

# A study factors associated with ectopic pregnancy at tertiary health care center

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## Abstract

**Background:** Ectopic pregnancy is one of the major health problem in women of child bearing age. <sup>1</sup> It occurs when the blastocyst implants outside the endometrial cavity and not within. **Aims and Objectives:** To Study factors associated with Ectopic pregnancy at tertiary health care center. **Methodology:** After approval from institutional ethical committee this cross-sectional study was carried out in the Department of OBGY in the patients who were diagnosed as Ectopic pregnancy during the one year i.e. March 2016 to March 2017. All the patients after written explained consent included into the study, So during one year period total 52 patients with ectopic pregnancy were included. All the patients undergone Sr. HCG assay, Pelvic USG all other necessary investigations. This data was presented in the tabular form and expressed in the percentages. **Result:** The majority of the patients were from the age group of 20-24 were 44.23% followed by 24-29 were 21.15%, 29-34- 17.31 %, > 34 -13.46%, <19-3.85%. The majority of the patients were from Gravida 3 were 48.08%, followed by 2 were 32.69%. The most common clinical symptoms were Pain in abdomen in 90%, Bleeding per vaginum in 80%, Vomiting in 73%, Fainting in 56%, Shock in 32%, Abdominal distention in 24%. The most common Associated factors were H/O Medical abortion in 90%, H/O Lower segment caesarean section in 75%, H/O IUD in 70%, H/O Curettage in 57%, H/O Infertility in 26%, H/O Tuberculosis in 22%, H/O Previous ectopic in 19%, H/O Pelvic inflammatory disease in 15%, H/O Tubal ligation in 12%, Diabetes mellitus in 10%, Unicornuate uterus in 9%. **Conclusion:** It can be concluded from our study that The most common clinical symptoms were Pain in abdomen, Bleeding per vaginum, Vomiting. The most common Associated factors were H/O Medical abortion, H/O Lower segment caesarean section, H/o IUD, H/O Curettage, H/O Infertility in 26%, H/O Tuberculosis, H/O Previous ectopic in 19%, H/O Pelvic inflammatory disease in 15%, H/O Tubal ligation, Diabetes mellitus, Unicornuate uterus etc. **Key Word:** Ectopic Pregnancy, Intra Uterine Device (IUD), Pelvic inflammatory Diseases (PID), Infertility.

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and is estimated to be around 10%. It is said to occur in about 1-2% of all pregnancies.<sup>3,4</sup> Over the years, there has been a considerable rise in the incidence of ectopic pregnancy.<sup>5</sup> The potential risk factors which lead to ectopic pregnancy are history of previous ectopic pregnancy, intrauterine device usage, previous pelvic surgery, history of pelvic inflammatory disease (PID), or induced ovulation.<sup>6-8</sup>

## MATERIAL AND METHODS

After approval from institutional ethical committee this cross-sectional study was carried out in the Department of OBGY in the patients who were diagnosed as Ectopic pregnancy during the one year i.e. March 2016 to March 2017. All the patients after written explained consent included into the study, So during one year period total 52 patients with ectopic pregnancy were included. All the

## INTRODUCTION

Ectopic pregnancy is one of the major health problem in women of child bearing age.<sup>1</sup> It occurs when the blastocyst implants outside the endometrial cavity and not within.<sup>2</sup> It is one of the major cause of maternal mortality

patients undergone Sr. HCG assay, Pelvic USG all other necessary investigations. All details of the information like Age, Gravida and associated factors like H/O Medical abortion, H/O Lower segment caesarean section H/O Curettage, H/O Infertility, H/O Tuberculosis, H/O

Previous ectopic, H/O Pelvic inflammatory disease, H/O Tubal ligation, Diabetes mellitus, Unicornuate uterus etc. was noted. This data was presented in the tabular form and expressed in the percentages.

## RESULT

**Table 1:** Distribution of the patients as per the Age

Age group	No.	Percentage (%)
<19	2	3.85
20-24	23	44.23
24-29	11	21.15
29-34	9	17.31
>34	7	13.46
<b>Total</b>	<b>52</b>	<b>100.00</b>

The majority of the patients were from the age group of 20-24 were 44.23% followed by 24-29 were 21.15%, 29-34-17.31%, >34 -13.46%, <19-3.85%.

**Table 2:** Distribution of the patients as per the Gravida

Gravida	No.	Percentage (%)
1	4	7.69
2	17	32.69
3	25	48.08
4	4	7.69
>4	2	3.85
<b>Total</b>	<b>52</b>	<b>100.00</b>

The majority of the patients were from Gravida3 were 48.08%, followed by 2 were 32.69%.

**Table 3:** Distribution of the patients as per the Clinical feature

Symptoms	No.	Percentage (%)
Pain in abdomen	47	90
Bleeding per vaginum	42	80
Vomiting	38	73
Fainting	29	56
Shock	17	32
Abdominal distention	12	24

The most common clinical symptoms were Pain in abdomen in 90%, Bleeding per vaginum in 80%, Vomiting in 73%, Fainting in 56%, Shock in 32%, Abdominal distention in 24%

**Table 4:** Distribution of the patients as per the associated factors

Associated factors	No.	Percentage (%)
H/O Medical abortion	47	90%
H/O Lower segment caesarean section	39	75%
H/o IUD	36	70%
H/O Curettage	30	57%
H/O Infertility	14	26%
H/O Tuberculosis	11	22%
H/O Previous ectopic	10	19%
H/O Pelvic inflammatory disease	8	15%
H/O Tubal ligation	6	12%
Diabetes mellitus	5	10%
Unicornuate uterus	5	9%

The most common Associated factors were H/O Medical abortion in 90%, H/O Lower segment caesarean section in 75%, H/o IUD in 70%, H/O Curettage in 57%, H/O Infertility in 26%, H/O Tuberculosis in 22%, H/O Previous ectopic in 19%, H/O Pelvic inflammatory disease in 15%, H/O Tubal ligation in 12%, Diabetes mellitus in 10%, Unicornuate uterus in 9%.

## DISCUSSION

Ectopic pregnancy causes major maternal morbidity and mortality, with pregnancy loss, and its incidence is increasing worldwide.<sup>9,10</sup> This is true especially in developing countries, where the majority of patients present late with rupture and hemodynamic compromise.<sup>11</sup> The etiology of ectopic pregnancy is not well understood. However, multiple risk factors have been associated with ectopic pregnancy. Pelvic inflammatory disease, puerperal sepsis, post abortion sepsis, appendicitis, and the use of intrauterine contraceptive devices have been identified as sources of pelvic infection and major risk factors.<sup>12, 13</sup> In addition assisted reproductive techniques including induction of ovulation has also been blamed for increased incidence. The management of a case of ectopic pregnancy, has always been a challenge to the clinician. The diagnosis being complicated by the wide spectrum of clinical presentations, from asymptomatic cases to acute abdomen, and hemodynamic shock.<sup>14</sup> In our study we have found that the majority of the patients were from the age group of 20-24 were 44.23% followed by 24-29 were 21.15%, 29-34-17.31%, >34 -13.46%, <19-3.85%. The majority of the patients were from Gravida 3 were 48.08%, followed by 2 were 32.69%. The most common clinical symptoms were Pain in abdomen in 90%, Bleeding per vaginum in 80%, Vomiting in 73%, Fainting in 56%, Shock in 32%, Abdominal distention in 24%. The most common Associated factors were H/O Medical abortion in 90%, H/O Lower segment caesarean section in 75%, H/o IUD in 70%, H/O Curettage in 57%, H/O Infertility in 26%, H/O Tuberculosis in 22%, H/O Previous ectopic in 19%, H/O Pelvic inflammatory disease in 15%, H/O Tubal ligation in 12%, Diabetes mellitus in 10%, Unicornuate uterus in 9%. These findings are similar to Mridula Shrivastava<sup>15</sup> Majority (62%) of patients belonged to the age group 20-29 years and were gravida 3 and above. Ninety two percent were ruptured ectopic. Sixty two percent ectopic pregnancies were on right side. The common presenting complaints were pain in abdomen (81%) and bleeding/spotting per vaginum (43%). The mean duration between onset of symptoms and reporting to hospital was one and a half day and the average time between admission to hospital and surgery was 9 hours. The ectopic pregnancies were managed surgically in all cases. No obvious risk factors were identified in 34% patients. Among the remaining, previous MTP (17%), previous ectopic (9%) and PID (7%) were identified risk factors. There was no mortality.

## CONCLUSION

It can be concluded from our study that The most common clinical symptoms were Pain in abdomen, Bleeding per vaginum, Vomiting. The most common

Associated factors were H/O Medical abortion, H/O Lower segment caesarean section, H/o IUD, H/O Curettage, H/O Infertility in 26%, H/O Tuberculosis, H/O Previous ectopic in 19%, H/O Pelvic inflammatory disease in 15%, H/O Tubal ligation, Diabetes mellitus, Unicornuate uterus etc.

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