

Tubal Ectopic Pregnancy – A Clinical Study

Dr. Preeti Kale

Dept.of obstetrics and Gynecology
Heritage Institute of Medical sciences, Varanasi
Varanasi, India
drpreetikale@rediffmail.com

Dr. Ketan Jangale

Dept of obstetrics and Gynecology
Aundh Institute of Medical sciences
Pune, India
ketan.jangale@gmail.com

ABSTRACT

Background: The diagnosis of an ectopic pregnancy is usually unexpected and is often emotionally traumatic. Many women may have only recently discovered they were pregnant when they receive the diagnosis. Some women diagnosed with an ectopic pregnancy do not even know they are pregnant and suddenly must think about the possibility of major surgery or medical treatment. The objectives of the study were, 1. To know the age group, gravidity, parity and the risk factors with respect to the ectopic pregnancy. 2. To know the clinical presentation of the ectopic pregnancy. 3. To know the outcome of the ectopic pregnancy.

Methods: This is a retrospective study conducted at Multispeciality Hospital, Pune during 7 month period commencing from June 2019 to December 2019. The

INTRODUCTION

Ectopic pregnancy is defined as any intra or extrauterine pregnancy in which the fertilized ovum implants at an aberrant site which is inconducive to its growth and development.¹

Ectopic pregnancy is assuming greater importance because of its increasing incidence and its impact on womens fertility.^{2,3} Ectopic pregnancy remains the leading cause of maternal deaths in early pregnancy.⁴ With respect to the management of ectopic pregnancy, there has been tremendous technical advances. The early diagnosis and treatment of this condition over the past two decades has allowed a definitive medical management of unruptured ectopic pregnancies even before there were clinical symptoms in these high risk women.^{5,6} 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.^{7,8} Tubal ectopic pregnancy could be managed by Laparoscopy.

study covered all the cases of Ectopic pregnancy that came during that time frame.

Results: Commonest gestational age to diagnose tubal ectopic pregnancy was 6-7 weeks.No significant differences existed in gestational age, pelvic inflammatory disease. The most common symptom in our study was anemia, lower abdominal pain and spotting. Fallopian tube was the commonest site of ectopic pregnancy and out of which Ampulla part was the commonest site in fallopian tube. Maximum number of patient of tubal ectopic pregnancy could be managed by Laparoscopy.

Conclusion: Tubal Ectopic pregnancy is a diagnosis of suspicious patient and can possible to manage in early gestational age to morbidity & mortality.

Key Words: Ectopic pregnancy, Fallopian tube, Salpingectomy, Laparoscopy, Laparotomy

AIMS & OBJECTIVES

1. To know the age group, gravidity, parity and the risk factors with respect to the ectopic pregnancy. 2. To know the clinical presentation of the ectopic pregnancy. 3. To know the outcome of the ectopic pregnancy.

MATERIALS AND METHODS

This is a retrospective study conducted at Multispeciality Hospital, Pune during the period commencing from June 2019 to December 2019. The study covered all the cases of Ectopic pregnancy that came during that time frame and incidence, risk factors and mode of clinical presentation of ectopic pregnancy was calculated. All patients with a history suggestive of ectopic pregnancy and in whom diagnosis was confirmed by clinical acumen, ultrasound or direct observation at laparotomy are included in the study. All the surgeries were done by laparotomy and spinal/general anesthesia was used in all the cases. This retrospective analysis was done to determine the incidence, clinical features, risk factors, treatment and morbidity and mortality associated with ectopic pregnancy in a Multispecialty Hospital, Pune.

The following patient characteristics were recorded: age, height, weight, gestational age of ectopic pregnancy, and quantitative beta-hCG level. Conditions that predispose to adhesion formation, including prior surgeries, ectopic pregnancy, history of pelvic inflammatory disease, and endometriosis were recorded. Gravidity and parity were also noted. The amount of internal bleeding and unstable vital signs were the parameters used to determine whether to proceed with most laparotomy cases.

The following outcome information was collected from operative and anesthesia records: estimated blood loss, operative time, operative complications, type of surgery performed, and length of hospital stay. Estimated blood loss was defined as blood loss from the surgery and preexisting blood loss found on entry into the abdomen. Operative time was defined as time between starting and finishing the procedure.

RESULTS

During the period of study, there was 27 deliveries in the hospital and there were 7 cases of ectopic pregnancy.

Table 1. Age Distribution

Age Groups(in years)	Number of cases	Percentage
26-30	04	57.14
31-35	02	28.57
36-40	01	14.28

The age of patients ranged between 26-40 years. The prevalence of ectopic pregnancy was highest in age groups of 26-30 years.

Table 2. Parity

Parity	No of Patient	Percentage
Nullipara	02	28.57
Multi para	05	71.42

The parity ranged from nulliparous to multigravida. In this study, out of 7 case, 2(28.57%) were nulliparous and the rest 05(71.42%) were parous.

Table 3. Predisposing factors

Risk Factor	Number of cases	Percentages
Pelvic inflammatory Disease	01	14.28
Previous Ectopic	00	00
Treatment of infertility	01	14.28
No significant risk factor	05	71.42

In the study of 07 cases of ectopic pregnancies, Pelvic inflammatory disease was found in 01(14.28%) cases. 1(14.28%) patients had conceived after treatment of infertility.

Table 4. Presenting Symptoms

Symptoms	Number of Cases	Percentage
Pain abdomen	07	100
Amenorrhoea	07	100
Spotting per vagina	06	85.71
Fainting spells	04	57.14

All the cases (100%) had pain abdomen, amenorrhoea was present in all cases (100%). Abnormal vaginal bleeding- spotting was present in 06(85.71%) cases. Fainting spells in 04(57.14) cases.

Table 5. Duration of Amenorrhoea

Duration In Weeks	Number of Cases	Percentage
5	03	42.85
6	03	42.85
7	01	14.28
8 & Above	00	00

Out of the 7 cases studied, 6 had definite period of amenorrhoea ranging from 5 to 6 weeks.

Table 6. Site of Ectopic pregnancy in fallopian tube

Site of Tube	Number of Cases	Percentage
Interstitial	00	00
Isthmic	00	00
Ampulla	06	85.71
Isthmic-Ampullary	01	14.28
Infundibulum/Fimbria	00	00
Indeterminate	00	00

The commonest site of Tubal ectopic pregnancy constitutes 85.71% is Ampulla part of the Tube.

DISCUSSION

Ectopic pregnancy remains a common gynecologic condition that causes significant maternal morbidity and mortality. The incidence of ectopic pregnancy has increased from 0.5% 30 years ago to a current incidence of 1% to 2%.⁹ The risk of ectopic pregnancy is increased by several factors: previous ectopic pregnancy, tubal damage from surgery, a history of infertility, treatment using in vitro fertilization, and increased age.¹⁰ In our study, the laparotomy group

had a significantly greater number of patients with a history of previous ectopic pregnancy.

Because laparoscopy has been shown to be superior to laparotomy, it has become the gold standard for the treatment of ectopic pregnancy.¹¹ However, in women who are hemodynamically unstable, the role of laparoscopy remains controversial. But as surgeons gain increased expertise in laparoscopic surgery, even in the presence of a large hemoperitoneum, operative laparoscopy is still achievable.^{12,13}

Obesity has an impact on whether laparoscopic surgery can be performed. Obesity, defined as BMI₃₀, is considered by some to be a relative contraindication to operative laparoscopy.¹⁴ Also, laparoscopic surgery in the obese population can be challenging. Increased abdominal wall thickness makes it difficult to achieve pneumoperitoneum and to visualize the inferior epigastric vessels. Moreover, increased omental and retroperitoneal fat limits maneuverability of the instruments.¹⁵ However, a recent report¹⁶ reveals that laparoscopic management of tubal ectopic pregnancy does not appear to significantly increase surgical morbidity in obese patients. In our study, BMI was not significant.

The mean operative time was shorter in the laparoscopy. This may contradict the results of many studies documenting the unpredictability of time needed for laparoscopic surgery, especially for ectopic pregnancy.¹⁷ Blood loss was less and hospital stay was shorter in the laparoscopy group. Previous randomized studies,¹⁸ also have shown that laparoscopy results in less blood loss, a shorter hospital stay, and lower cost compared with laparotomy.

Doubt of Ectopic pregnancy should be kept in mind if a patient present with complaint of amenorrhea, pain

REFERENCES

1. Te linde's Operative Gynaecology, 8th edition. Philadelphia: *Lippincott- Raven* 1997; 501-27.
2. Ectopic Pregnancy – United States, 1990-92. *JAMA* 1995; 273:533.
3. Rajkhowa M, Glass MR, Rutherford AJ, Balen AH, Sharma V, Cuckle HS. Trends in the incidence of ectopic pregnancy in England and Wales from 1966-1996. *Br J Obstet Gynaecol* 2000 March; 107:369-74.
4. Department of Health : Why mothers die : a confidential enquiry into the maternal deaths in the United Kingdom. In *Drife J, Lewis G (eds): Norwich, UK :HMSO,2001; 282.*
5. Stovall TG, Ling FW, Buster JE. Outpatient chemotherapy of unruptured ectopic pregnancies. *Fertil Steril* 1989; 51:435.
6. Stovall TG, Ling FW, Gray LA, Carson SA, Buster JE. Methotrexate treatment of unruptured ectopic pregnancies: a report of 100 cases. *Obstet Gynaecol* 1991; 77:749.
7. Sultana CJ, Easley K, Collins RL. Outcome of laparoscopic vs traditional surgeries for ectopic pregnancies. *Fertil Steril* 1992; 57:285.
8. Delacruz A, Cumming DC. The factors which determine the fertility after a conservative or

abdomen with or without vaginal bleeding.¹⁹ In one of the study conducted by Hassan N et al, abdominal pain was found in 70.97%, amenorrhea in 51.61% and irregular vaginal bleeding 25.81%.⁶ Most of the cases in the present study presented as an acute emergency. All the cases that are 100% had pain abdomen of varying degree. Amenorrhea was present in 80% cases. Abnormal vaginal bleeding was present in 75% cases.

CONCLUSION

Ectopic pregnancy is a fatal emergency faced by the gynaecologist in the day to day practice. It is usually confused with other causes of acute abdomen. Early diagnosis and management can save the patient life can fertility can be preserved. Late diagnosis associated with morbidity and sometimes mortality in some patients.

Though the recent trend in the management of ectopic pregnancy is the use of a conservative surgical or medical line of management, radical surgery or salpingectomy was the treatment modality which was used in the present study. This was mainly because a majority (80%) of the cases were referred or they came late to the hospital after the ectopic pregnancy had ruptured. But fortunately, there has not been even a single mortality. The maternal morbidity was also significantly less.

A higher percentage of ectopic pregnancies can be managed laparoscopically if minimal access experience is introduced in the surgical unit. Although this study is limited by its retrospective nature, it supports the idea that laparoscopic management of ectopic pregnancy might be the most beneficial procedure with maximal safety and efficacy.

- radical surgical treatment for ectopic pregnancy. *Fertil Steril* 1997; 68:871.
9. Lehner R, Kucera E, Jirecek S, Egarter C, Husslein P. Ectopic pregnancy. *Arch Gynecol Obstet*. 2000;263:87–92.
 10. Mohamed H, Maiti S, Phillips G. Laparoscopic management of ectopic pregnancy: a 5-year experience. *J Obstet Gynaecol*. 2002;22:411–414.
 11. Hajenius PJ, Mol BW, Bossuyt PM, Ankum WM, Van Der Veen F. Interventions for tubal ectopic pregnancy. *Cochrane Database Syst Rev* 2000:CD000324.
 12. Yamada T, Okamoto Y, Kasamatsu H, Mori H. Intraoperative autologous blood transfusion for hemoperitoneum resulting from ectopic pregnancy or ovarian bleeding during laparoscopic surgery. *JSLs*. 2003;7:97–100.
 13. Takeda A, Manabe S, Mitsui T, Nakamura H. Management of patients with ectopic pregnancy with massive hemoperitoneum by laparoscopic surgery with intraoperative autologous blood transfusion. *J Minim Invasive Gynecol*. 2006;13:43– 8.
 14. Miles RH, Carballo RE, Prinz RA, et al. Laparoscopy: the preferred method of cholecystectomy in the morbidly obese. *Surgery*. 1992;112:818–823.
 15. Eltabbakh GH, Piver MS, Hempling RE, Recio FO. Laparoscopic surgery in obese women. *Obstet Gynecol*. 1999;94:704– 708.
 16. Hsu S, Mitwally MF, Aly A, Al-Saleh M, Batt RE, Yeh J. Laparoscopic management of tubal ectopic pregnancy in obese women. *Fertil Steril* 2004;81:198 –202.
 17. Baumann R, Magos AL, Turnbull A. Prospective comparison of videopelviscopy with laparotomy for ectopic pregnancy. *Br J Obstet Gynaecol*. 1991;98:765–771.
 18. Maruri F, Azziz R. Laparoscopic surgery for ectopic pregnancies: technology assessment and public health implications. *Fertil Steril*. 1993;59:487– 498.
 19. Nama V, Manyonda I. Tubal ectopic pregnancy: diagnosis and management. *Archives of gynecology and obstetrics*. 2009Apr1;279(4):443