

A Clinical Study on Ectopic Pregnancy in Govt. General Hospital Kurnool

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Abstract:

Background: Ectopic pregnancy remains one of the important cause of maternal morbidity and mortality, if not diagnosed in time it will result in rupture leading to emergency laparotomy or laparoscopy endangering the mother's life. Due to increased incidence of infertility, ART, STI, early diagnostic procedures like ultrasound, there is a rising trend of ectopic pregnancies.

Aims and Objective: The aim is to study the incidence, clinical presentation risk factors, site of ectopic, management modalities at Govt. General Hospital Kurnool, Andhra Pradesh.

Methods: This study was conducted at Govt. General Hospital Kurnool from January 2017 to December 2017. It is a retrospective observational study. 710 antenatal mothers were admitted to the labour room with first trimester complaints and those with diagnosed ectopic pregnancy from outside were included in the study. After admission necessary investigations were done, planned for surgery/conservative management depending on the patient profile. Most cases were taken up for emergency laparotomy. Age, parity, risk factors, treatment, intraoperative findings were collected and the data has been analysed. Of 710 patients admitted, 27(3.8%) cases of ectopic pregnancies in which 18(66.6%) presented as ectopic rupture of which 9 (50%) presented as rupture in shock and 9 (33.33%) presented as early diagnosis, either with ultrasonographic or clinical findings.

Results: Ectopic pregnancy constituted 1.12% of all gynaecological admissions, and its incidence was 1-2%. The commonest age group of the patients was 25-30 years. 18(66.6%) patients presented in emergency with rupture ectopic of which 9(50%) presented as rupture in shock. 9(33.33%) patients were admitted, on the basis of early diagnosis, with incidental ultrasonography finding, or due to any of the mentioned symptoms, and confirmed on ultrasound. The commonest (85%) clinical presentation was abdominal pain, and the commonest (34%) identified risk factor was a previous history of sexually transmitted diseases confirmed as pelvic inflammatory condition or others. No death due to ectopic pregnancy was found during the study period.

Conclusion: Ruptured ectopic pregnancy is of profound threat to the well being of the women, and if undiagnosed early, is the major cause of maternal morbidity and mortality, and has remained a reproductive health challenge in developing countries.

Key Words: Ectopic pregnancy, ART, STI, shock.

I. Introduction

Implantation of the fertilised ovum outside the uterine cavity is called ectopic gestation. The various sites of ectopic pregnancy are fallopian tube, ovary, cervix, abdominal cavity and prior cesarean scar. Most common site of ectopic is fallopian tube (90%). There is rising trend of ectopic due to prevailing STIs which lead to tubal endosalpingeal damage hindering the ovum travel. Unsupervised prescription of ovulation induction drugs on one side and prolonged infertility treated by ART techniques are the other factors.¹

However availability of modern diagnostic modalities permits early diagnosis of this condition.² As an obstetrician our concern is about the ruptured ectopic pregnancies which results from syncytiotrophoblastic invasion into the thin tubal musculature which fail to distend enormously and not capable of contracting and occluding the vessels unlike the uterine myometrium, Double blood supply to the fallopian tube when ruptures leads to torrential hemoperitonium, hypovolemic shock leading to mother's life in danger.³ Unless one intervenes before mother goes into irreversible shock the condition turns out to be a catastrophe which is 100 % preventable. Amenorrhoea, pain, bleeding or spotting per vagina are three cardinal symptoms of ectopic pregnancy.⁴ All the three said symptoms may not be there in all cases.⁵ High index of suspicion is key to the diagnosis of ectopic gestation. Treatment modalities depend upon the hemodynamic status of the patient availability of blood and blood products and expertise of the obstetrician to decide for laparoscopy / laparotomy. In case of unruptured ectopic pregnancies conservative methods using methotrexate or injection of KCL into the sac are the other options.

II. Materials And Methods

A retrospective study of those patients who presented to the emergency delivery room or to the outpatient department with the clinical symptoms of ectopic and pregnant women reported with a diagnosis of ectopic either by clinical examination or with ultrasound report were included in our study from January 2017 to December 2017. All patients were admitted, necessary investigations were done and preceded for emergency / elective laparotomy. Blood transfusions were given to patients who were in hypovolemic shock. Age parity, risk factors treatment, intraoperative findings were collected and the data has been analysed. Treatment modalities either medical or surgical were decided depending on the general condition of the patient.

III. Results And Observations

A total of 27 ectopic pregnancies were recorded in the 6 months study of period, 18 patients were presented with ruptured ectopic, 9 patients were admitted on the basis of early diagnosis. 26 patients underwent operative intervention and one patient received medical management with methotrexate.

Criteria for surgical therapy taken were:

1. Beta hcg > 5000 IU/L
2. Hemodynamically unstable
3. Ectopic mass size > 3.5 cm

Criteria for Medical therapy taken were:

1. Hemodynamically stable
2. Cardiac activity absent
3. Beta hcg < 5000 IU/L
4. Ectopic mass size < 3.5 cm

The commonest clinical presentation was abdominal pain, and the commonest cause was the history of Pelvic inflammatory disease. During our study it was found that ectopic pregnancy was maximum in the age group of 25-30 yrs (44.4%) and maximum in multipara (55.5%), followed by para 1 (22.2%). Table 2 shows that, maximum (85%) patients presented with abdominal pain, followed by 33.3% in shock. Table 3 shows that ampulla was the most common site of rupture (48.14%), and isthmus was 18.51%. The most common time of rupture was at 8-12 weeks of ectopic pregnancy (48.14%), and Isthmus (57.1%) end had the longest duration of pregnancy of >12 weeks. Table 4 shows that confirmation of ectopic pregnancy 55.5% was by clinical diagnosis, and by pregnancy tests, and 40.7% was by ultrasonography. Table 5 shows that 66.6% were ruptured at presentation in the hospital, 33.3% unruptured ectopic. Table 8 shows that, 77.7% went for unilateral salpingectomy, 18.5% for salpingo-oophorectomy and 3.7% went for medical therapy with Injection methotrexate.

Table 1: Bio-demographic characteristics of patients with ectopic gestation

S.No	Age (years)	Number (n=27)	Percentage
1	Less than 20	1	3.7
2	20-24	10	37
3	25-30	12	44.4
4	31-35	4	14.8
5	Parity		
	0	5	18.5
	1	6	22.2
	2	8	29.6
	3	6	22.2
	4	1	3.7

Table 2: Clinical presentation of patients with ectopic pregnancy

S.No	Presentation	Number	Percentage
1	Abdominal pain	18	66.6
2	Amenorrhoea	24	88.8
3	Vaginal Spotting	26	96.2
4	Shock	9	33.3

Table 3: Site of ectopic pregnancy

S.No	Site	Number	Percentage
1	Ampulla	13	48.14%
2	Isthmus	5	18.51%
3	Interstitial/Cornual	4	14.81%
4	Ovarian	5	18.51%
5	Fimbrial	0	0
6	Cervical	0	0

Table 4: Diagnostic Methods

S.No	Method	Number	Percentage
1	Clinical examination and urine pregnancy test	16	59.2%
2	Ultrasonography	11	40.8%

Table 5: Operative Findings

S.No	Findings	Number	Percentage
1	Ruptured	18	66.6%
2	Unruptured	9	33.3%

Table 6: Type of surgical treatment

S.No	Surgery	Number	Percentage
1	Salpingectomy	21	77.7%
2	Salpingoophorectomy	5	18.5%
3	Medical treatment(inj.methotrexate)	1	3.7%

IV. Discussion

Ruptured ectopic pregnancy is an acute emergency and the patient has to be taken for surgical intervention. When the diagnosis is in doubt better to go for exploration by laparoscopy if the mother is clinically stable.⁶ Early diagnosis and timely intervention can save many lives. Resuscitation with colloids and procurement of blood should go simultaneously before mother goes into irreversible shock. During the surgery if the mother has already completed her family the opposite tube has to be liagated and tubectomy should be done to avoid the risk of recurrence.⁷ Associated pathologies like adhesions either result of chronic pelvic disease or endometriosis and due to genital tuberculosis must be noted for further follow up. The incidence of ectopic pregnancy found in our center during the study period was 3.8%; this was consistent with the 1-2% reported in United Kingdom.⁸ The incidence of ectopic pregnancy was found to be highest in the 25-30(44.4%) year age group, due to higher incidence of PID and increased incidence of history of induced abortion. The highest incidence of ectopic pregnancy was noted amongst multiparous women. The increasing rate in early diagnosis and intervention of ectopic pregnancy, is due to consideration of risk factors, ordering for an

ultrasonography preferably transvaginal at the earliest clinical suspicion. Empty uterus with absent gestational sac and/or adnexal mass with intact sac and free fluid in POD are important signs in ultrasound. The patient presenting with ruptured ectopic will have paler, tachycardia, tachypnea, hypotension, distension of abdomen, depending on the amount of hemoperitonium and rebound tenderness. On bimanual pelvic examination feeling of normal or bulky uterus, presence of an adnexal mass, cervical motion tenderness fullness in the POD are important clinical signs. On colposentesis/ paracentesis aspiration of blood or blood stained fluid which do not clot along with positive urinary pregnancy test clinches the diagnosis. Such kind of patients were considered for emergency laparotomy.

Many patients also presented with unruptured ectopic, and were admitted on the basis of pregnancy tests, high clinical suspicion, confirmed by transvaginal sonography, and serum beta HCG. The commonest site of ectopic pregnancy from our findings was the ampullary region(50%), of the fallopian tube, which has also been reported as the commonest site by other studies. Immediate resuscitation with intravenous fluid and blood, emergency laparotomy with salpingectomy, and conservation of the ovaries if possible, was done for the majority of our patients. Salpingectomy (77.7%) was the commonest emergency procedure performed in our institution, as ruptured ectopic pregnancies was associated with massive hemoperitoneum. In developing countries like India with limited facilities, surgical intervention remains the basic mainstay, in the line of treatment of ectopic pregnancy. The overall goal of management of ectopic pregnancy is to preserve the life of the mother.⁹

V. Conclusion

Ectopic Pregnancy occurs when implantation of the fertilized egg occurs outside the uterus. The estimated prevalence of ectopic pregnancy is 1-2% worldwide. In GGH, Kurnool, the incidence of ectopic pregnancy was 3.8% delay in the diagnosis results in adverse outcomes. Knowledge regarding the risk factors high index of clinical suspicion will help the obstetrician to intervene at the earliest instance and to decrease maternal morbidity and mortality. Now a days due to availability of better diagnostic facilities like ultrasound and serum beta HCG levels, many ectopics are being diagnosed in unruptured state and can be managed conservatively/ medically. Ectopic pregnancy should be considered in all pregnant women, presenting with abdominal pain or vaginal bleeding.

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