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Factors Leading To Ectopic Pregnancy

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Abstract

Ectopic pregnancy is implantation of gestational sac outside the uterus . Most common sites of ectopic pregnancy are fallopian tubes. Other sites include cervical, ovarian, abdominal and cesarean scar, Ectopic implantation occurs in 1 to 2 % of pregnancies and can occur in any sexually active women of reproductive age and is responsible for 10% of all pregnancy related deaths . Various risk factors have been identified that lead to ectopic pregnancy , Some of these factor tubal surgery and use of intrauterine contraceptive device , abnormalities of the tubes prevent normal transport of the fertilized egg to the uterus etc. , Result In the study, the commonest site of ectopic pregnancy was fallopian tubes (88.8%). Ampullary part accounted for 68.7% of all tubal pregnancies. Risk of ectopic increased with parity and highest risk was seen in multigravida(47.2%) , The aim of this study is to identify various risk factors of ectopic pregnancy

Introduction

Ectopic pregnancy is potentially a life threatening condition and remains the leading cause of maternal death.

Word “Ectopic” means “out of place” and was described for the first time in the 11th

The incidence is higher between 35 and 44 year

Risk factors of ectopic pregnancy include age over 40 years, previous tubal surgery, previous ectopic pregnancy, PID and genital tuberculosis, long term infertility, smoking, IUCD, progesterin only pills, multiparity, previous abortion

Incidents in Pakistan of ectopic pregnancy occurs 97% in the fallopian tube, 80% in ampullary region of tube, 10% in isthmus & 5% in infundibulum region, rarely occur in the ovary, cervix & in the abdomen.

Ectopic pregnancy presents with subacute features in 75% of cases, presentation may be varied & atypical.

Most common sign is abdominal and pelvic pain,

Also Clinical manifestations can vary according to the site of ectopic pregnancy.

Tubal pregnancy accounts for 97% of all ectopic pregnancies.

Approximately, 80% of all ectopic pregnancies occur in ampulla, 12% in isthmic part, 5% in fimbrias, and 2% in interstitial part of the fallopian tube.

Ovarian, cervical and abdominal ectopic pregnancies account for 1% .

Presentation may range from asymptomatic to acute abdomen with hemodynamic shock.

The classical clinical triad is of amenorrhea, vaginal bleeding and abdominal pain.

But only 50% of patients present with all 3 symptoms.

Ectopic pregnancy is diagnosed by clinical presentation, beta hCG (human chorionic gonadotropin) levels and ultrasonography.

Combination of beta- hCG levels and transvaginal ultrasound has specificity of 95% in the diagnosis of ectopic pregnancy

The aim of the report to determine the frequency of factors leading to ectopic pregnancy in woman

Method

This method is based on Two studies:

- 1st study includes analysis of 117 cases of ectopic pregnancy admitted through emergency in obstetric & gynecological department of civil hospital Karachi and the study was approved by hospital ethical committee ¹
- 2nd study is performed in India at 7.3.2017 conducted on 36 patients of ectopic pregnancy reporting in a tertiary health care hospital of Govt. Medical College, Amritsar over a period of six months ²

Discussion

I compared between Two studies to know more about risk factor of ectopic pregnancy

First study

A total of 117 pregnant women with ectopic pregnancy were included in this study. Most of the women were from 21 to 30 years of age

Regarding parity of women were **multiparous** (parity 2-4) or (parity above 4) and **primiparous**

Table 3: Factor leading to ectopic pregnancy with respect to parity

Factors leading to ectopic Pregnancy	Nullipara N=33	Primipara N=36	Multipara N=44
Previous pregnancy	0(0%)	9(25%)	5(11.4%)
Use of contraception	1(3%)	5(13.9%)	26(59.1%)
History of tubal surgery	0(0%)	4(11.1%)	2(4.5%)
History of genital infection	7(21.2%)	14(38.9%)	3(6.8%)

- Use of **contraception** was the commonest factor associated with ectopic pregnancy that was observed in 30.3% cases, followed by history of genital infection 22.2%, previous ectopic pregnancy 12% and history of tubal surgery 5.1%
- According to result In our study similarly factor like previous ectopic pregnancy and history of genital infection were significantly high in primiparous women while use of contraception was high in multiparous women

- Also the tubes serve as complex function in the process of fertilization and transport of the oocytes.
- conduction of egg towards the uterus is thought to be effected primarily by the negative tubal intraluminal pressure generated by muscular contractions, with a secondary contribution from ciliary beating.
- Impaired muscular contraction as a peri menopausal woman, loss of ciliary action (prior infection, surgery, previous ectopic pregnancy) or physical blocked (tuba ligation) can therefore subsequently increase one's risk of future ectopic pregnancy.¹

Second study

Total number of patients of ectopic pregnancy included in the study were 36

Table 1. Sites of ectopic pregnancy

Site of ectopic	No. of patients	Percentage
Tubal	32	88.8%
Ovarian	2	5.5%
Caesarean scar ectopic	1	2.7%
Abdominal pregnancy	1	2.7%

Table 2. Risk factors for ectopic pregnancy

Risk factor	No. of patients	Percentage
H/O PID	8	22.2%
Previous tubal surgery/Tubectomy	1	2.7%
Previous ectopic	4	11.1%
IUCD	2	5.5%
Infertility treatment	2	5.5%
No identifiable risk factors	19	52.7%

- In this study the most common site was fallopian tube followed by ovarian ,caesarean scar and abdominal pregnancy
- According to this study, multigravida (69.44%) are at highest risk followed by primigravida (30.5%).
- Impaired muscular function of the fallopian tube is seen in multiparous women . Loss of ciliary action due to prior infection, surgery, previous ectopic or tubal ligation can increase the risk of ectopic pregnancy
- Most common site of fallopian tube involvement was ampullary region followed by isthmic and fimbrial²

Conclusion

Ectopic pregnancy is one of the dreaded emergencies in obstetrics which requires early diagnosis and urgent management. Pelvic inflammatory disease (PID) is the most common & most preventable etiological factor ,Ectopic pregnancy cannot be prevented but one can definitely work towards primordial prevention

References

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