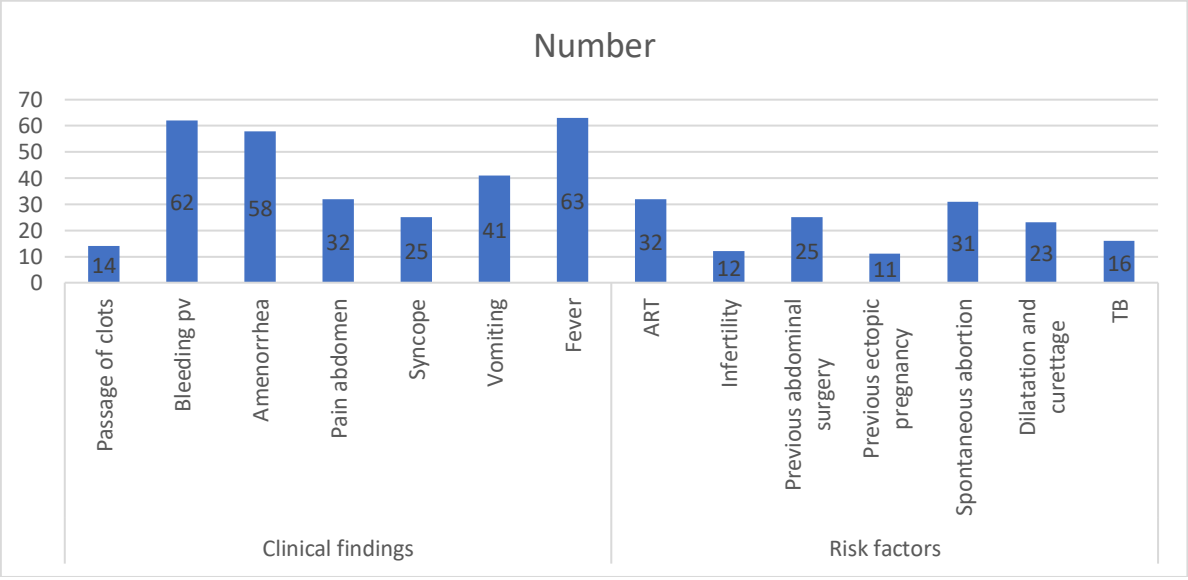
Table I shows that age group 18-27 years had 31, 28-37 years had 38and 38-47 years had 5 patients. The difference was non- significant (P> 0.05).

Table II Assessment of parameters

Parameters	Variables	Number	P value
Clinical findings	Passage of clots	14	0.05
	Bleeding pv	62	
	Amenorrhea	58	
	Pain abdomen	32	
	Syncope	25	
	Vomiting	41	
	Fever	63	
Risk factors	ART	32	0.04
	Infertility	12	
	Previous abdominal surgery	25	
	Previous ectopic pregnancy	11	
	Spontaneous abortion	31	
	Dilatation and curettage	23	
	TB	16	

Table II, graph Ishows that common clinical findings were passage of clots in 14 patients, bleeding pv in 62, amenorrhea in 58,pain abdomen in 32,syncope in 25 patients, vomiting in 41, and fever in 63 patients. Common risk factors for ectopic pregnancy wasART in 32, infertility in 12, previous abdominal surgery in 25, previous ectopic pregnancy in 11, spontaneous abortion in 31, dilatation and curettage in 23 and TB in 16 cases. The difference was significant (P< 0.05).

Graph I Assessment of risk factors



DISCUSSION

The implantation of a fertilized ovum outside of the normal uterine cavity is referred to as an ectopic pregnancy. Worldwide, ectopic pregnancies affect 1-3% of women. Ectopic pregnancy is the main cause of pregnancy-related deaths in the first trimester.[8,9] There are several possible reasons for the rise in ectopic pregnancy rates, including advanced age, smoking, tubal surgery, induced abortion followed by infections, pelvic inflammatory disease (PID), and the use of intrauterine contraception (IUCD).[10] The most common site of ectopic pregnancy is the fallopian tube. Although it is commonly believed that tubal damage, either functional or anatomical, is the cause

of the zygote implanting into the tube, this is not always the case.The majority of risk factors raise the possibility of previous fallopian tube injury.[11] These elements include pelvic infection and any prior abdominal or pelvic surgery. 30–50% of all ectopic pregnancies have been linked to Chlamydia trachomatis.[12,13]The present study was conducted to evaluate variousrisk factors for ectopic pregnancy.

We found that age group 18-27 years had 31, 28-37 years had 38 and 38-47 years had 5 patients. Etuknwa et al[14]evaluated the incidence of ectopic pregnancy (EP). 2,3951 pregnancies was registered out of which 72 cases of ectopic pregnancies was reported. 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.

We observed that the common clinical findings were passage of clots in 14 patients, bleeding pv in 62, amenorrhea in 58,pain abdomen in 32, syncope in 25 patients, vomiting in 41, and fever in 63 patients. Common risk factors for ectopic pregnancy wasART in 32, infertility in 12, previous abdominal surgery in 25, previous ectopic pregnancy in 11, spontaneous abortion in 31, dilatation and curettage in 23 and TB in 16 cases. Moini et al[15] assessed the contribution of the risk factors associated to ectopic pregnancy. In case group, there were a total of 83 women diagnosed with EP, while in the control group; there was a total of 340 women who gave birth. The basic recorded information included surgical, gynecological, obstetrics, sexual, contraceptive, and infectious histories; demographic characteristics; smoking habits; fertility markers; as well as reproductive outcome after EP. The findings reveal that the following factors were associated with increased risk of EP, including: 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 abortions (OR = 1.93, CI [1.11–3.36], P = 0.01), history of EP (OR = 17.16, CI [1.89–155.67], P = 0.01), tubal blockage (OR = 10.85, CI [2.02–58.08], P = 0.01), use of intrauterine device (IUD) (OR = 4.39, CI [1.78–10.81], P = 0.001), tubal damage (OR = 2.704, CI [1.26–5.78], P = 0.01), first pregnancy interval (OR = 1.01, CI [1.00–1.02], P < 0.0001) and history of infertility (OR = 6.13, CI [2.70–13.93], P < 0.0001).Karaer A et al[16]identified the risk factors for ectopic pregnancy. The main risk factors for ectopic pregnancy were prior ectopic pregnancy and a history of infectious reproductive system. Other risk factors found to be associated with an increased risk for ectopic pregnancy were multisexual partner (AOR: 3.5), history of infertility (AOR: 2.5), induced conception cycle (AOR: 3.4), current intrauterine device usage (AOR: 3.2), prior Caesarean section (AOR: 2.1) and cigarette smoking at the time of conception (AOR = 1.7). On the contrary, barrier methods were protective from ectopic pregnancy (AOR: 0.4).

The shortcoming of the study is the small sample size.

CONCLUSION

Authors found that previous ectopic pregnancies, spontaneous abortions, prior abdominal surgeries, infertility, and antiretroviral therapy were common risk factors for ectopic pregnancy.

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