

Sore Point of First Trimester is Still Ectopic Tubal Pregnancy; Recent Insight from a Central Obstetric Facility Center

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ABSTRACT

Background: Pakistan is one of the countries in the region of South Asia, with the highest fertility rates. The latest birth rate was 3.425. Ectopic pregnancy is one of the leading causes of early pregnancy-related deaths and is one of the most common complications associated with obstetrics, high morbidity and mortality.

Aim: To highlight the frequency of ectopic tubal pregnancy in a hospital, known to be one of central mother and child health facility in Lahore, Pakistan.

Methods: Current research conducted in the Department of Pathology, Fatimah Jinnah Medical University, Lahore from January 2018 to July 2020. Every biopsy submitted with clinical diagnosis of ectopic tubal pregnancy was included.

Results: Total of 176 cases were studied. Variables included age, parity and histological site of implantation. The majority of patients were of age range 20-30 years, multiparous, had ectopic implanted in ampullary region of right sided fallopian tube. What remained to know was history of risk factors, i.e, previous abortions, previous pelvic surgery, and treatment of infertility.

Conclusion: The purpose of this study was to give a recent insight into ectopic tubal pregnancies with the help of important parameters, in a set of obstetric care that covers a large number of maternal emergencies. Timely diagnosis and early treatment would help reduce maternal mortality and morbidity from complications of ectopic pregnancy.

Keywords: Fertility, Ectopic, Ampulla, Multiparous, Tubal Pregnancy

INTRODUCTION

An ectopic pregnancy is when the fertilized egg is implanted in a place other than the normal uterine area¹. Between 93-97% are found in the fallopian tube. Of these, 13% were found in the isthmus, 75% in the ampullary region, and 12% in the fimbria². Approximately 2% are established in other areas such as the ovaries, cervix and intra-abdominal³. It is one of the most deadly emergencies in the first trimester of pregnancy, leading to maternal death. The classic triad of ectopic pregnancies are abdominal pain, amenorrhea and vaginal bleeding⁹. In most cases, it resolves without treatment. Surgical intervention is required if there is a rupture of the tube⁴. Women with pelvic inflammatory disease (PID) have a higher risk of ectopic pregnancy. The cause of PID is damage to the cilia on the inner surface of the fallopian tubes. The cilia lead the fertilized egg to the normal place of implantation in the uterus⁵.

Pakistan has one of the highest fertility rates in the developing world, with an average of more than 4 children per woman⁶. This varies from 1: 124 to 1: 130 pregnancies in Pakistan. Division is still growing and have already been increased from 4.9 / 1000 pregnancies in 1970 to 9.6 / 1000 in 1992 (Royal College of London)⁴. Considering its global dimensions and the widely growing population, there is surprising incognizance information about the incidence of ectopic pregnancy.

There is an overall increase in the diagnosis of ectopic pregnancy and this is due to increased awareness, advanced diagnostic tools such as transvaginal ultrasonography and beta-hCG assessment in serum⁷. Although many studies have been published from developed countries, women in this region of the South Asia, i.e. the subcontinent, have different characteristics (cultural, religious, sexual behaviors, socio-economic and contraceptive methods. Thus the incidence may be different.

MATERIALS AND METHODS

This is a retrospective study carried out over the period of 2.5 years, from January 2018 to July 2020. All biopsy samples of fallopian tubes labelled with the clinical diagnosis of ectopic tubal pregnancy (ruptured or unruptured) sent to the Pathology department of Fatimah Jinnah Medical University (FJMU) were included. Informed consent was taken in all cases. Clinical and demographic data was taken from Histopathology Record register. Relevant investigations, including Complete Blood Count, b-hCG levels and ultrasound pelvis were noted. Histopathological examination was done in Pathology department of FJMU. Grossing of all specimen was done according to protocols and included all macroscopic details. After processing and staining with hematoxylin and eosin, detailed microscopic examination was done by histopathologists of the Department.

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Data Analysis: Data was recorded on proforma sheets. Analysis was done and percentages were calculated.

RESULTS

Total 176 cases of ectopic tubal pregnancy were recorded in this 2.5 years of study. The incidence of tubal pregnancy is highest in 20-30 years age group. Youngest age was 17 years. Highest age was 37 years (Table 1).

The incidence of tubal pregnancy was most commonly recorded among multiparous women (Table 2).

Right sided fallopian tube was more frequently involved than left side. Most common site was ampulla of fallopian tube (Table 3).

Table 1: Age Groups of patients

Age Range (years)	n	%age
< 20	16	9
21-30	120	69
>30	40	22
Total	176	100

Table 2: Distribution based on Parity

Parity	n	%age
Primigravida	39	22
Multigravida	137	78
Total	176	100

Table 3: Histological site of Implantation in Fallopian tube

Site	n	%age
Ampulla	144	82
Fimbria	11	6
Isthmus	21	12
Total	176	100

DISCUSSION

Being a region with highest fertility rate in South Asia, the complications of pregnancies were also at a higher rate as compared to developed countries. Some of the complications might be related to poverty, religious and social practices affecting treatments. Ectopic pregnancy was one of such complications of pregnancy that could lead to infertility which in this region of world was more disastrous consequence than other maternal morbidities. The incidence of ectopic pregnancy was on rise, as did the population. The current study showed that most of the patients were in age group 20-30 years, In accordance with a Pakistani study in different area, carried out by Islam A [8]. The results of current study also were also comparable to the International studies, one by Creanga AA⁹, other by Smart G¹⁰. However, this was observed to be in contrast with a study conducted in Nepal by Poonam¹¹, where the age group of most of the cases was 26-30 years. Ectopic tubal occurs more on right side as per global data. Our study showed same occurrence. Almost all the studies showed same laterality (right side). Left sided tubal ectopic was studied as only a rare case report by Farahani¹², in which simultaneous bilateral tubal ectopics were found. Majority of the tubal ectopic were found in ampullary region, which was quite in accordance with the study of Kumari¹³ and furthermore a local study by Fatema¹⁴. Incidence of ectopic tubal was highest among multiparous women as compared to nulliparous. Studies by Yimer¹⁵ and

Sudha¹⁶ showed same outcome. However, a study in India by Nitesh¹⁷ showed higher incidence among nulliparous.

CONCLUSION

Ectopic pregnancy should always be kept in mind when a female in reproductive age groups, present with abdominal pain, and amenorrhea of less than 16 weeks and vaginal bleeding. Regular screening of high risk cases, Early and prompt diagnosis can reduce the incidence of morbidity and mortality of ectopic pregnancy.

Limitations: The present study may not be representative of the trends of ectopic pregnancy in the entire region. Being a retrospective study, important information regarding gynecologic history of symptoms of PID, detailed history of contraceptive practices, previous history of pelvic surgery or treatment of infertility, could not be gathered.

Conflict of Interest: No conflict of interest

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