

## Research Article

### A Study On Risk Factors And Clinical Presentations Of Ectopic Pregnancy In Women Attending A Tertiary Care Teaching Hospital

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#### ABSTRACT

**Background:** Ectopic pregnancy is one of the nightmare and a life threatening condition. The rising incidence of ectopic pregnancy in the past few years is due to a number of risk factors which include pelvic inflammatory disease & availability of better diagnostic techniques. There is increased frequency of ectopic after IVF and related techniques. Tubal pregnancy may be due to factors that retard the passage of fertilized ovum, conditions which increase tubal receptivity and factors intrinsic in the conceptus.

**Aim:** The present study was designed to study the risk factors and clinical presentations of ectopic pregnancy attending to a tertiary care centre.

**Materials and methods:** It was a prospective study on 50 cases of ectopic pregnancy conducted in department of obstetrics and gynaecology, RIMS Medical college and general hospital KADAPA, for a period of 2 years were included. Detailed history suggestive of risk factors for ectopic pregnancy, menstrual and obstetric history was taken. general, systemic, abdominal and vaginal examinations were done.

**Results and Discussion:** A total of 12132 deliveries were confirmed during the study period, of which 50 cases of ectopic pregnancies were diagnosed, giving an incidence of 0.41%. 74% were in the age group of 21- 30 years. 90% of women were multigravidae and 10% were primigravidae. 64% of the patients had identifiable risk factors, of which past history of PID in 32%, history of previous abortion in 12%, infertility in 10%, history of previous ectopic pregnancy in 4%, usage of IUCD and OCP in 4% each and tubectomy in 10% were noted. 98% had amenorrhea, followed by pain abdomen in 100%, bleeding PV in 82%, fainting and syncopal attack in 6%% of the patients. Pallor in 90%% of the cases, 6% presented with shock was noted. Percentage of haemoglobin was <7 gms in 68% .ectopic pregnancy presents as ruptured ectopic in 48 cases, and unruptured in 2 cases.

**Conclusion:** Increasing awareness among sexually active women and men regarding safe sexual practices and contraception decrease abortions and reduces the risk of ectopic pregnancy. All high risk women should be screened at the earliest with serum B-hCG and TVS. The impact on future fertility can be improved by focusing on primary prevention and early diagnosis before rupture.

**Key-words:** Drug utilization, Post-operative, Obstetrics and gynecology

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## INTRODUCTION

Motherhood is an eternal, universal and inherent dream which every woman has. This may not be always pleasant, but may have some nightmares through her journey. One of it is ectopic pregnancy- which can be life threatening and one of the leading causes of maternal mortality in the first trimester. The present study is prospective study of ectopic pregnancy who was admitted to the RIMS general hospital, Kadapa from September 2014 to June 2016. Ectopic pregnancy is defined as any pregnancy where the fertilized ovum gets implanted and develops in sites other than normal uterine cavity. The rising incidence of ectopic pregnancy in the past few decades due to increased awareness of risk factors and availability of better diagnostic techniques like diagnostic laparoscopy. There is increased frequency due to ovulation induction drugs, IVF and related techniques.

## AIM:

- 1) To study the risk factors associated with ectopic pregnancy
- 2) To study the clinical presentation in ectopic pregnancy

## SOURCE OF THE DATA:

Source of the data includes all the women in the reproductive age group (15-44).

## METHODS OF COLLECTION OF THE DATA:

All the women with ectopic pregnancy diagnosed after a clinical examination and investigations are included in the study.

## INCLUSION CRITERIA:

The women who were diagnosed as ectopic pregnancy and who were in the reproductive age group of 15- 44 years.

## EXCLUSION CRITERIA:

All intrauterine pregnancies.

## METHODOLOGY:

Detailed history including age, socioeconomic status, and history suggestive of risk factors for ectopic pregnancy, menstrual and obstetric history were taken. General, systemic, abdominal and vaginal examination was done. Informed consent was taken and data were recorded on the proforma. TVS / TAS were done. Apart from routine surgical profile,  $\beta$ -hCG assay, UPT, coagulation profile, renal function tests, Liver function tests.

## STATISTICAL ANALYSIS:

- Data was collect and tabulated ted as shown in results.
- Statistical analysis was done using Microsoft Excel.
- Frequency and percentage of each parameter was calculated and analyzed.

## RESULTS:

50 cases of ectopic pregnancy were diagnosed in a total of 12132 deliveries giving incidence 0.41%.

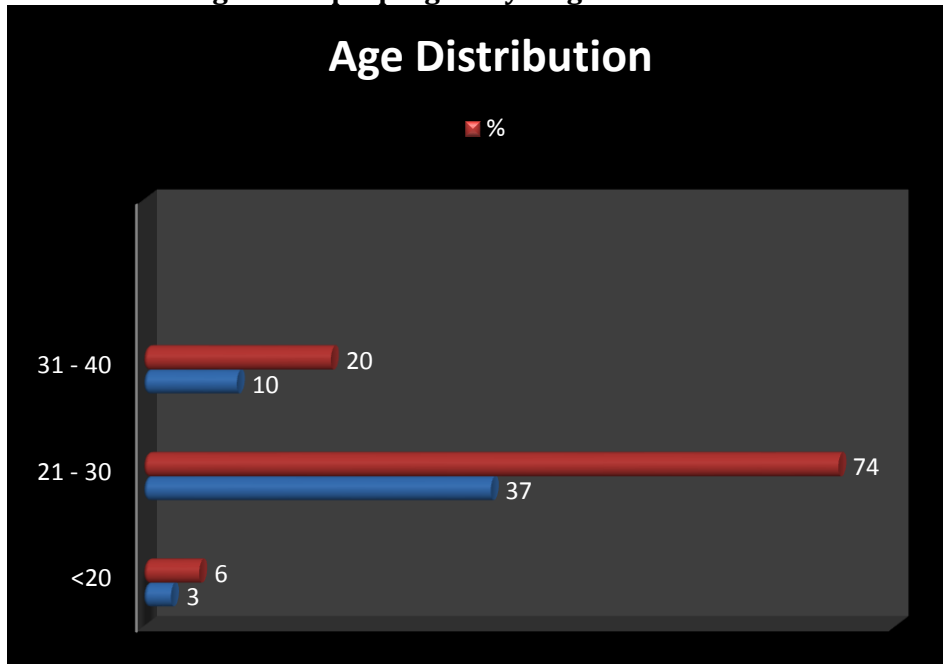
## BASED ECTOPIC AGE DISTRIBUTION:

AGE DISTRIBUTION: Age distribution varied from 18 – 40 years.

**Table: 1 Ectopic pregnancy – Age Distribution**

Age in years	n/t	%
<20	3/50	6
21 – 30	37/50	74
31 – 40	10/50	20

Fig : 1 Ectopic pregnancy – Age Distribution

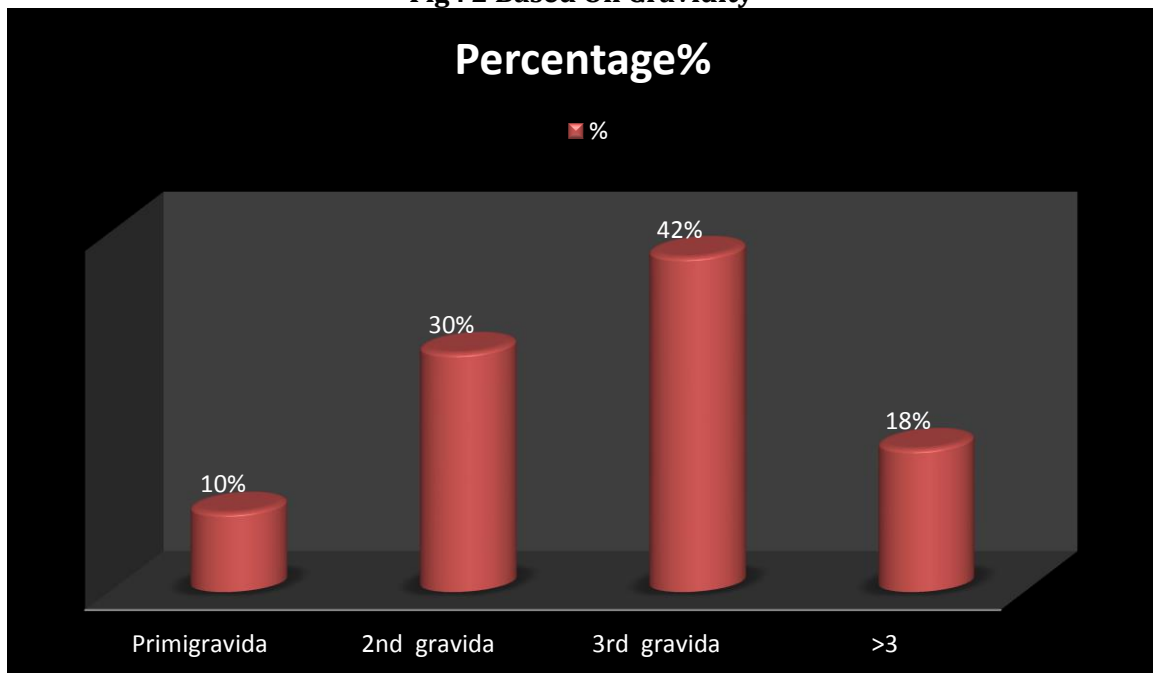


**GRAVIDITY:** In the present study group 90% are multigravidae and 10% were primi gravidae.

Table: 2 Based On Gravidity

GRAVIDITY	NO/TOTAL	%
Primigravida	5/50	10%
2 <sup>nd</sup> gravida	15/50	30%
3 <sup>rd</sup> gravida	21/50	42%
>3	9/50	18%

Fig : 2 Based On Gravidity



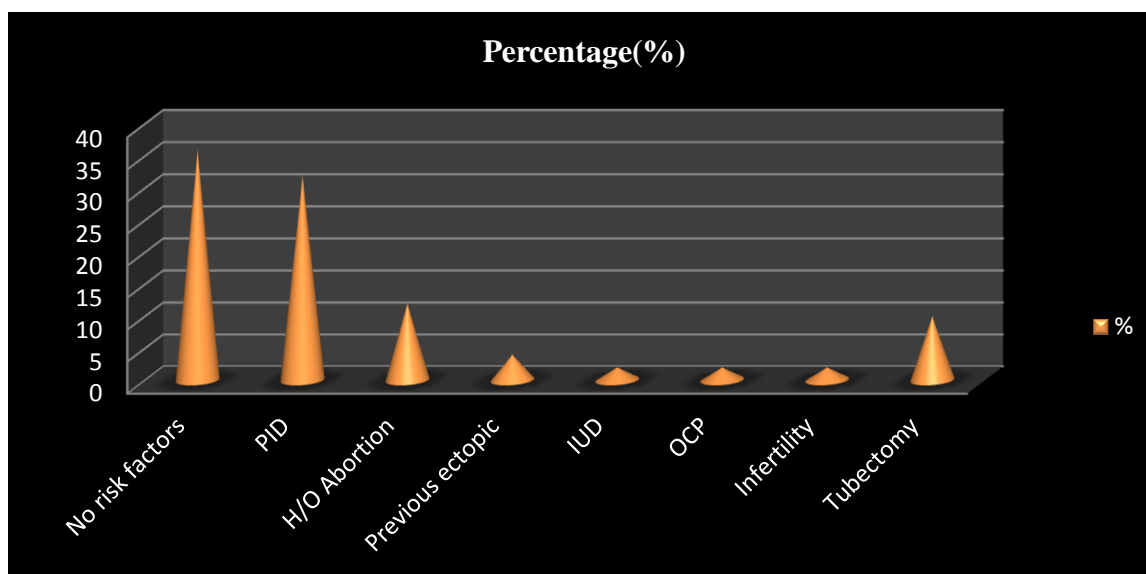
**RISK FACTORS:**

In our present study group 64% of the patients have identifiable risk factors. Past H/O PID was present in 32%, H/O previous abortion & D&C present in 12%. Infertility 2%, Previous ectopic in 4%, OCPs usage & IUCDs 4%, H/O tubectomy 10%.

**Table: 3 Based On Risk factors**

Risk factors	No/Total	%
No risk factors	18/50	36
PID	16/50	32
H/O Abortion	6/50	12
Previous ectopic	2/50	4
IUD	1/5	2
OCP	1/5	2
Infertility	1/50	2
Tubectomy	5/50	10

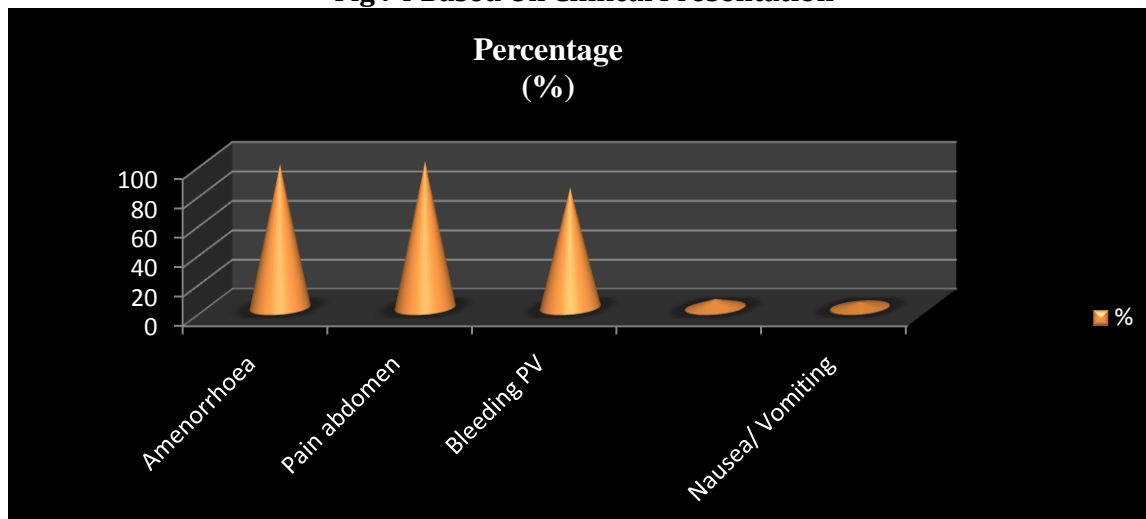
**Fig : 3 Based On Risk factors**



**Table : 4 Based On Clinical Presentation**

Presentation	No/Total	%
Amenorrhoea	49/50	98
Pain abdomen	50/50	100
Bleeding PV	41/50	82
Fainting & syncopial attack	3/50	6
Nausea/ Vomiting	2/50	4

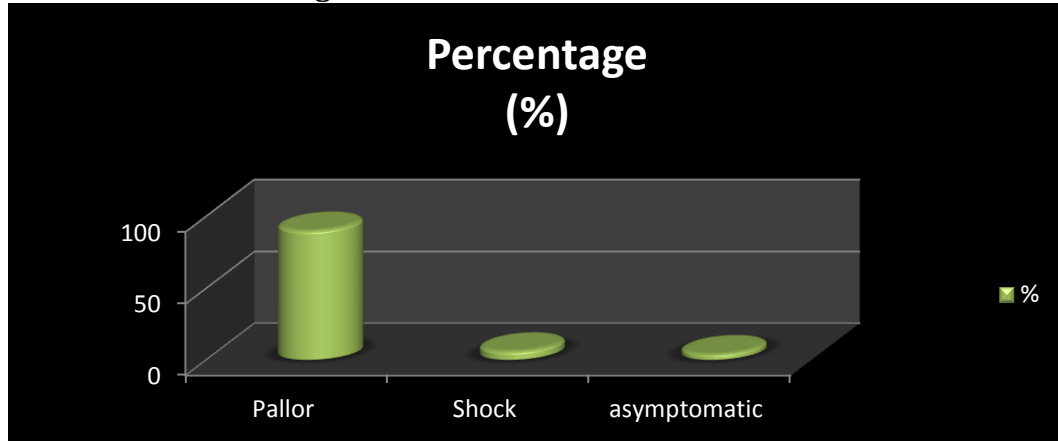
**Fig : 4 Based On Clinical Presentation**



**Table : 5 Based On Clinical Examination**

Clinical Examination	No/Total	%
Pallor	49/50	90
Shock	3/50	6
asymptomatic	2/50	4

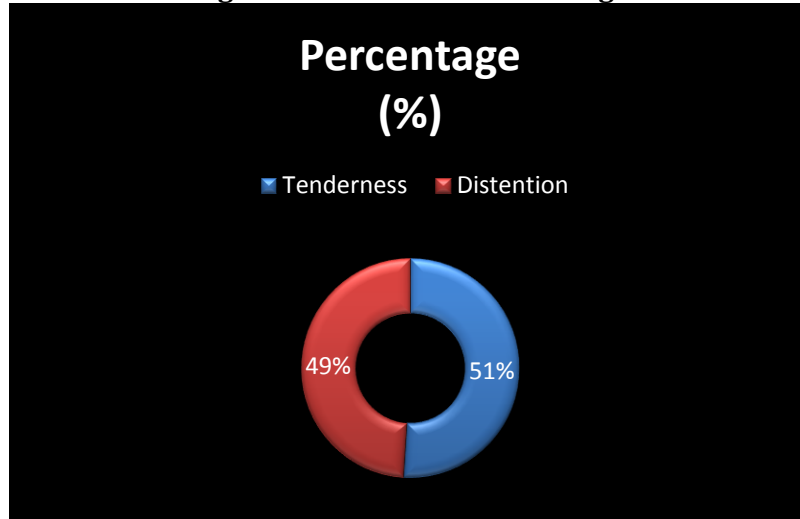
**Fig: 5 Based On Clinical Examination**



**Table: 6 Based On Clinical Findings**

P/A	No/Total	%
Tenderness	50/50	100
Distention	48/50	96

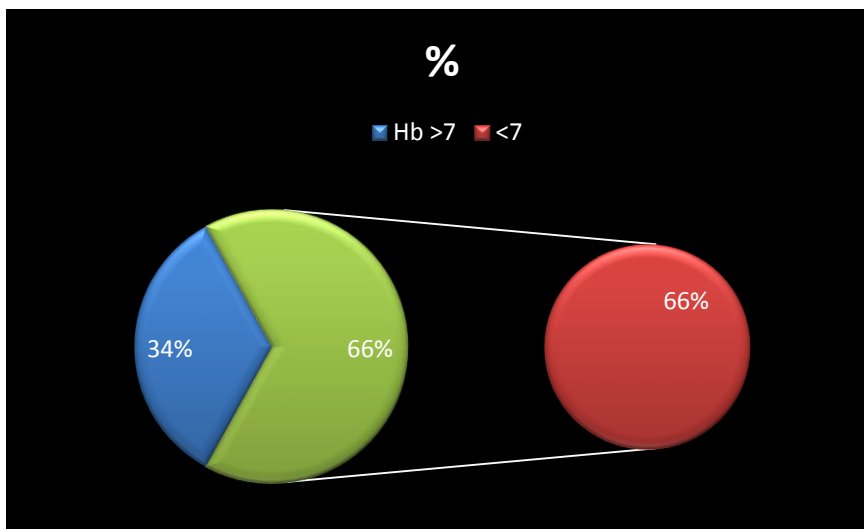
**Fig: 6 Based On Clinical Findings**



**Table: 7 Based On Ectopic With Hb**

Ectopic with Hb	No/Total	%
Hb >7	17/50	34
<7	33/50	66

Fig: 7 Based On Ectopic With Hb



- Ectopic with UPT: UPT +ve in 48cases (96%), negative in 2 cases.
- Ectopic pregnancy with USG: In the present study group, USG showed evidence of rupture 48 cases and 2 cases were diagnosed as unruptured ectopics.

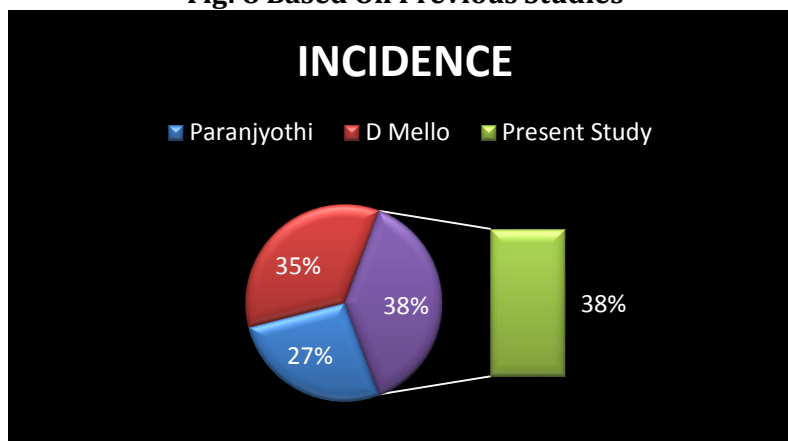
**DISCUSSION**

A total of 12132 deliveries were occurred, of this 50 cases were diagnosed as ectopic pregnancy giving incidence of 0.41% or 1:244 deliveries.

Table: 8 Based On Previous Studies

STUDIES	YEAR	INCIDENCE
Paranjyothi	1965	1:151
D Mello	1988	1:214
Present Study	2016	1:244

Fig: 8 Based On Previous Studies



In our study group 84% women belongs to age 21 to 30 years. In India most of the women marry at an early age and completes their family at an early age which corresponds to peak sexual activity and reproduction. Most of the women (92%) belong to low socioeconomic status. Low socioeconomic women have poor personal hygiene and lack of immunity predisposing them to PIDs including Tuberculosis. Majority of women (90%) were multi gravidae, which correlate with studies done by Sridhar shetty K et al (83.9) & Poonam et al (83.6). This higher incidence due to previous mis -carriages and infections leading to tubal damages. H/O PID was present in 32% of cases correlating with the study done by Rose et al 2002, 34.4%. Endo salpingitis damages the mucosa may entrap the migrating embryo, leading to ectopic implantation. Exo salpingitis gives rise to peritubal adhesions impairing peristaltic movements giving rise inadequate transportation. 12% of patients had H/O previous abortion, which is close to the study done by Khaleeqeef et al (12%) The relationship

between prior abortions and ectopic is explain by the post abortal infections leading to tubal damage. 4% of patients had H/O previous ectopic, which correlating with the study done by Rose et al 2002, (3.2%) There is increase risk of ectopic with previous ectopic because tubal disease is always bilateral. There is strong tendency to occur first on one side and then other side.10% of women had H/O tubal sterilization. In postpartum period edematous, congested and friable tube increases the chance of incomplete tubal occlusion resulting in ectopic implantation. 2% women had H/O infertility which correlates with the study done by March banks study (1998).2.9%. Most important fact which needs attention is that in a majority of the cases 36% there was no recognizable risk factor, this stresses the fact that to diagnose ectopic pregnancy, we must have ectopic in minded. 96%of women had H/O amenorrhea, 100% of the women had pain abdomen and 82% women had bleeding per vaginum. This is correlating with the study done by Gupta et al, in which amenorrhea was present in 90%, pain abdomen in 87.5%, and bleeding PV in 67.55. Urine pregnancy test was positive in 96% of cases which correlate with the study done by Rashmi a Gaddagi et al (97.3%) and W.M. Fageeh (96%). The availability of more sensitive (5 mIU/mL) urine pregnancy test kits makes the test positive and in making an early diagnosis. Pallor was present in 98% of the cases. According to national family health survey (2005-2006). The prevalence of anemia in India is 57.9%. Pre existing anaemia with superimposed acute blood loss due to rupture ectopic explains the higher incidence. 6% of women presented with shock. These patients presented late with signs of rupture ectopic and hypovolemia. Decompensation with shock is a significant sign of intra peritoneal hemorrhage.

## CONCLUSION

The rise in incidence of ectopic pregnancy due to the rise in incidence of risk factors like STD, increased tubal sterilization and reversal, delayed child bearing, assisted reproductive technology, increased awareness and improvements in diagnostic techniques. Despite many advances in the diagnostic techniques, ectopic is still a diagnostic dilemma because of its varied clinical presentations. Increasing awareness among sexually active women and men regarding safe sexual practices and contraception decrease abortions and reduces the risk of ectopic pregnancy. All high risk women should be screened at the earliest with serum B-hCG and TVS. The impact on future fertility can be improved by focusing on primary prevention and early diagnosis before rupture.

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