



A Clinical Study Of Ectopic Pregnancy In North Kashmir J & K, India

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Abstract

Background: An-ectopic pregnancy occurs when a fertilized ovum implants outside the normal uterine cavity and accounts for 0.5 to 1.5 percent of all first-trimester pregnancy. It is the most important cause of maternal mortality and morbidity in the first trimester.

Aim And Objectives: To study about the clinical presentation and the risk factors associated with ectopic pregnancy.

Materials And Methods: This is prospective study. This study was conducted at the department of Obstetrics and Gynaecology, GOVT.MEDICAL COLLEGE HOSPITAL BARAMULLA. 124 cases were studied during a 2 years study period between SEP 2020 and AUG 2022 at GMC BARAMULLA .

Results: Total number of ectopic pregnancies reported were 124 cases for 13168 deliveries, the incidence of ectopic pregnancy was 0.94. About 59 cases presented were ruptured tubal ectopic and 65 cases were unruptured. The maximum incidence of ectopic pregnancy occurred between 25 to 29 years. Greater incidence was noted in previous LSCS accounting for 26.6% that is 33 out of 124 cases. Common risk factors were previous history of abortion 15.3 (19), ectopic 3.2% (4), infertility 2.4% (3), OCP 8.9% (11), IUCD 1.6% (2) and history of DNC 5.6% (7). No risk factors were seen in 35.5% (44).

Conclusion: It can be concluded that incidence of ectopic pregnancy was more in females within age group of 25-29 years and in subjects having previous history of caesarean sections and abortions. Furthermore, commonest site of ectopic pregnancy was observed in Ampulla of Fallopian tube.

Keywords: Ectopic pregnancy, risk factors, fallopian tube

Introduction

Ectopic pregnancy occurs when fertilized ovum gets implanted in tissue other than the endometrium. It is a common life-threatening emergency in the developing world and the commonest cause of maternal morbidity and mortality in the first trimester pregnancy¹. According to centre for disease control and prevention, ectopic pregnancy accounts for approximately 2% of all reported pregnancy². Efforts to reduce cases of ectopic pregnancy; ensure early diagnosis and appropriate management is

crucial in reducing maternal mortality due to ectopic pregnancy. The sustainable development goal 3 states that global maternal mortality ratio should be less than 70 per 100000 births, with no country having a maternal mortality rate of more than twice the global average³. Therefore, reducing deaths from EP is one essential element towards realization of this goal.

It is now widely accepted that in the presence of HCG levels above the discriminatory zone of 1500-2500 IU/litre, a normal intrauterine pregnancy defined by the existence of a gestational sac, should be visible by TVS. Therefore the absence of an

intrauterine gestational sac with the HCG concentration above the discriminatory zone implies an abnormal gestation. The patient's clinical condition, terrain, geographical location, desire for future fertility and the availability of facilities all have a impact on the treatment of ectopic pregnancy⁴. In clinically stable patients medical management is a safe and effective option whereas patients who are not eligible for medical management or present with ruptured ectopic pregnancy or failed medical management are to be surgically dealt⁵

Material And Methods:

Study Design and Subjects

This was a Prospective cohort study done at department of Gynae and Obstetrics GMC Baramulla from Sep 2020 to Sep 2022. All ectopic patients were included in the study. GMC Bramulla is a primary referral centre for whole north Kashmir. All women with pain abdomen, irregular vaginal bleeding/spotting following period of amenorrhea were evaluated. Proper history, physical examination, lab investigations which included pregnancy test, CBC, blood grouping, LFT, KFT, and b-hCG levels were done. All women were subjected to TVS. In the absence of intra-uterine gestational sac tubal ectopic pregnancy was diagnosed after failure of 66% increase in b-hCG after 48 hours as is expected in intra-uterine pregnancy and presence of complex adnexial mass on TVS. All hemodynamically stable patients were administered a single dose of 50 mg/M² of MTX and patients who were haemodynamically unstable were managed surgically.

Statistical Analysis:

The data obtained was put as percentages and significance level between variables was assessed by using Chi square test and declared significant for $p < 0.05$.

Results:

In the present study which was conducted over a period of 2 years at Dept. of Gynae and Obstetrics GMC Baramulla, the total no. of deliveries were 13168 out of which 124 were ectopic giving an incidence of 0.94 cases/1000 deliveries. Commonest age group affected was 25-29 with 70 (56.45%) patients. There were 59 (47.5%) cases of ruptured ectopic and 65 (52.5%) cases were unruptured on surgery. 49 were primi (39.5%), 75 were multi (60.5%), 18 (14.5%) had previous 2 lscs, 15 (12.1%) had previous 1 lscs, 19 (15.3%) had history of abortion, 2 (1.6%) patients had history of induced abortion and 7 (5.6%) had history of DNC, 4 (3.2%) had history of ectopic pregnancy in the past among which 1(0.8%) patient had undergone tubectomy for ruptured ectopic. 3 (2.4%) patients had history of infertility. 11 (8.9%) had history of Oral contraceptive pills (OCP) intake and no risk factor in 44 (35.5%) patients. Commonest site affected was Ampulla of fallopian tube in 106 (85.5%) patients. Most common presentation was abdominal pain 90 (72.6%) patients followed by vaginal bleeding 72 (58.1%) patients. Left sided ectopic was seen in 68 (55%) patients and right sided in 56 (45%) patients. 65 patients were medically managed out of which 3 had tubal rupture during the course of treatment and were managed surgically. 59 patient had ruptured tubal ectopic who underwent salphingectomy and 2 out of these 59 patients had cornual pregnancy who reported to casualty in a state of shock.

Table 1: Distribution of cases based on parity

Total ectopic	Primi	Gravid	P value
124 (100)	49 (39.5%)	75 (60.5%)	0.019 (Sig)

Table 2: Distribution of cases by Ultrasonography

Total ectopic(%)	Ruptured (%)	Unruptured (%)	P-value
124 (100)	59 (47.5)	65 (52.5)	0.590 (non -Sig)

Table 3: Age-wise distribution of ectopic pregnancy.

Age	Number (percentage)	P-value
20-24	31 (25%)	Less than 0.001 (Sig)
25-29	70 (56.45%)	
30 and above	23 (18.54%)	

Table 4: Distribution of cases as per site.

Site of ectopic pregnancy	Number (%)	P -value
Ampulla of fallopian tube	106 (85.4%)	Less than 0.001 (Sig)
Cornu	2 (1.6%)	
Isthimus	17 (13.7%)	

Table 5: Risk factors in ectopic pregnancy.

Risk factors	Number (%)	P –value
Lscs	33 (26.6%)	Less than 0.001 (Sig)
Abortion	19 (15.3%)	
Ocps	11 (8.9%)	
Previous ectopic	4 (3.2)	
Infertility	3 (2.4%)	
IUCD	2 (1.6%)	
Salphigectomy	1 (0.8%)	
DNC	7 (5.6)	
No risk	44 (35.5)	

Table 6: Clinical characteristics

Symptoms	Number (%)	P-value
Bleeding	72 (58.0%)	Less than 0.001 (Sig)
Abdominal pain	90 (72.5%)	
Asymptomatic	30 (24.1%)	
Bleeding accompanying abdominal pain	75 (60.4%)	
Shock	20 (16.1%)	

Nausea/vomiting	40 (32.5%)	
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Discussion:

In the present study, incidence of ectopic pregnancy was 0.9/1000 deliveries. As per study conducted by Murray et al., the prevalence of ectopic pregnancy among women who went to an emergency department with first trimester bleeding, pain, or both ranges ranged from six to 16 percent⁶. In a study conducted by Rashmi and Chandrashekhar, the incidence was 1: 399 Pregnancies⁷. In the study by Shaikh et al, the incidence was 1.6 per thousand of deliveries⁸. A majority of the patients (56.2%) belonged to the age group of 25-30 years in our study. Similar results were found in Khaleeque et al study⁹. Hoover et al. reported that the ectopic pregnancy rate increases with age; it was 0.3% among girls and women aged 15-19 years and 1.0% among women aged 35-44 years¹⁰. In our study risk factor was present in 73 (59%) which was almost similar to one reported by Jayati Nath et al.¹¹ Previous pelvic surgery was the most common risk factor 33(26.6%) followed by abortion 19 (15.3%).¹² Similar findings were reported by B Sreelatha et.al.¹² who had found LSCS to be a risk factor in more than 50% patients. However studies from other regions have reported abortions as the major risk factor for EP in contrary to our study^{13,14}. About half of patients (47.5%) presented with ruptured ectopic gestation. The higher rate can be explained by delayed presentation to our hospital as it is a referral center. Many previous studies reported similarly higher percentage of ruptured cases like Sreelatha et al. who reported ruptured ectopic in 67.6% patients¹⁵. The commonest site of location of the ectopic pregnancy was in the ampulla of the fallopian tube. Ampullary part of the tube was commonly involved in most of the ectopic pregnancies in other studies¹⁶. Right sided tubal pregnancy was present in 56 (45.1%) cases and left tubal involvement in 68(54.8%) cases contrarily, to what was found by Shetty et al. and other who had found right sided dominance¹⁷. All ruptured patients underwent total salpingectomy. Similar high rates of salpingectomies were reported by Parmar S¹⁸. Mahboob reported a success rate of 80% by treating 12 out of 15 women with single dose MTX with initial β -hCG levels equal to 5000mIU/ml². As medical management

needs extremely close follow up & hospitalization, surgical management is still the method of choice in our country¹⁹. Laparoscopy and medical therapy have now emerged as the widely used therapeutic modalities with great succession terms of reduced morbidity, shorter hospital stay and conservation of fertility²⁰. Morbidity included anemia, blood transfusion and wound infection. By reducing and identifying the risk factors and 'catching' the patients at the earliest it is possible to improve the prognosis so far as morbidity, mortality and fertility are concerned²¹. No maternal mortality found in our study, in consistent with A. Abbas and H. Akram study²². Studies suggest that around 60% of women affected by an ectopic pregnancy go on to have a viable IUP. There is thought to be a 5-20% risk of a recurrence of ectopic pregnancy with one previous ectopic pregnancy and a risk of 32% or more following more than one previous ectopic²³.

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