Annual Analysis of Ectopic Pregnancy in Tertiary Care Hospital

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ABSTRACT

INTRODUCTION: Ectopic pregnancy remains an important and one of the leading causes of morbidity and mortality in early pregnancy. The incidence has increased worldwide with an increase in pelvic infections and improvements in the early and newer methods of diagnostic techniques. The objective of this study was to determine the incidence of ectopic pregnancy in this hospital population and to assess the possible risk factors, clinical features and to analyze the various aspects of ectopic pregnancy with a view to suggest interventions that would decrease the incidence.

METHODS: The study was carried out in the department of Obstetrics and Gynaecology, Patan hospital Lagankhel Lalitpur (Nepal). Data were analyzed retrospectively using the case sheets and operative notes of one year Baishakh to chaitra 2062 BS.(April 2005- April 2006). The gynaecological operations and records of the total births within the period of study were also used in the analysis.

RESULTS: The incidence of ectopic pregnancy during this study period was 0.68% of total births, 2.9% of the total gynaecological operations and 11.1% of total major gynecological operations. The mean age of incidence was 29.7 years. Majority of patients were multy parity (80%) where primi parity were 7.5%. The patient who had previous history of miscarriage with no living issue were 12.5%. The mean gestational age was 6 weeks and 20% of cases had no history of amenorrhoea. The history of tubal surgery (12.5%) and Pelvic inflammatory disease (10%) were the major risk factors. 70% of patients did not use any contraception. 10% used depo provera, 5% used condom and 2.5% used IUCD. Abdominal pain (97.5%), vaginal bleeding (62.5%) and syncopal attacks (12.5%) were the most frequent presenting complaints. 80% had amenorrhea. 20% had history of regular cycle and 17.5% had vomiting. Ampulla (80%) were the commonest site of ectopic implantation. Rudimentary horn pregnancy contributed to only 2.5%. The right side 70% was the commonest site of the tube involved. 80.4% had hemodynamical stable but 19.5% were in shock. Majority of patients underwent salpingectomy (80%) followed by salpingo-oophorectomy, adenectomy and fimbriectomy (5%) on each. 5% had laparoscopy followe by laparotomy. 47.5% required blood transfusion.

CONCLUSION: The mean age of the patients attending Patan hospital for ectopic pregnancy was 29.7 years and had history of previous tubal surgery and pelvic inflammatory disease. Surgery (salpingectomy/salpingo-oophorectomy) was the main stay of treatment.

KEY WORDS: Ectopic pregnancy, acute abdomen, sonography.

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INTRODUCTION

Implantation of the blastocyst outside the normal uterine cavity is called ectopic pregnancy. It is derived from Greek ektopen – out of place. Ectopic pregnancy is an increasingly common and potentially catastrophic condition for which patients often present to the emergency department. It remains an important cause of morbidity and mortality in early pregnancy. The incidence has increased worldwide with an increase in pelvic infections and improvements in the diagnostic techniques. But the overall incidence is difficult to determine because of variation in the availability of medical facilities and of course on an individual’s socioeconomic status and attitude towards health, especially in the developing counties. The objective of this study was to determine the incidence of ectopic pregnancy in this hospital and to assess the possible risk factors, clinical features and analyze the various aspects of ectopic pregnancy with a view to suggest interventions that would decrease the incidence.

METHODS

The study was carried out in the department of Obstetrics and Gynecology, Patan hospital Lagankhel Lalitpur(Nepal). Data were analyzed retrospectively using the case sheets and operative notes from the past one year. (April 05-April 06). All case notes were retrieved and analyzed for age, parity, contraceptive methods, significant past medical & surgical history, clinical presentation, operative findings and outcome of treatment. The gynaecological operations and records of the total births within the period of study were also used in the analysis.

RESULTS

The total number of deliveries during the study period was 5836 and the total gynecologic operations were 1361 where major gynecological operations were 360. Ectopic pregnancy constituted 2.9% of all gynecological operations and 11.1 % of total major group. The incidence of ectopic in our study was 0.68%. This is similar as 0.67% reported from the western countries. The mean age of incidence was 29.7years, consistent with the findings of Gharoro and Igbafe. Out of 40 patients 80% were multiparity and 7.5% were primi parity. 12.5% had history of previous miscarriage with no living issue. The mean gestational age was 6 weeks. 20% had no history of amenorrhoea. Previous history of tubal surgery was 12.5%. Pelvic inflammatory disease were 10%, 5% were history of previous ectopic pregnancy, 2.5% were smokers and majority of patients had no risk factor (70%).

**Figure 1. Various risk factors in ectopic pregnancy**

The majority of patients (80%), were not using any contraception while11%, 6%, and 3% were using Depo provera, condom, and IUCD respectively. (Fig. 2)

**Figure 2. Use of contraception.**

Most of the patients presented with more than one symptom. But the most common amongst them was abdominal pain as expected. It was present in around 97.5% of the cases.80% were abdominal pain, 62.5% were bleeding vaginally followed by syncopal attack in 12.5%. 20% were regular cycle and 17.5% were vomiting (fig 3).

**Figure 3. Shows clinical features**

19.5% were in shock and 80.4% were hemodynamically stable. 47.5% were got transfusion, 100% pregnancy test was positive. Diagnosis was done...
clinically with peritoneal aspiration (32.5%) and 67.5% by ultra sonogram.

Mode of treatment was surgery. (95% were laparotomy and 5% were laparoscopy followed by laparotomy). Hemoperitoneum was found 72.5% less than 1000 ml, 22.5% 1000-2000ml and 5% more than 2000ml.Ampulla (80%) were the commonest site of ectopic implantation. Rudimentary horn pregnancy contributed to only 2.5%. The right side 70% was the commonest site of the tube involved. Left side of the tube was involved in 30%. Salpingectomy [52.5% (right), 27.5% (left)], fimbriectomy [5% (right), 2.5% (left)], 5% right adenectomy, 5% right salpingo-oophorectomy and 2.5% right excision of rudimentary horn (fig.4).

35% of the patients had hospital stay 4 days, 50% had 5 days and 15% had longer than 6 days.

Time interval between (hospital arrival and operation). Was that 7.5% were less than 2 hours, 32.5% were two to five hours, 25% were more than five to ten hours, 30% were more than ten to twenty hours and 5% were more than 20 hours because they were kept for conservative management followed by laparotomy. ( fig.5).

**DISCUSSION**

The mean age was 29.7 years which was found to be a significant risk associated with ectopic pregnancy in this study. However recent studies have shown a significant increased risk in women aged 40 and above. Cumulative risk factors associated with getting pregnant at an older age may be responsible for the increased risk of ectopic pregnancy.

The reported risk factors for ectopic pregnancy include previous tubal surgery, pelvic inflammatory disease non-contraceptive use, Depo provera, condom. Previous tubal surgery and pelvic inflammatory disease was the principal etiologic factor in this study. This finding is consistent with the internationally identified risk factors for the overall increase in the incidence of ectopic pregnancy. The majority of patients were not using any contraception prior to the antecedent conception that resulted in an ectopic pregnancy. 12.5% in this study had previous miscarriage with no living issue.

The rate of repeated ectopic is reported to be 4-27%, it was 5% in this study which was consistent with the other studies.

The reduced risk of ectopic in condom users is not surprising (5%) in this study. Condom not only prevents unwanted pregnancies but also the sexually transmitted diseases, one of the major risk factors for ectopic pregnancy. In this study, progesterone (Depo provera) users constituted 10 % of the patients. This slightly increased risk could be due to the inhibitory effect of progesterone on tubal motility. The common risk factors for ectopic pregnancy such as sexual transmitted disease, pelvic inflammatory disease and
induced abortions are preventable.

Educational messages intended to improve knowledge on family planning methods would help in reducing the incidence of ectopic pregnancy by reducing the prevalence of pelvic inflammatory disease, and unwanted pregnancies. Sex education and the use of effective contraception must be strictly stressed upon along with liberalizing the abortion laws.

CONCLUSION

If a woman of reproductive age comes with pain in the abdomen, there is a high suspicion of ectopic pregnancy unless otherwise proved.

REFERENCES