



A RETROSPECTIVE STUDY ON ECTOPIC PREGNANCY IN A TERTIARY CARE HOSPITAL : 5 YEAR STUDY.

Pathology

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ABSTRACT

BACKGROUND: Ectopic pregnancy is the result of a flaw in human reproductive physiology that allows the conceptus to implant and mature outside the endometrial cavity, which ultimately results in fetal death. Any female in reproductive age group presenting with lower abdominal pain or vaginal bleeding must raise the suspicion of an ectopic pregnancy to prevent mortality and morbidity.

AIM: The present study was undertaken to provide a better understanding of ectopic gestation, its clinical presentation and various risk factors associated with ectopic pregnancy.

RESULTS: Study was conducted among 160 cases of ectopic pregnancy and it was found that ectopic gestation was more common in multigravida than primigravida . Typical triad of symptoms comprising of amenorrhea , vaginal bleeding and abdominal pain was seen in 84 % cases. The etiology was pelvic infections in 15% cases, infertility in 7% cases, previous pregnancy in 3% cases, contraception in 3% cases . Most common site of ectopic gestation was ampullary portion of the tube(55%). About 64% were ruptured ectopic gestation.

CONCLUSION: Early Diagnosis, identifying underlying risk factors and timely intervention in the form of conservative or surgical treatment will help in reducing the morbidity , mortality associated with ectopic pregnancy.

KEYWORDS

Amenorrhea, Maternal mortality, Risk factors , Tubal pregnancy ,Salpingectomy.

INTRODUCTION

Ectopic pregnancy is one of the commonest acute abdominal emergency a gynecologist can encounter in a day to day practice.

Ectopic pregnancy occurs when a fertilized ovum implants outside normal uterine cavity (1) . It is most important cause of maternal mortality and morbidity in the first trimester and majority of patients present late with rupture and hemodynamic compromise (2,3).

Risk factors like previous ectopic pregnancy, tubal corrective surgery, tubal sterilization, intrauterine devices, documented tubal pathology, infertility, assisted reproductive techniques, pelvic inflammatory disease, smoking, prior abortions, multiple sexual partners and prior delivery have been implication in the development of ectopic pregnancy (4).

A knowledge of the associated risk factors helps to identify females at higher risk in order to facilitate early and more accurate diagnosis (5).

Most risk factors are associated with risks of prior damage to the fallopian tube . These factors include any previous pelvic or abdominal surgery and pelvic infection (5).

Chlamydia trachomatis has been linked to 30 to 50% of all ectopic pregnancies.(6).

Diagnosis requires a high index of suspicion, as the classical triad of amenorrhea, abdominal pain and vaginal bleeding is not seen in majority of cases. Females may present with non specific symptoms and in developing countries including India the mortality rate is not precisely known ,with data from few studies indicating 3.5 -7 % maternal deaths due to ectopic pregnancy (7,8).Unaware of the ongoing pregnancy females often present with hemodynamic shock thus contributing to the maternal mortality rates.

95% of ectopic pregnancy occurs in fallopian tube, majority occur in ampulla or isthmic portions of fallopian tubes (9). About 2–3% occurs in interstitial ectopic pregnancies (arising in the part of the tube which goes through the endometrial cavity). Other sites are cervical, fimbrial, ovarian and peritoneal sites as well as previous caesarian section scars. Very rarely an ectopic pregnancy can coexist with intrauterine pregnancy, this is called heterotopic pregnancy,(1 in 30,000) (8,10).

Ruptured ectopic pregnancy is the leading cause of maternal mortality in first trimester and accounts for 10 – 15% of the maternal deaths (11). The early diagnosis and treatment of this condition over the past two decades have been allowed a definitive medical management of unruptured ectopic pregnancy even before there are clinical symptoms in high risk women (12,13). The reason for increasing incidence has been fully elucidated but the possible contribution of pelvic

inflammatory disease, ovulation inducing drugs, previous abdominopelvic surgeries and intra uterine contraceptive devices use has been cited as contributing factors (14). Diagnosis of ectopic pregnancy has become more frequent during the last decade but the incidence of ectopic pregnancy rupture has declined .This decline is due to quantitative hCG measurements ,minimally invasive surgeries and trans vaginal ultrasound.(15).Early diagnosis reduces the risk of tubal rupture and allows more conservative medical treatment to be employed(16).

METHODS

This retrospective study was conducted in Government Medical College Jammu a tertiary care hospital in North India. Case records of patients diagnosed with ectopic pregnancy between January 2014 to December 2018 were retrieved from the Department.

A total of 160 cases were diagnosed as ectopic pregnancy .All the intrauterine pregnancies were excluded from the study. A detailed history and history suggestive of high risk factors for ectopic pregnancy, menstrual and obstetric history, age parity were noted.

RESULTS

During the study period of 5 years there were 160 cases that were diagnosed as ectopic pregnancy

Table 1: Gravidity

GRAVIDA	NUMBER	PERCENTAGE
Primi	32	20%
2nd	48	30%
3rd	66	42%
>3	14	8%

Table no. 2: Risk Factors

RISK FACTORS	NUMBER	PERCENTAGE
PID	25	15%
D&C	15	10%
INFERTILITY	12	7%
IUCD	8	5%
Oral contraceptive	5	3%
Prev. ectopic	5	3%
H/O sterilization	2	1%
No risk factor	88	56%

Table No. 3: Site of Ectopic

Site of ectopic pregnancy	No. of cases	percentage
Interstitial	56	35%
Isthmus	32	20%
Ampulla	72	45%

A majority of patients belonged to the age group of 20 – 30 years (16%).

In this study there were 20 % primigravida and 80% multigravida.

The clinical triad of amenorrhea, vaginal bleeding and lower abdominal pain was present in 515 of cases.

Acute abdominal pain was the most important complaint seen in 82% of females although preceding amenorrhea was reported in 94% of females.

Abnormal vaginal bleeding was seen in 66% of cases.

Symptoms of vomiting and syncope were observed in some patients.

Mean gestational age of diagnosis was 7.2 weeks.

The urinary pregnancy test was positive in 98.6% of the cases.

Ruptured ectopic pregnancy was present in 64% and unruptured in 14% and 22% of cases were with heterogenous mass with minimal free fluid in pouch of Douglas.

DISCUSSION

Incidence of ectopic pregnancy has increased over the last 20 years. This may be due to a number of factors.

Majority of females in our study group belonged to the age group of 20 – 30 years which is close to the studies done by Samiya Mufti et al (75.41%), Panchal D et al (71.66%) and Rashmi et al (17,18). In a study conducted by Sudha V S et al it was (67.57%)(19).

A Gaddagi et al (70.2%) Most of the females in India marry at an early age and complete their family at an early age. This age corresponds to the age of peak sexual activity and reproduction (20).

In the present study group majority of females with ectopic pregnancy were multigravidae (80%).

This correlates with the study conducted by Sudha V S et al (81.58%) and Shraddha shetty K et al (83.9%), Panchal D et al (81.66%) and Poonam et al (83.6%)(18,21,22).

The higher incidence in multigravidae is probably due to previous miscarriages and infection resulting in tubal damage.

In the present study history of Pelvic inflammatory disease was present in 15% of the cases of ectopic pregnancy which correlated with the study conducted by Bhavna et al (22.7%)(23) and Sudha V S et al 15.78% (19).

In our study group 7% of females were infertile which correlated with the study conducted by Panchal D et al (11.66%) and Samiya Mufti et al 18.77%.(17,18), also conducted by Sudha V S et al 7.01% (19).

In our study there were 5% of females with intra uterine contraceptive devices had ectopic pregnancy which correlates with the studies done by Shraddha Shetty K et al (6.4%), Shrestha et al (5%), WW fageeh(5.8%), Sudha V S et al (6.14%) . IUCD has no effect on ovulation, it prevents intrauterine pregnancy but not tubal and ovarian pregnancy (21,24,25,19).

In our study there were 6% of women had had previous ectopic pregnancy which is correlating with studies done by Samiya Mufti et al (5.265) , Uzma Shabab et al (5%) and Sudha V S et al (8.33%) (17,24,19).

Urinary pregnancy test was positive in 90.4% of the cases in study conducted by Sudha V S et al (19) and 97.35 by Rashmi A Gaddgi et al, and WH Fgeek 96%(20,21).

The commonest site of location of ectopic pregnancy was in ampulla of the fallopian tube. Ampulla part of the tube was commonly involved in most of the ectopic pregnancies in other studies.(26).

CONCLUSION

There is an increase in the incidence of ectopic pregnancy and a

decrease in maternal mortality during the last two decades. The treatment modality has evolved from radical to conservative surgery and even to medical and expectant management even though the early diagnostic tools are available some of the patients present as surgical emergencies as they are brought late with established diagnosis of rupture ectopic pregnancy.

It is important that physician should be sensitive to the fact females in reproductive age group who present with pain lower abdomen, a diagnosis of ectopic pregnancy be entertained irrespective of the presence or absence of amenorrhea and her status of sterilization.

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