

RETROSPECTIVE STUDY OF ECTOPIC PREGNANCY IN A TEACHING HOSPITALManohar R¹, Kavyashree G², Lalitha Shivanna³**HOW TO CITE THIS ARTICLE:**

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ABSTRACT: Ectopic pregnancy is the commonest cause of maternal mortality in the first trimester. There is increased incidence of ectopic pregnancy in recent times due to increased use of Assisted Reproductive Technology, early diagnosis due to ultrasonography. **OBJECTIVES:** To find out the incidence, various risk factors associated with ectopic pregnancy, and its outcome. **MATERIAL AND METHODS:** In this retrospective study 31 cases of ectopic pregnancy admitted were studied during a period of 3 years from 2011-2013 in Mandya Institute of Medical Sciences, Mandya. Various risk factors associated with ectopic pregnancy like post tubal sterilization, History of previous ectopic pregnancy, Pelvic Inflammatory Disease and tubal recanalization were analyzed among the 31 cases. Various clinical presentations based on the symptoms like pain abdomen, bleeding per vagina and site of ectopic pregnancies and its outcome like tubal rupture, tubal abortion or chronic ectopic pregnancies and its management was studied. **RESULTS:** There were 31 ectopic pregnancies in the study with an incidence of about 1 in 500, ectopic pregnancies were common among the age group of 20-25 years, post tubectomy was the single most risk factor, accounting for about 35.48%, 19 cases (61.29%) presented with pain abdomen, whereas 9 cases (29.05%) had pain abdomen followed by bleeding per vagina. 58.06% of the ectopic pregnancies were ampullary pregnancies followed by 32.25% of isthmic pregnancies. 25 cases (80.64%) presented with ruptured ectopic pregnancies followed by 4 (12.90%) cases of tubal abortion and 2 cases of chronic ectopic (6.45%). Salpingectomy was performed in 15 cases (48.38%) followed by salpingo-oophorectomy in 12 cases (38.7%). **CONCLUSION:** Ectopic pregnancy still remains an important cause for maternal morbidity and mortality. However early diagnosis and early intervention depending upon the availability of facilities and skilled personnel can result in reduced morbidity and mortality.

KEYWORDS: Ectopic pregnancy, 1st trimester, bleeding PV, cervical motion tenderness, salpingectomy, haemoperitoneum.

INTRODUCTION: Ectopic is derived from Greek word "ektos", meaning out of place. Ectopic pregnancy refers to implantation failures resulting in locations outside of the uterine cavity including fallopian tubes, ovary, cervix, and rarely abdominal. Ectopic pregnancy accounts for approximately 2% of all recognized pregnancies.^[1] The most logical explanation for the increase in incidence of ectopic is previous pelvic infection, however most patients presenting with ectopic have no identifiable risk factor.^[2]

Classic triad of pain abdomen, amenorrhea and vaginal bleeding are present in only 50% of the cases. 40-50% of the cases present with only vaginal bleeding. Ectopic pregnancy is a common life threatening condition in pregnancy and the leading cause of pregnancy related deaths in first trimester.^[3] Ectopic pregnancies can lead to massive haemorrhage, infertility and death. Surgical treatment has long been a main stay of management of ectopic pregnancy treatment.

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To date there is wealth of data establishing laparoscopic treatment as the "gold standard", however, paradoxically, the evidence behind choosing the two main treatment methods of salpingectomy and salpingostomy, especially with regards to future fertility potential, remains unclear.^[4] Without timely diagnosis and treatment ectopic pregnancy can become a life threatening situation.^[5] The current trend is a conservative way of management of these pregnancies be it chemotherapeutic agents or conservative surgical approaches, the ultimate goal is TUBAL CONSERVATIVE PROCEDURES rather than radical surgeries.^[6,7]

MATERIALS AND METHODS: Retrospective analysis of all cases of ectopic pregnancy admitted to Mandya Institute of Medical Sciences, Mandya during a period of 3 years from 2011-2013 were included in the study. After careful analysis of all case records all cases of ectopic pregnancy admitted to Mandya Institute of Medical Sciences diagnosed by clinical, biochemical or ultra sonographically were included in study.

OBJECTIVES:

1. To find out the incidence of ectopic pregnancy and its relation to various factors like age group and parity.
2. To find out the various risk factors associated with ectopic pregnancy.
3. To find out various clinical presentation and its outcome in ectopic pregnancy.

Various factors compared with respect to age, parity, risk factors for occurrence of ectopic like pelvic inflammatory disease/previous abortions/intrauterine contraceptive devices/previous ectopic, site of ectopic gestation, side, type (ruptured/tubal abortion), history of blood transfusion, any maternal morbidities/mortalities will be assessed and compared.

OBSERVATION: There were a total of 31 cases of ectopic pregnancy admitted during January 2011-December 2013 in Mandya Institute of Medical Sciences, Mandya. Among 31 cases, 30 cases were unbooked and one booked case

AGE	NO. OF CASES (31)
< 19 years	01
20-25 years	11
26-30 years	09
30-35 years	08
>35 years	02

Table 1: Age distribution

In our study 11 cases (35.48%) were found in the age group of 20-25 years.

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RISK FACTORS	NO. OF CASES
Post tubectomy	11 (35.48%)
No risk factors	09(29.03%)
Tubal recanalization	02 (6.45%)
Previous ectopic	03 (9.67%)
Post abortion (D &C)	06 (19.35%)

Table 2: Risk Factors in relation to Ectopic pregnancy

Most common risk factor for occurrence of ectopic pregnancy was following tubectomy (35.48%) in our study.29.03% had no risk factors.

SYMPTOMS	NO. OF CASES
Pain abdomen	19(61.29%)
Bleeding P/V	03(9.67%)
Pain abdomen & Bleeding P/V	09(29.03%)

Table 3: Presenting clinical symptoms in relation to ectopic pregnancy

In our study 61.29% cases presented with pain abdomen and 29.03% presented with pain abdomen and bleeding per vagina.9.67% of the cases presented with bleeding per vagina.

Diagnosis by	No of Cases
Mass in Fornices	13(41.93%)
Forniceal tenderness	15(48.38%)
Cervical movement tenderness	16(51.61%)

Table 4: Clinical signs in relation to ectopic pregnancy

Out of 31 cases 51.61% of them had cervical movement tenderness, 48.38% had forniceal tenderness and 41.93% presented with an adnexal mass.

SITE	NO. OF CASES
Ampulla	18(58.06%)
Ovary	01(3.20%)
Abdominal	02(6.45%)
Isthmic	10(32.25%)

Table 5: Site of Ectopic

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In our study 58.06% Of the cases were ampullary pregnancies, 32.25% of the cases were situated in the isthmic region and 2 cases (6.45%) were abdominal pregnancies.

SIDE	NO. OF CASES
Right	15(48.38%)
Left	16(51.61%)

Table 6: Side of Ectopic

Out of 31 cases, 16 cases were present on left side and 15 on the right side.

OUTCOME	NO. OF CASES
Ruptured	25(80.64%)
Chronic ectopic	02(6.45%)
Abortion	04(12.90%)

Table 7: Outcome of Ectopic pregnancy

Out of the 31 cases 80.64% of them were found to be ruptured ectopic pregnancies at the time of surgery,12.90% of the cases were tubal abortion and 6.45% of them were chronic ectopic.

SURGERY	NO. OF CASES
Salpingectomy	15(48.38%)
Salpingophorectomy	12(38.70%)
Partial salpingectomy	02(6.45%)
Hysterectomy	02(6.45%)

Table 8: Surgical Outcome of Ectopic pregnancy

In our study the most common procedure done was salpingectomy in 48.38% of the cases, followed by salpingoopherectomy in 38.70% of the cases. In two cases Total abdominal Hysterectomy was performed.

Blood transfusion	NO. OF CASES
1 unit	08(25.80%)
2 units	19(61.29%)
3 units	02(6.45%)
No blood	02(6.45%)

Table 9: Number of blood transfusions done

93.55% of the cases received Blood transfusion and 6.45% of the cases were managed without blood transfusion. Urine pregnancy test was positive in all cases. USG was done in all cases and confirmed Chronic ectopic by ultrasonography→02.

Intra operative and postoperative period of all 31 cases were uneventful.

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DISCUSSION: In the present study 31 cases of ectopic pregnancies were studied. The incidence of ectopic pregnancy was 1 in 500, in our study. Out of the 31 cases, 64.51% were found in the age group of 20-30 years, this coincides with a study conducted by Rashmi et al. (70.2%).^[8] The most common risk factor for occurrence of ectopic pregnancy in our study was Post-Tubectomy 35.48%, in a study conducted by Peterson Hb et al, 33% of the pregnancies following tubal ligation of ectopic. Those who underwent electro cautery and women younger than 35 years were at higher risk. In our study 29.03% had no identifiable risk factors.^[9]

In Chou et al study (1987), 79.6% of the pregnancies were in the ampulla, 12.3% of them in the isthmic region. According to the study conducted by Rose et al (2002), 56.9% were ampullary pregnancies and 39.78% were isthmic. In our study, 58.06% of ectopic pregnancies were ampullary pregnancies followed by 32.25% of Isthmic pregnancies. According to Wills and Mohambal study 66% of them were ruptured Ectopic pregnancies; in our study 80.64% of them were ruptured ectopic pregnancies. In our study, 51.61% of them had cervical movement tenderness which coincides with the study conducted by Tay et al (2000).

In one case series of ectopic pregnancies, conducted by Alsuleiman S A et al 98.6% of the patients presented with abdominal pain and 56.4% of the patients presented with Vaginal bleeding.^[10] In the present study, 61.29% of them presented with pain abdomen and 29.05% presented with pain abdomen and bleeding per vagina. In our study salpingectomy was performed in 48.38%, which coincides with the study conducted by Rashmi et al (51.4%)^[8] In our study, incidence of recurrent ectopic was 9.67%, according to the Rose et al study, 2002, the incidence was 3.2%. This is because of a stronger tendency for ectopic pregnancy to occur first on one side and then later on the other side.^[11]

CONCLUSION: Ectopic pregnancy still remains an important cause for maternal morbidity and mortality. However early diagnosis and early intervention depending upon the availability of facilities and skilled personnel can result in reduced morbidity and mortality. In a center where laparoscopic facilities are not available, Laparotomy proceeded with salpingectomy can be a lifesaving procedure even in the present day scenario.

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AUTHORS:

1. Manohar R
2. Kavyashree G.
3. Lalitha Shivanna

PARTICULARS OF CONTRIBUTORS:

1. Associate Professor, Department of Obstetrics and Gynaecology, MIMS.
2. Associate Professor, Department of Obstetrics and Gynaecology, MIMS.
3. Professor & HOD, Department of Obstetrics and Gynaecology, MIMS.

NAME ADDRESS EMAIL ID OF THE CORRESPONDING AUTHOR:

Dr. Manohar R,
No. 2977, 8th Cross,
Ashok Nagar,
Mandya-571401.
Email: manoharrangaswamy@gmail.com

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