

Observational Study on Ectopic Pregnancy

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Abstract

Background: Ectopic pregnancy is the implantation of blastocyst anywhere other than the endometrial lining of the uterine cavity. It is an obstetric emergency and can be life threatening when unattended. The incidence has increased in recent times could be attributed to the increase diagnostic tests. The attribution of occurrence to risk factors though uncertain has been seen. The mode of management mainly depends on the hemodynamic stability of the patient.

Aim: To study risk factors, clinical manifestations, treatment associated with ectopic pregnancy in a tertiary Care Hospital

Materials and Methods: The study was conducted in the Department of Obstetrics and Gynecology in Sree

Mookambika Institute of Medical Sciences on a total of 50 patients.

Results: In this study 50 cases of ectopic pregnancy were observed and treated. The maximum number of ectopic gestation in the present study occurred between age group of 20 To 25 years. PID was found to be most common followed by previous ectopic pregnancy and Tubectomy. The triad symptoms that are amenorrhea, pain abdomen, and per vaginal bleeding was seen in 44% of patients. Out of them four patients had ampullary pregnancy, 2 in isthmic portion, 1 in fimbrial, one in corneal, and one is ovarian ectopic. Morbidity included anaemia (80%), blood transfusions in (86.8%), and wound infection in (2.6%) of patients. No maternal mortality noted.

Conclusion: Ectopic pregnancy is an obstetric emergency and should be evaluated and treated appropriately. Though the recent trend in the management of ectopic pregnancy is the use of a conservative surgical or medical line of Management, salpingectomy was the treatment modality which was used in the present study. This was mainly because a majority of the cases were referred or they came late to the hospital after the ectopic pregnancy has ruptured

Keywords: Ectopic Pregnancy, Hemodynamic Stability, Methotrexate, Salpingectomy.

Introduction

An ectopic pregnancy otherwise known as extra uterine pregnancy is defined as implantation of blastocyst anywhere other than the endometrial lining of the uterine cavity^[1]. It is a life threatening emergency and the most important cause of maternal morbidity in the first trimester. Though the risk factors have been identified but no specific etiology has been concluded for ectopic pregnancy^[2]

The diagnosis is tricky as an unruptured ectopic can mimic normal pregnancy. Thus in most developed countries diagnosis is made with a correlation between clinical diagnosis, radiological evaluation and lab investigations.^[3]Ectopic pregnancy is one such condition which can be managed medically or surgically. The management mainly depends on the hemodynamic stability of the patient.

Aim

To study risk factors, clinical manifestations, treatment associated with ectopic pregnancy in a tertiary Care Hospital.

Materials and methods

The study was conducted in the Department of Obstetrics and Gynecology in Sree Mookambika Institute of Medical Sciences on a total of 50 patients.

Duration: June 2022 to December 2023.

Study design

It is a prospective study in which women who were admitted with ectopic pregnancy were evaluated and analysed for assessing the risk factors, clinical manifestations, treatment and outcomes.

The study was done on a total of 50 patients. All the who were diagnosed as ectopic pregnancy in the reproductive age group of 15 to 44 years were included with the written informed consent. They were completely evaluated by a thorough history taking ,presenting complaints were evaluated and noted, clinical evaluation was done, required lab investigations noted, radiological evaluation was done and recorded, management options were explained and undertaken. Hemodynamic stability of the patients was assessed and unstable patients were stabilized with adequate measures.

Medical management was offered to patients who were stable and fulfilled the criteria. Methotrexate was prescribed for them in single dose or multidose regimen. Those patients were later closely monitored for the outcome and success of medical management given. Their findings were noted. Failure of medical management was also noted.

Most of the cases had surgical management and the specimens were sent to HPE. The need for blood transfusion was estimated and was transfused preoperatively/ intraoperatively/ postoperatively based on the requirement. Postoperatively the patients were monitored for development of any complications.

Inclusion and Exclusion criteria

Patients with diagnosed ectopic pregnancy who came to our hospital with age in between 15-44 years , took treatment in our hospital were included. Patients who were not willing and lost follow-up were excluded.

Results

Risk Factors	Percentage	Number
PID	46%	23
Previous Ectopic	24%	12
Infertility	10%	5
IUCD	4%	2
Tubectomy	16%	8

Site of Ectopic	Number of Cases	Percentage
Ampullary	32	64
Isthmal	5	10
Cornual	2	4
Fimbrial	2	4
Cervical	1	2
Ovary	1	2
Rudimentary	1	2
Ampullary + Isthemic	6	12
Total	50	100

Site of Ectopic	Mode of Presentation			
	Amenorrhea	Abdominal Pain	Bleeding PV	Others
Ampullary	17	22	17	12
Ishtmal	5	4	3	-
Cornual	2	2	1	-
Fimbrial	2	2	1	-
Cornual	1	1	-	-
Ovarian	1	1	1	-
Cervical	1	1	-	-
Rudimentary	6	5	5	3
Ampullary + Isthmic	6	5	5	3

	No of cases	Percentage
Unilateral Salpingectomy	28	56%
Bilateral Salpingectomy	4	8%
Unilateral Salpingo ophorectomy	12	24%
Salpingo ophorectomy with contralateral Tubectomy	6	12%

In this study 50 cases of ectopic pregnancy were observed and treated. The maternal age range from 15 to 44 years. The maximum number of ectopic gestation in the present study occurred between age group of 20 To 25 years. The youngest age was 17 years and oldest 38 years. According to the parity Most of them are multiparous 22 patients (40%).

PID was found to be most common followed by previous ectopic pregnancy and Tubectomy. The triad symptom that is amenorrhea, pain abdomen, and per vaginal bleeding was seen in 44% of patients. Amenorrhea followed by abdominal pain was the most common symptom. Other symptoms like nausea ,vomiting, syncopal attacks were observed in 14 out of 44 patients (31.8%).Six patients were asymptomatic (12%).UPT positive in 90% of cases.

Out of 50 patients only 9 patients presented with shock. Out of them four patients had ampullary pregnancy, 2 in isthmic portion, 1 in fimbrial, one in corneal, and one is ovarian ectopic. Ruptured ectopic was present in 85% of cases, unruptured in 15% of cases. The most common procedure which was done was unilateral Salpingectomy in 62% of cases followed by salpingo-oophorectomy in 24%of cases. 2%of cases managed medically with intramuscular methotrexate. Morbidity included anaemia (80%), blood transfusions in (86.8%), and wound infection in (2.6%) of patients. No maternal mortality noted.

Discussion

Ectopic pregnancy remains a life threatening emergency. The recent advances in early diagnosis have reduced the mortality and morbidity as well lead to increase in incidence. Although the incidence of ectopic pregnancy has remained static in recent years in this study the rate was found to be 11 per 1000 deliveries or 1 in every 350 deliveries. Patients in the age group of 20-25 yrs were mostly seen in the study. This result was similar to other literature done by Panchal D et al 71.66%^[4], study by Poonam et al showed peak incidence in 26-30 years.^[5] Most of the woman in India marry at an early age and complete their family at an early age, this corresponds to the age of peak sexual activity and reproduction which could be the factor behind the high incidence in this age. In the present study group majority of women with ectopic pregnancy were multi-gravidae 81.58% this correlates with the studies done by Shraddha Shetty et al 83.9%, Panchal D et al 81.6%^[6] and Poonam et al 83.6%. The higher incidence in multigrade is probably due to previous miscarriages and infection resulting in tubal damage. The remaining were nulliparous and the selection of appropriate management in these women is important in optimizing their further reproductive outcome.

In the present study group history of PID was presented in 46% of the cases with ectopic pregnancy. This is correlating with the study done by Panchali et al 55% of the cases with ectopic pregnancy. Damage in mucosa due to salpingitis may entrap the migrating embryo leading to ectopic implantation. Other studies done by Savitha Devi, Rose et al. and Rashmi AGaddagi & Chandrashekhar also suggest the incidence of PID as a risk factor is 25%, 34.4% and 8.1% respectively.^[7]

^{9]}Common site is ampullary part of the tube correlating

with the most other studies. Second most common site was the isthmal region which was also in coordance with most sites with ruptured ectopic.

The classical triad of ectopic pregnancy is abdominal pain, amenorrhea, bleeding PV. This was observed in most of the cases and abdominal pain was the most common presentation identified in the present study. This was followed by amenorrhoea and bleeding pv. The location of ectopic also influenced the presenting complaints. Other signs elicited were tenderness, cervical motion tenderness.

The recent advances in laboratory and radiological investigations have lead to early diagnosis and treatment of ectopics. Widespread availability of radiological investigations have improved the practice of Obstetrics and Gynaecology greatly^[10]. This enables to diagnosis ectopics early thereby preventing ruptures, gives time to try medical management, as well as reduces complications and morbidity^[11].

As medical management needs extremely close follow up and hospitalization, surgical management is still the method of choice in our country. Laproscopy and medical therapy have now emerged as the widely used therapeutic modalities with great sucession in terms of reduced morbidity, shorter hospitals stay and conservation of fertility, However choice depends upon early identification of ectopic pregnancy and hemodynamic stability of the patients.

Conclusion

Ectopic pregnancy has always been a challenging situation to the obstetrician. It should not be missed in women of reproductive age group as it is common in this age group. The incidence of ectopic pregnancies are on the rise, as was evident by the findings of this study all the cases were diagnosed with a high index of clinical

suspicion and the ultrasound findings added to the diagnosis. Though the recent trend in the management of ectopic pregnancy is the use of a conservative surgical or medical line of Management, salpingectomy was the treatment modality which was used in the present study. This was mainly because a majority of the cases were referred or they came late to the hospital after the ectopic pregnancy has ruptured.

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