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Original Research Article

A Clinic-Outcome Assessment of Chronic Ectopic Pregnancy: an Observational Study

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Abstract

Aim: The aim of the present study was to assess the clinical profile and outcome of chronic ectopic pregnancy in tertiary care hospital.

Methods: This prospective observational study was undertaken in the Department of Obstetrics & Gynecology, Nalanda Medical College and Hospital, Patna, Bihar India on pregnant women with persistent chronic ectopic pregnancies . During the study period of one year, 9015 patients were delivered to the institute. 82 patients were diagnosed with ectopic pregnancy. Hence, the incidence of ectopic pregnancy was 0.90% in our study. Only 7 patients were diagnosed in chronic ectopic frequency (CEP).

Results: 28.58% cases were aged ≤ 30 years while rest of the cases was aged more than 30 years. The mean age was 32.58 ± 4.0 years. 42.86% (3 cases) were nullipara, 57.14% (4 cases) were primipara and none of cases were multipara. Our center being tertiary center, 42.86% (3 cases) were referred from other centers while 57.14% (4 cases) were diagnosed at our hospital. Majority of the patients 57.14% (4 cases) presented at 6 to 8 weeks of gestation followed by 42.86% (3 cases) at less than 6weeks of gestation. Amenorrhea and pain abdomen was the most common complaint seen in 100% (7 cases) followed by Vaginal Bleeding/Spotting (60%) and Fainting Attack (28.58%). 85.72% cases were positive UTP. All of the patients were positive in Culdo/Paracentesis. The beta-HCG levels of more than 5000mIU/ml was observed in 14.28% (1 case), beta-HCG of less than 1500mIU/ml was in 57.14% (4 cases, and beta-HCG in the range of 3000-5000 mIU/ml was in 28.57% (1 case). All of the patients had hemoglobin range of 7-10 gm/dl.

Conclusion: Chronic ectopic pregnancy is rare and is often misdiagnosed preoperatively. Chronic ectopic pregnancy should be the provisional diagnosis in a young multiparous woman with AUB and/or abdominal pain, if the ultrasound shows the presence of a heterogeneous mass in the POD and/or adnexa, with no internal vascularity on CD.

Keywords: Chronic ectopic pregnancy, HCG, UTP

Introduction

Ectopic derives from the Greek word “ektopos”, meaning out of place. Unfortunately ectopic pregnancy is very much common place, with rising incidence globally. Ruptured ectopic is potentially life-threatening and requires prompt suspicion and management. Identifying ectopic pregnancy has always challenged the ingenuity of the obstetrician and gynecologist by its bizarre clinical picture. This often leads to delay in diagnosis with disastrous consequences. It is therefore the leading cause of maternal mortality and morbidity in the first trimester accounting for 10–15% of all maternal deaths. [1] The prevalence of ectopic pregnancy among women with first trimester bleeding and pain or both ranges from 6 to 16% in the United States. [2] In a multicentric case–control study in India in 1990, the incidence of ectopic pregnancy was found to be 3.12 per 1,000 pregnancies. [3] The true incidence of ectopic pregnancy, however, is difficult to determine. [4] It varies significantly among

institutions and countries, depending on the denominator used in its calculations and the facilities available for diagnosis.

Currently, the overall incidence is increasing worldwide, [4,5] but the case–fatality rate has decreased. [5,6] In developed countries this might be due to improved diagnostic techniques such as diagnostic laparoscopy, radioimmunoassay of beta-human chorionic gonadotropin (β-hCG) and transvaginal ultrasonography with more cases being identified before rupture. In developing countries, however, a rise in pelvic inflammatory disease (PID) incidence on one hand (3–10% in India according to British Medical Journal) and availability of better antibiotics on the other hand, which permits retaining a patent tube with luminal damage following infection, has led to increased risk of ectopic pregnancy. Increased tendency of using ovulation induction drugs by gynecologists and assisted reproductive techniques for infertility even in developing countries is the new contributor in the rising ectopic incidence (rate of ectopic pregnancy following ART is 2.1–11%). [7] Modern anesthesia, blood transfusion facilities, immediate resuscitation as well as prompt surgery are the cornerstone of success in the reduction of mortality. [8]

The aim of the present study was to assess the clinical profile and outcome of chronic ectopic pregnancy in tertiary care hospital.

Materials and Methods

This prospective observational study was undertaken in the Department of Obstetrics & Gynecology, Nalanda Medical College and Hospital, Patna, Bihar India on pregnant women with persistent chronic ectopic pregnancies During the study period of one year, 9015 patients were delivered to the institute. 82 patients were diagnosed with ectopic pregnancy. Hence, the incidence of ectopic pregnancy was 0.90% in our study. Only 7 patients were diagnosed in chronic ectopic frequency (CEP).

The study included all eligible prenatal clinic and labor room patients. Prenatal clinic and labor room patients with clinical features and persistent chronic ectopic pregnancy diagnosis were included after written informed agreement. All pregnant women in the first trimester attending prenatal clinic and labor room of Department of OBG with confirmed chronic ectopic pregnancy and willing to participate were included. Intrauterine pregnancies and other hemoperitoneum causes were excluded. Data were presented as frequency and percentages.

Results

Table 1: Baseline Characteristics

Baseline Characteristics	Frequency (N=5)	Percentage (%)
Marital Status		
Married	7	100
Unmarried	0	0
Age Categories (Years)		
≤30	2	28.58
>30	5	71.42
Age Mean (Years)	32.58 ± 4.0	
Parity		
Nullipara	3	42.86
Primipara	4	57.14
Multipara	0	0
Referral Status		
Non-Referred	4	57.14
Referred	3	42.86
Gestational age at time of admission		
≤6 weeks	3	42.86
6wks, 1day to 8 weeks	4	57.14
Symptoms		
Amenorrhea	7	100
Abdominal Pain	7	100
Vaginal Bleeding/Spotting	4	57.14
Fainting Attack	2	28.58
UPT		
Positive	6	85.72
Negative	1	14.28
Culdo/Paracentesis		
Positive	7	100
Negative	0	0

28.58% cases were aged ≤ 30 years while rest of the cases was aged more than 30 years. The mean age was 32.58 ± 4.0 years. 42.86% (3 cases) were nullipara, 57.14% (4 cases) were primipara and none of cases were multipara. Our center being tertiary center, 42.86% (3 cases) were referred from other centers while 57.14% (4 cases) were diagnosed at our hospital. Majority of the patients 57.14% (4 cases) presented at 6 to 8 weeks of gestation followed by 42.86% (3 cases) at less than 6weeks of gestation. Amenorrhea and pain abdomen was the most common complaint seen in 100% (7 cases) followed by Vaginal Bleeding/Spotting (60%) and Fainting Attack (28.58%). 85.72% cases were positive UTP. All of the patients were positive in Culdo/Paracentesis.

Table 2: Beta-HCG levels in the patients

Beta-HCG levels (mIU/ml)	Frequency (N=5)	Percentage (%)
<1500	4	57.14
1500-3000	0	0
3000-5000	2	28.57
>5000	1	14.28
Hemoglobin levels (gm/dl)		
<5	0	0
5-7	0	0
7-10	6	100%
>10	0	0

Table 3: Site of Ectopic

Site of Ectopic	Frequency (N=7)	Percentage (%)
Ampulla	6	85.72
Fimbria	1	14.28

Most common site of ectopic pregnancy was ampulla region (85.72%), followed fimbrial end of the tube 14.28% (1 case).

Table 4: Management

Management	Frequency (N=7)	Percentage (%)
Surgical Salpingectomy	6	85.72
Surgical Salpingo-oopherectomy	1	14.28

The surgical salpingectomy was the most common procedure done for chronic ectopic pregnancy in 85.72% (6 cases) while 14.28% cases were Surgical Salpingo- oopherectomy.

Table 5: Blood transfusion

Blood Transfusion	Frequency (N=7)	Percentage (%)
1 Unit	4	57.14
2 Unit	2	28.57
3 Unit	1	14.28

Out of 7 patients of chronic ectopic pregnancy 100% (7 cases) required blood transfusion. It was further observed 57.14% (4 cases) were transfused with one units of blood, 28.57% (2 cases) each were transfused with two and 14.28% were transfused with three units of blood.

Discussion

Ectopic pregnancy (EP) is a complication that occurs in the first trimester of pregnancy when an embryo implants outside of the uterus.[9] In India, the incidence has been reported in the range of 0.91-2.3%. [9,10] The most frequent risk factors of EP include a history of abortions and pelvic inflammatory disease (PID). [11,12] Because the classic symptoms triad of amenorrhea, abdominal pain, and vaginal bleeding is present only in 30% to 40% of patients with EP, the diagnosis requires a high index of clinical suspicion. [13] The EP spectrum includes asymptomatic patients as well as ruptured ones that present in shock. Increased morbidity and occasionally even fatality are

consequences of delayed diagnosis. [14] It could even have an impact on her future fertility if not treated instantly and effectively. [15]

28.58% cases were aged ≤ 30 years while rest of the cases was aged more than 30 years. The mean age was 32.58 ± 4.0 years. 42.86% (3 cases) were nullipara, 57.14% (4 cases) were primipara and none of cases were multipara. All patients had positive Culdo/Paracentesis. In a study by Singh et al [16] the mean age group of study population was 28.28±4.19 (1SD) yrs with 26.78 to 29.78 yrs and range of patient's age were 20 to 38 years (Median age 28 yrs). In a study by Ugur et al [17] the most common complaints was pelvic pain and vaginal bleeding and a history of amenorrhea present in the majority of cases. Our center being tertiary center, 42.86% (3 cases) were referred from other centers while 57.14% (4 cases) were diagnosed at our hospital. Majority of the patients 57.14% (4 cases) presented at 6 to 8 weeks of gestation followed by 42.86% (3 cases) at less than 6weeks of gestation. In a study by Behera, et al [18] right side tubal pregnancy is more common than left side.

Amenorrhea and pain abdomen was the most common complaint seen in 100% (7 cases) followed by Vaginal Bleeding/Spotting (60%) and Fainting Attack (28.58%). 85.72% cases were positive UTP. All of the patients were positive in Culdo/Paracentesis. The beta-HCG levels of more than 5000mIU/ml was observed in 14.28% (1 case), beta-HCG of less than 1500mIU/ml was in 57.14% (4 cases, and beta-HCG in the range of 3000-5000 mIU/ml was in 28.57% (1 case). All of the patients had hemoglobin range of 7-10 gm/dl. Most common site of ectopic pregnancy was ampulla region (85.72%), followed fimbrial end of the tube 14.28% (1 case). The surgical salpingectomy was the most common procedure done for chronic ectopic pregnancy in 85.72% (6 cases) while 14.28% cases were Surgical Salpingo- oopherectomy. In Wakankar and Kedar's [19] study, out of 52 cases, 51 underwent surgical management and one case (1.9%) received medical management. Partial salpingectomy was done in most of the patients (65.38%) followed by complete salpingectomy (19.23%). Ranji et al [11] noted that expectant management and medical therapy were offered in 15.9% and 29.4%, respectively. Surgery was done in 47.9% of cases. Salpingectomy (S) alone was done in 78.1 cases and laparoscopy in 15.1% of cases. Out of 7 patients of chronic ectopic pregnancy 100% (7 cases) required blood transfusion. It was further observed 57.14% (4 cases) were transfused with one units of blood, 28.57% (2 cases) each were transfused with two and 14.28% were transfused with three units of blood.

Conclusion

Chronic ectopic pregnancy is rare and is often misdiagnosed preoperatively. Chronic ectopic pregnancy should be the provisional diagnosis in a young multiparous woman with AUB and/or abdominal pain, if the ultrasound shows the presence of a heterogeneous mass in the POD and/or adnexa, with no internal vascularity on CD.

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