A Retrospective Study of Ectopic Pregnancy in a Teritary Care Hospital

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ABSTRACT
Background: A ruptured ectopic pregnancy is a true emergency and remains the leading cause of pregnancy related first trimester deaths. The objective was to study the clinical profile of ectopic pregnancy in a tertiary care hospital.

Methods: It was a retrospective study conducted at M.N.R Medical College & Hospital, Sangareddy from 1st September 2013 to 31st August 2015. A total of 21 patients with ectopic pregnancy were analysed on clinical presentation, clinical findings, investigations, operative findings and outcome.

Results: A majority of women (66.67%) were in the age group of 25-30 years and 80.95% were multigravida. Risk factors were identifiable in 76.19% patients. Amenorrhea (90.48%) and pain abdomen (95.24%) were the most common presenting symptoms. 15 (71.43%) underwent an exploratory laparotomy, two (9.5%) women had laparoscopy and 4 (19%) women received medical management. There were no maternal deaths and post-operative morbidity in the form of febrile illness (9.52%), and wound sepsis (4.76%) was seen.

Conclusions: Ectopic pregnancy still remains one of the major causes of maternal morbidity and mortality. Early diagnosis and referral in hemodynamically stable state along with use of minimal access surgery or medical management can change the scenario of ectopic pregnancy in the developing world.

Keywords- Ectopic, Pregnancy, Amenorrhoea, Emergency, laparotomy.

INTRODUCTION
An ectopic pregnancy occurs when a fertilized ovum implants outside the uterine cavity. A ruptured ectopic pregnancy is a true emergency and remains the leading cause of pregnancy related first trimester deaths¹. The number of ectopic pregnancies has increased dramatically in the past few decades. Any woman of reproductive age presenting with abdominal pain, vaginal bleeding, syncope or hypotension with or without amenorrhea with pregnancy test positive should be provisionally diagnosed as an ectopic pregnancy unless proved otherwise. The evaluation includes determination of urine and serum Human Chorionic Gonadotropin levels and Ultrasonography. Key to diagnosis is determination of presence or absence of an intrauterine gestational sac correlated with serum β hCG levels.

AIMS & OBJECTIVES
The study was undertaken to study the incidence, clinical presentation, risk factors, and management of cases and outcomes of all cases of ectopic pregnancies that presented to our centre.
METHODS
This is a retrospective study conducted at MNR Medical College and Hospital, Sangareddy from 1st September 2013 to 31st August 2015.
The data collected was in respect to the following Age
Parity
Chief complaints
Period of amenorrhea
Any risk factors for ectopic pregnancy
Evidence of hypovolemia
hCg in urine/serum
Mode of treatment
Operative findings
Outcome of patients

RESULTS
Total number of ectopic pregnancies during this study period was 21 cases. The incidence of ectopic pregnancies is 4.6/1000 pregnancies. A majority of woman who presented with ectopic pregnancy were in the age group of 26-30 years (61.9%) and 80.95% had one previous pregnancy. On evaluation of the risk factors, it was found that 76.19% woman had one or the other risk factor which included history of PID in 5, previous abortion in 3, history of infertility treatment in 3, tubal ligation on in 3, previous ectopic pregnancy in 1 and IUCD use in 1 woman.

Fig 1: Distribution According to Risk Factors

| Risk Factors               | No. of cases | Percentage(%) |
|----------------------------|--------------|---------------|
| PID                        | 5            | 31.25         |
| Previous Abortion          | 3            | 18.75         |
| Tubal Ligation             | 3            | 18.75         |
| Infertility Treatment      | 3            | 18.75         |
| Previous ectopic Pregnancy| 1            | 6.25          |
| IUCD use                   | 1            | 6.25          |

Amenorrhea (90.5%), pain abdomen(95.2%) along with vaginal bleeding were the common presenting complaints. Tachycardia, Abdominal tenderness and pallor were the consistent clinical findings. Urine pregnancy test was positive in around 86% of the cases and ultrasound revealed ectopic pregnancy in 90.48% cases. The commonest site of ectopic pregnancy was in the ampulla of the fallopian tube.

Fig 2: Distribution According to Mode of Treatment

| Mode of treatment    | No. of cases | Percentage |
|----------------------|--------------|------------|
| Laparotomy           | 15           | 71.42      |
| Medical management   | 4            | 19.04      |
| Laparoscopy          | 2            | 9.52       |

Fig 3: Distribution According to Operative Findings

| Operative Findings   | No. of cases | Percentage(%) |
|----------------------|--------------|---------------|
| Tubal rupture        | 15           | 71.42         |
| Unruptured           | 4            | 19.04         |
| Chronic ectopic      | 2            | 9.52          |

Fig 4: Site of ectopic pregnancy on laparotomy

| Site of ectopic pregnancy | No. of cases | Percentage(%) |
|---------------------------|--------------|---------------|
| Ampulla of tube           | 11           | 52.38         |
| Fimbria                   | 3            | 14.29         |
| Isthmus                   | 2            | 9.52          |
| Cornu                     | 1            | 4.76          |
| Others                    |              |               |
| Adhesions to bowel serosa| 2            | 9.52          |
| Heterotopic               | 1            | 4.76          |
| Ovarian                   | 1            | 4.76          |

Most of the patients presented with anaemia of different degrees. Severe anaemia was seen in 6 patients.
Blood Transfusions were required in 13 patients.
DISCUSSION

Ectopic pregnancy is a high risk condition. It is a heterogenous disease which presents itself in a wide variety of anatomical, physiological and clinical expressions. The incidence of ectopic pregnancy has been increasing over past 3 decades. Worldwide ectopic pregnancy complicates 0.25 to 2.0% of all pregnancies. The incidence of ectopic pregnancy in our study is 4.6 /1000 pregnancies. The increase in the incidence is associated with raise in incidence of sexually transmitted infections, salpingitis, advances on assisted reproductive techniques, tubal surgeries, female contraception and earlier diagnosis with more sensitive methods. More cases are seen between 26-30 years of age group. PID and salpingitis increases the risk of ectopic pregnancy by 6-10 folds. In women with previous 3 or more spontaneous abortions there is increased risk of ectopic pregnancy. Increased incidence of ectopic pregnancy in women with previous history of ectopic pregnancy (10%) .Most of cases present with rupture ectopic pregnancy , making clear that in India most of the patients present late to hospital due to failure of making early diagnosis at various levels of health care system. The cases end up in laparotomy due to unstable condition and hemoperitoneum. Laparotomy with salpingectomy is the most common modality of treatment in most of the patients with ruptured ectopic pregnancy. Due to lack of expertise in laparoscopy and aspirations present late in night to hospital increases the rte of laparotomy. Laparoscopy with medical management, with methotrexate, remains an attractive option. Methotrexate single dose of 50mg/m² IM is given. Preventive measures to be taken up. Most forms of ectopic pregnancy that occur outside fallopian tube are not preventable. Steps to be taken to reduce their risk by getting early diagnosis and treatment of infections, practising safer sex, by stopping smoking etc. The likely hoo of successful pregnancy after ectopic pregnancy depends on women’s age, by knowing the etiology of previous ectopic pregnancy if occurred.

CONCLUSION

Early identifying of underlying risk factor, diagnosis with essential aids like transvaginal ultrasound and β hCG levels ,timely intervention in the form of medical and surgical treatment will help in reducing the morbidity and mortality associated with ectopic pregnancy and to improve the future reproductive outcome.

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