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Original Research Paper

Gynaecology

A CLINICAL STUDY DEPICTING THE VAST SPECTRUM OF ECTOPIC PREGNANCY IN TERTIARY CARE CENTRE

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ABSTRACT

BACKGROUND- Ectopic pregnancy is a catastrophe and life terrifying condition. In the past two decades, the prevalance of ectopic pregnancy has been increasing dramatically, worldwide. Objectives of present study were to know the incidence of ectopic pregnancy at tertiary care centre ,its socio demographic character and their experience regarding clinical presentation, risk factor, management and the consequences of ectopic pregnancy.

METHODOLOGY: Prospective study of all cases of ectopic pregnancy admitted in TMU, Moradabad in OBG department .Study was done from January 2017 to August 2018.

RESULTS: A total of 74 patients were admitted with provisional diagnosis of ectopic pregnancy from January 2017 to August 2018. Risk factors were found in 70% of cases and the major contributors were PID and infertility. Other contributing factors are history of IUCD insertion ,previous ectopic, ART, previous history of abortion .Out of 74 patients, 20 patient were immediately taken for laparotomy based on clinical diagnosis, as they came with shock and rest 54 patient was hemodynamically stable. Out of which 12 of them were managed conservatively depending on USG findings & beta-HCG levels. Surgical treatment was performed in all the remaining 42 patients.

CONCLUSION: As the incidence of ectopic pregnancy has been on the rise,especially in high risk cases,but with the revolution in the treatment options mortality has reduced significantly now a days. Early diagnosis and early intervention are required to enhance maternal survival and conservation of reproductive capacity.

KEYWORDS : Ectopic, Methotrexate, Salphingostomy, Salphingectomy, Ovariectomy

INTRODUCTION

One of the commonest tragedy of reproduction is "ectopic pregnancy" i.e; implantation of blastocyst anywhere other than the endometrial lining of the normal uterine cavity.[1]The rising trend of this condition is being attributed to advance in diagnostic technique & number of contributing risk factors which include salphingitis ,advances in assisted reproductive technology [ART],tubal reconstructive surgeries ,sterilizations & use of IUD's.[2,3]
The commonest cause of salphingitis is PID .It may be due to sexually transmitted infections ,pyogenic or tubercular, mainly chlamydia and gonorrhea ,secondary to postabortal ,puerperial or extragenital infection.[4]

Anatomical defects of uterus and fallopian tubes can also increase the risk of ectopic pregnancy. Peritoneal synaechia subsequent to surgery or with congenital absence of any segments of fallopian tube can lead to tubal pregnancy. Atresia of the tube, tubal diverticula and accessory ostia may distort the lumen,further predisposing for ectopic implantation.

Even contraception plays a major role in causing ectopic pregnancy, among which "Progestasart" has got the highest rate[5].

Advancing age is also one of the major risk factors .[6]

Smoking and DES exposure also plays a major contributing factor in causing ectopic by delayed ovulation, altered tubal and uterine motility and or altered immunity. "DES exposure causes the tubal abnormalities like shortened and convoluted tubes, constricted fimbria, and paratubal cysts favours ectopic implantation".

Due to advancement in the reproductive technology, ART predisposes for ectopic pregnancy via higher volume of transfer media or deep catheter insertion which may predispose to tubal transfer.[7]

Recent research focused on etiology of ectopic, lying at the molecular level altering the blastocyst implantation, involving various factor including lecithin ,integrin, cytokines and their receptors.[8,9]

Ectopic pregnancy causes major maternal morbidity and mortality with pregnancy loss and pshycological stress to women, and its incidence is increasing worldwide.[10,11,12] It is 10-50 times as threatening as vaginal delivery and abortions respectively. With the advancement in the diagnostic technique and awareness among patient, major maternal morbidity and mortality has been reduced worldwide .Ectopic pregnancy can have various modes of presentation and can be managed by various methods like expectant, medical, surgical depending on the age, reproductive history and status of contralateral fallopian tube of the patient. Here, study was conducted for a period of 1.5 year with varied clinical presentation and managed by all possible means (medical, expectant and surgical) mentioned in literature.

AIMS AND OBJECTIVES

The purpose of this study is to appraise the-Socio demographic profile, frequency, varied clinical presentation ,management and maternal outcome in the patients of ectopic pregnancy at our tertiary care hospital.

SUBJECTS AND METHODS

Place of study : Department of OBG between the time period of January 2017 to August 2018. It is hospital based Prospective study, and includes all the cases of ectopic pregnancy; admitted through OPD or Casualty in TMMC & RC.

The study was undertaken after obtaining clearance from the hospital ethical committee.74 diagnosed cases of ectopic pregnancy with the consent for participation were included.

INCLUSION CRITERIA

STUDY DEFINITION-History of amenorrhoea with positive urine pregnancy test, either diagnosed with ectopic on ultrasound or positive paracentesis or culdocentesis along with features of shock.

METHODOLOGY

All patients of ectopic were subjected to investigation and managed accordingly .Data was collected and tabulated, as the study was observational, so percentage of each parameter was calculated and analyzed.

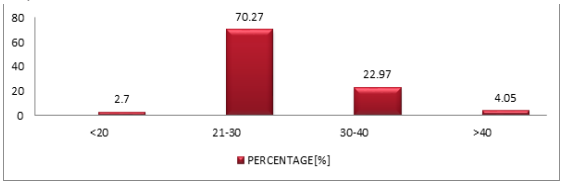
RESULTS

Overall prevalance of ectopic pregnancy in our study was 1.01%. Maximum number of patients were nulliparous as shown in table 1. In the present study ,fallopian tube was the most common site. Most common clinical presentation was acute and the site was right fallopian tube. Most of the patients in the present study were managed surgically.

Table 1-Age And Parity Wise Distribution

DEMOGRAPHIC VARIABLES[AGE IN YRS]	NUMBER OF CASES	PERCENTAGE[%]
<20	2	2.70
21-30	52	70.27
30-40	17	22.97
>40	3	4.05
PARITY		
NULLIPARA	34	45.94
PRIMIPARA	27	36.48
MULTIPARA	13	17.56

Above table shows that the majority of patients were above the age of 21 years which was around 70.27%.



Maximum number of ectopic pregnancies were found in nulliparous women followed by primipara and less commonly in multiparous women,as shown in the pie chart.

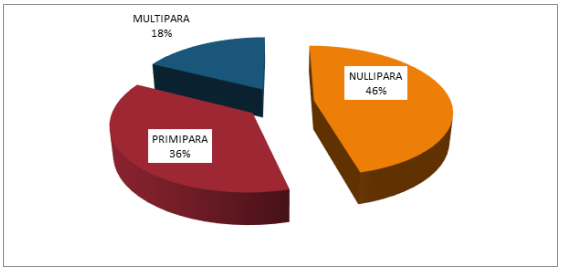


TABLE 2- Risk Factors

RISK FACTORS	NO. OF CASES	PERCENTAGE[%]
PID	17	22.97
PREVIOUS ECTOPIC	5	6.75
ENDOMETRIOSIS	2	2.7
IVF/ART	4	5.40
PREVIOUS ABORTION	6	8.10
TUBAL SURGERY/LIGATION	2	2.7
H/O TUBERCULOSIS	3	4.05
RECANALISATION	1	1.35
INFERTILITY	10	13.51
H/O IUCD INSERTION	8	10.81
NO RISK FACTORS	16	21.62

Although a proportion of women with ectopic pregnancy have no identifiable causal factors, the risk is increased by several factors: previous ectopic pregnancy,[8] tubal damage from infection or surgery,[13] a history of infertility therapy for in vitro fertilization,[14] increased age,[15,16] and smoking.[17]

As discussed earlier, history of pelvic inflammatory disease is particularly important [13,18] and has been implicated in the increased incidence of ectopic pregnancy.[18,19] The risk of an ectopic pregnancy is increased 7-fold after an episode of acute salpingitis.[18]

The incidence of ectopic pregnancy after assisted reproductive techniques is 5.40%,[18] which is 2 to 3 times greater than the background incidence. The main risk factor in the present study is pelvic inflammatory disease. The incidence of heterotopic pregnancy—an ectopic pregnancy together with an intrauterine pregnancy—is also increased after assisted reproductive techniques.

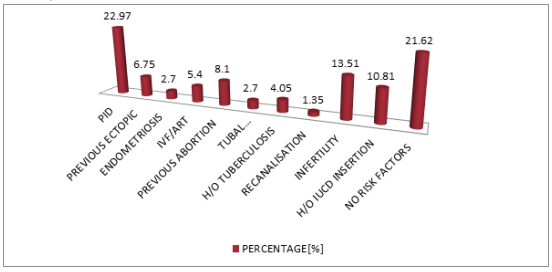


Table 2 shows risk factors associated with ectopic pregnancy. In the present study,78.37% of the patients had identifiable risk factors of which PID was the leading cause and 21.62% of the affected patients had no identifiable risk factors. Some patients had more than one associated risk factors.

Table 3- Clinical Features

CLINICAL FEATURES	NO. OF CASES	PERCENTAGE [%]
AMENORRHOEA	68	91.89%
PAIN ABDOMEN	72	97.29%
BLEEDING PV	42	56.75%
MASS ABDOMEN	15	20.27%
SHOCK	20	27.02%
ABDOMINAL DISTENTION	10	13.51%
ABDOMINAL TENDERNESS	54	72.97%
CERVICAL MOTION TENDERNESS	62	83.78%
PRESSURE SYMPTOMS	6	8.10%
ASYMPTOMATIC		12.16%

Table - 3 shows the sign and symptoms of the patients with ectopic pregnancy. In our study, shock was seen in 27.02% of the patients. Pain in abdomen was the most consistent symptom found in 97.29% of cases.

Table 4- Site Of Ectopic

SITE OF ECTOPIC	NO. OF PATIENTS	PERCENTAGE[%]
TUBAL	71	95.94%
OVARIAN	2	2.70%
SCAR ECTOPIC	1	1.35%
TOTAL	74	100%

Table 4, shows incidence of tubal ectopic was maximum. Three cases were at the extra tubal site i.e., two was ovarian ectopic & other was in scar ectopic.

Table 5-site Of Tubal Ectopic

SITE OF ECTOPIC	NO.OF CASES	PERCENTAGE[%]
AMPULLA	33	44.59
ISTHMIC	10	13.51
INTERSTITIAL RUPTURE	18	24.32
FIMBRIAL ABORTION	10	13.51
OVARIAN	2	2.70
SCAR ECTOPIC	1	1.35
TOTAL	74	100

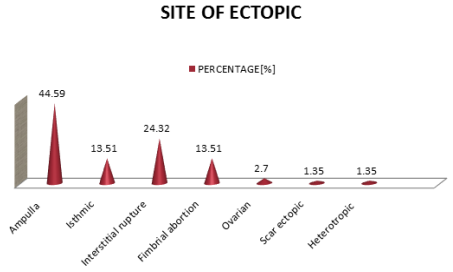
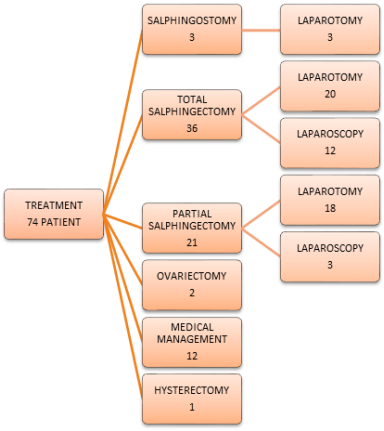


Table 6- Mode Of Treatment



As shown in table 6,unilateral salphingectomy was the surgical procedure of choice in 57 of the patients. Three [4.05%] of the patients had linear salphingostomy .Twelve patient were advocated medical management due to early presentations and falling in β-Hcg levels.

DISCUSSION

The incidence of ectopic pregnancy has been rising during the last few decades throughout the world ,and in our study it was 1.01%.It further confirms that the condition is common in our community, which was comparable to similar studies by sunita samal et al[1.2%].[20]

In the present review,70.27% of the patients lie between 21-30 years of age group.Most of them were nullipara [45.94%] which was corroborating with other studies singh et al[20%].[21]

Our study also comparable with the study of Morrice et al [3] ,who found that nulliparous women were 2.6 times more likely to have an ectopic pregnancy after one year of unprotected intercourse.

Majority of women belong to low socioeconomic status & they will have poor personal hygiene and lack of immunity, predisposing them to PID including tuberculosis .They are likely to engage in induced abortion ,which is usually performed by Non-physician ,and if the procedure is complicated ,they seek medical attention late .In addition ,they are highly sexually active and when they contact STD ,they are unlikely to seek proper medical care and resort to buying of drugs from patent medical stores with the resultant effect of poor treatment,leading to tubal damage .The predominant risk factor being PID followed by infertility.

We have observed that amenorrhea was present in most of the patients. Pain in abdomen, bleeding per vaginum, and cervical motion tenderness was presented in 97.29%, 56.75% and 83.78% patients respectively. This is corroborated with the study of AO Igwegbe et al. where majority, 80.6% (75/93) presented with abdominal pain and 35.8% (33/93) presented with vaginal bleeding.[22] The studies by Perveen F et al, Manthan et al and Shivkumar HC et al also found almost similar trends of presenting complaints.[23,24,25]

In our study about 27.02% patients were brought in the state of shock which is corroborating with the study of Shaikh BN et al and Shanti Suri Asuri where 38% and 40.5% patients were brought in a state of shock.[26,23]

As long as adequate facilities for monitoring are available, Expectant and medical management of ectopic pregnancy are effective options in selected women especially in less acute situations .However in acute situations salphingectomy is the gold standard of management. Majority of the patients in our study were managed surgically, due to acute presentation and blood loss for better maternal outcome. The high rate of surgery is due to late referral from other centres.

The Royal college of obstetrician and Gynaecologists recommends that surgical treatment by laparoscopic salphingectomy is the preferred method of treatment for an ectopic pregnancy when the fallopian tube on the other side is normal. Conservative management are equally successful in treating ectopic pregnancy[27].

CONCLUSION

The rise in the incidence of ectopic pregnancy is going in parallel with the rise in the incidence of risk factors like Sexually Transmitted Infections, increased tubal sterilization and reversal, delayed child bearing, Assisted Reproductive Technology.

All high risk women should be screened at the earliest with serum β-hCG and TVS. The impact on future fertility can be improved by focussing on primary prevention and early diagnosis before rupture. Women with a history of ectopic pregnancy should have early ultrasonography to verify a viable intrauterine pregnancy in their subsequent pregnancies. Diagnostic laparoscopy is necessary if the clinical situation cannot be clarified or if the patient's condition deteriorates.

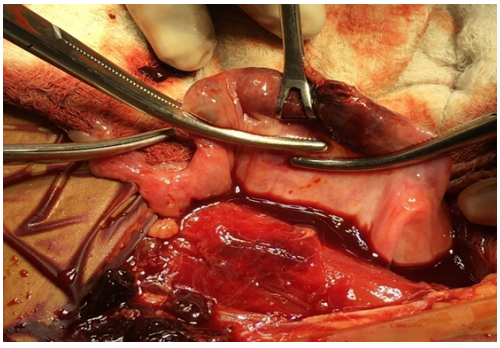


Fig. showing right side rupture ectopic

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