



A RETROSPECTIVE STUDY OF ECTOPIC PREGNANCY IN A TERTIARY CARE HOSPITAL

Dr .R.Aruna Rani M.D[Og] Senior Asst Professor

Dr.R.Padmapriya* Md,Dgo.Senior Asst Professor Department Of Obstetrics And Gynaecology, Gmkmch , Salem .Tn. *Corresponding Author

ABSTRACT **Background:** In early pregnancy, ruptured ectopic pregnancy remains the leading cause of death. The aim of the study was to determine the incidence, clinical presentation, risk factors, treatment, morbidity and mortality associated with ectopic pregnancy.

Methods: In Governmepregnancy was 0.54%. Majority of the patients were in the age group of 21-25years(28.26%). Multiparous women were more affected than nulliparous (26.08%). 41.30% of the patientt Mohan Kumaramangalam Medical College Hospital, Salem, a retrospective study of ectopic pregnancy was done during the period July 2016 to June 2017. A total of 46 cases were analysed.

Results: Incidence of ectopic ts had risk factors. Pelvic inflammatory disease and previous abortions were remaining the common causes for ectopic pregnancy. The commonest symptoms are amenorrhea (95.65%) and abdominal pain (86.95%). A classical triad of ectopic pregnancy was seen in 45.65% of women. The commonest site was ampulla of the tube (60.86%). Ruptured ectopic pregnancy was noted in 63.04% of patients, among which 43% of patients were presented in shock. Only one patient died, as the patient suffered from dilated cardiomyopathy and hyperthyroidism.

Conclusion: The morbidity and mortality associated with ectopic pregnancy could be reduced by early diagnosis, identification of risk factors and timely intervention.

KEYWORDS : Ectopic pregnancy, Amenorrhea, Ampulla, PID

INTRODUCTION

An ectopic pregnancy occurs when a fertilised ovum implants outside the normal uterine cavity¹. It is the leading cause of maternal mortality in early pregnancy². Ectopic pregnancy is one of the commonest acute abdominal emergencies^{3,4}. In spite of good diagnostic methods available, most women present late as majority of the cases are asymptomatic till they rupture. Ectopic pregnancy commonly occurs in the fallopian tube⁵(95%). Pelvic inflammatory disease, smoking, tubal sterilisation and previous ectopic pregnancy have been identified as risk factors for ectopic pregnancy^{2,6}. Ectopic pregnancy can be diagnosed by USG, serum beta-HCG, although the "gold standard" is laparoscopy⁷.

AIMS AND OBJECTIVES

To determine the incidence, clinical features, risk factors, treatment, morbidity and mortality associated with ectopic pregnancy in a tertiary care hospital.

METHODS

This retrospective study was conducted in Govt.Mohan Kumaramangalam Medical College Hospital, Salem during the period of July 2016 to June 2017 in the department of Obstetrics and Gynaecology. The case sheets of the patients with ectopic pregnancy were traced through labour ward registers, operation registers and the postoperative ward registers. Information regarding the total number of ectopic pregnancies during the study period, age of the patient, gravidity, clinical signs & symptoms, diagnostic methods used, risk factors, treatment given, morbidity and mortality were obtained

RESULTS

There were 8494 deliveries and 46 cases of ectopic pregnancies during the period July 2016 to June 2017. Incidence in our hospital was 0.54%

Table 1: Age distribution of the patients

AGE	NO. OF PATIENTS	PERCENTAGE
<20yrs	7	15.21%
21-25yrs	13	28.26%
26-30yrs	12	26.08%
31-35yrs	5	10.86%
>35yrs	9	19.56%

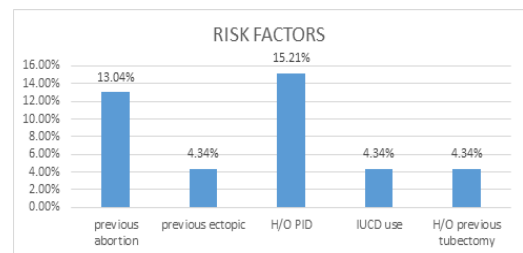
Table 2: Gravidity

GRAVIDITY	NO.OF PATIENTS	PERCENTAGE
Primi	12	26.08%
G2	10	21.73%

G3	14	30.43%
>G3	10	21.73%

A majority of the patients (54.34%) belonged to the age group of 20-30yrs. In the present study, 73.92% were multigravida and 26.08% were primigravida

Fig 1: RISK FACTORS



Associated risk factors for ectopic pregnancy was present in 41.30% of patients. Among this, H/O pelvic inflammatory disease constituted 15.21%. H/O previous abortion was present in 13.04% of patients. H/O previous ectopic, IUCD use and previous tubectomy constituted 4.34% each.

Table 3: CLINICAL PRESENTATION

CLINICAL PRESENTATION	NO. OF PATIENTS	PERCENTAGE
H/O amenorrhea	44	95.65%
Abdominal pain	43	93.47%
Bleeding per vagina	21	45.65%
Shock	20	43.47%
Cervical tenderness	29	63.04%
Adnexal tenderness	39	84.78%
Abdominal guarding	29	63.04%

In the present study, H/O amenorrhea was present in 95.63%. 93.47% patients had abdominal pain, 45.65% had bleeding per vagina. About 43.47% patients were presented with shock. Classical triad of pain, bleeding and amenorrhea was seen in 45.65% of women. Urine pregnancy test was positive in almost 98% of patients. Ultrasound was done in all patients, which revealed ruptured ectopic in 63.04% of patients and adnexal mass with minimal fluid in POD was seen in 36.96% of cases

Table 4: Site of ectopic

SITE OF ECTOPIC	NUMBER	PERCENTAGE
Ampulla	28	60.86%
Fimbria	6	13.04%
Isthmus	7	15.21%
Cornual	3	6.52%
Ovarian	1	2.17%
Rudimentary horn	1	2.17%

Table 5: Type of ectopic pregnancy

TYPE OF ECTOPIC PREGNANCY	NO.OF PATIENTS	PERCENTAGE
Ruptured	29	63.04%
Unruptured	8	17.39%
Chronic ectopic	2	4.34%
Tubal abortion	7	15.21%

In the present study, ectopic pregnancy was present in right side of the fallopian tube in 60.8% of cases. Ampullary region was the commonest site, seen in 60.80% of cases, followed by isthmus (15.21%) and fimbria (13.04%) of patients. On laparotomy ruptured ectopic was seen in 63.04% of cases, unruptured ectopic in 17.39%, tubal abortion in 15.21% and chronic ectopic in 4.34% of cases. Medical management with methotrexate was done in 2.17% cases. The most common procedure done was unilateral salpingectomy in 91.30%, followed by salphingo-oophorectomy in 6.52% of cases.

76.08% of the patients received blood transfusion. Wound infection was seen in 10.8% of patients. One patient with dilated cardiomyopathy and hyperthyroidism, operated for ruptured ectopic pregnancy died

DISCUSSION

Worldwide ectopic pregnancy complicates 0.25%-2.0% of all pregnancies. The incidence of ectopic pregnancy in the present study was 0.54% which is comparable to a study done by Firyal Omer Mohammed Nous⁸, where in India, incidence was found to be 0.62%.

In our study, majority of the women (54.34%) belonged to the age group of 20-30yrs, and 15.21% were in the age group less than 20yrs. This was comparable to the studies done by Samiya Mufti et al & Panchal D et al⁹. In the present study, 26.08% were primigravida and 73.92% were multigravida which was comparable to a study done by Gaddagiet al¹⁰. The higher incidence of ectopic pregnancy in multigravida is probably due to previous miscarriages and infection resulting in tubal damage.

In our study, 13.04% patients had abortions. Ankumet al¹¹ 1996, found that there is a slight increase of ectopic conception in women with previous abortions. In the present study group, history of PID was present in 15.21% of the cases, which is correlating with the study done by Bhavnaet al¹² in which 22.7% of the cases had history of PID. Endosalphingitis damages the mucosa and may entrap the migrating embryo, leading to ectopic implantation. Endosalphingitis causes peritubal adhesions and impair tubal peristaltic movement, resulting in inadequate transportation and ectopic pregnancy.

In our study group, 4.34% of the women with ectopic pregnancy had tubectomy which correlates with the studies done by Uzmashabab et al (5%)¹³ and Shrestha et al (15%)¹⁴. In our study, 4.34% of women with IUCD had ectopic pregnancy which correlates with the studies done by ShradhdhaShetty K et al (6.4%), Shrestha et al (5%) and WMFagesh (5.8%). IUCD prevents intrauterine pregnancy but not tubal and ovarian pregnancy, as it has no effect on ovulation^{14,15,16}.

In our study, the common presenting symptoms were amenorrhea in 95.65%, abdominal pain in 93.4% and bleeding per vagina in 45.65% of cases, which is comparable to the studies done by Perveen F et al and AO Igwegbe et al. About 43.47% patients were presented with shock. Classical triad of abdominal pain, amenorrhea and vaginal bleeding was seen in 45.65% patients.

The urine pregnancy test, serum beta-HCG and ultrasound were the diagnostic tool used for diagnosis of ectopic pregnancy. Urine pregnancy test and transvaginal ultrasound were commonly used diagnostic tests, while serum beta- HCG was done only in indeterminate cases.

In our study, only one patient of unruptured ectopic pregnancy managed medically, and all others underwent laparotomy. Surgical management of ectopic pregnancy is still the method of choice in our country, as medical management needs extremely close followup and hospitalisation⁶.

In consistent with other studies¹⁹, right sided ectopic pregnancy was seen in 60.8% and left sided ectopic in 39.13% in our study.

In our study, ruptured ectopic pregnancy was present in 63.04% patients, unruptured in 17.39% , chronic ectopic in 4.34% and tubal abortion in 15.21%. The ampullary part of the tube was commonly involved in 60.86% as seen in the most of the ectopic pregnancies in other studies²⁰.

Most of the patients were referred here with clinical signs of ruptured ectopic pregnancy and haemodynamically compromised hence emergency laparotomy and salphingectomy was done as lifesaving procedure.

In respect to morbidity, about 76.08% patients received blood transfusion and 10.8% patients had wound infection.

One patient with dilated cardiomyopathy and hyperthyroidism, presented with ruptured ectopic pregnancy and underwent emergency laparotomy with right salphingectomy expired within 24hrs of surgery.

CONCLUSION

As ectopic pregnancy causes significant morbidity to the mother it requires a high index of suspicion so that diagnosis could be made early. The maternal mortality was reduced in the present study due to prompt diagnosis and management. As most of the referred cases are ruptured ectopic pregnancy, emergency laparotomy with salphingectomy continues to be the preferred mode of management in our institution.

REFERENCES

- Walker II, Ectopic pregnancy. Clinobstet Gynecol. 2007;50:89-99
- Department of Health. Why mothers die: a confidential enquiry into the maternal deaths in the United Kingdom. In Drife J, Lewis G (ed 5); Norwich, UK: HMSO. 2001:282
- Challoner K, Incerpi M. Non traumatic abdominosurgical emergencies in the present patients. Emerg Med Clin North Am. 2003;21(4):971-85
- Mayman R, Shulman A, Mayman BB, Bar-Levy F, Lotan M, Bahary C. Ectopic pregnancy, the new gynaecological epidemic disease: review of the modern work up and the non surgical treatment option. Int J Fertil. 1992;37(3):146-64
- Vasquez G, Winston RML, Brosens IA. Tubal mucosa and ectopic pregnancy. BJOG 1983;90:468
- Chatterjee S, Dey S, Chowdhury RG, Ectopic pregnancy in previously infertile women-Subsequent pregnancy outcome after Laparoscopic management. Al Ameen J Med Sci 2009;2(1):67-72
- Berek & Novak's Textbook of Gynaecology 13th edition; chapter 17
- Ectopic pregnancy incidence, morbidity and mortality by Firyal Omer Mohammed Nous, university of Khartoum, Sudan
- Shagufa SM, Samina M, R EYaz AR, Wasiqa K. Ectopic pregnancy : an analysis of 114 cases. JK practitioner. 2012; 17(4):20-3
- Rashmi A Gaddagi and AP Chandrashekar, A clinical study of ectopic pregnancy. Journal of Clinical and Diagnostic Research. 2012, 6(5): 867-869
- Ankum WM, Mol BWJ, Van der Veen F & Bossuyt. pmm. Risk factors for ectopic pregnancy: a metaanalysis. Fertilsteril 1996;65:1093-9
- Gupta BK, Pathania BK, Jindal M, Vohra R, Ahmed M. Risk factors for Ectopic pregnancy: A Case Control Study in Tertiary Care Centre, Journal of Dental & Medical Sciences. 2014; 13(3):23-7
- Shabab U, Hasmi HA. Different patterns of presentation of ectopic pregnancy and its management journal of surgery Pakistan (International). 2013; 18: 1.
- Shrestha J, Saha R. Comparison of laparoscopy & laparotomy in the surgical management of ectopic pregnancy:
- Shetty S, Shetty A. A Clinical Study of Ectopic pregnancies in a Tertiary Care hospital of Mangalore, India. Innovative Journal of Medical & Health Science 2014 ; 4(1) : 305-9
- Fageeh WM. Diagnosis and Management of Ectopic pregnancy in King Abdul Aziz University Hospital, a Four Year Experience. Medical Science. 2008: 15(2)
- Perveen F, Tayyab S. Ruptured Ectopic pregnancy clinical presentation & management. J Surg Pak. 2007;12(2):45-51
- Igwegbe AO, Eleje GU, Okpala BC. An appraisal of the management of ectopic pregnancy in a Nigeria tertiary hospital. Ann Med Health Sci Res. 2013;3(2):166-70
- Udigwe GO, Umeonoihu OS, Mbachu II. Ectopic pregnancy: A 5 year review of cases at Nnamdikazikiwe University Teaching Hospital (NAUPTH) ZNEWI, NMJ. 2010;51:160-3
- Swenda TZ, Jogo AA. Ruptured tubal pregnancy in Makurdi, North Central Nigeria. Niger Jmed 2008;17(1):75-7