



THE INCIDENCE AND MANAGEMENT OF ECTOPIC PREGNANCY

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ABSTRACT

Background: Ectopic pregnancy continues to be one of the most common gynecologic emergencies and is the leading cause of pregnancy-related first-trimester death in the United States. The rate of ectopic pregnancy continues to rise because of increases in the incidences of its risk factors. **Objective:** in this study our main goal is to investigate the incidence and management of Ectopic pregnancy. **Method:** This cross-sectional study was carried out at out at Kustia General Hospital, from September 2018 to October 2019. Where 62 Patients who were clinically suspected but laparotomy findings ruled out ectopic pregnancy. **Results:** During the study, majority 72.58% cases belong to <30 years age group and 35.48% cases had HTN followed by 19.35% had history of infertility, 80.65% cases visited ANS ≤ 4 times. 54.45% mild abdominal tenderness cases were seen followed by 53.22% moderate cases were anemic, 83.87% cases BP was $>120/80$. Apart from that, 91.93% cases had H/O P/V bleeding and 88.71% had H/O lower abdominal pain. History of tubal ligation, 19.35% followed by PID history, 29.03%, 32.25% history of ligation cases were common risk factor seen in ectopic patients. 67.75% cases right tube was affected, and all cases were undergone laparoscopy. In addition, 80% cases were managed by surgically. **Conclusion:** While ectopic pregnancy mortality has decreased dramatically due to improved diagnosis and care procedures, it remains a severe gynecologic emergency. Delays in diagnosis or treatment might have disastrous consequences. Clinicians should be aware of the limitations of various studies and have an open mind when it comes to ectopic pregnancy. The mother's life would be saved if vigorous resuscitation and laparotomy were performed as soon as possible. Lower abdomen discomfort, amenorrhea, and P/V bleeding were the most common symptoms. The primary risk variables were tubal ligation history, PID history, ligation history, and IUCD. In many circumstances, laparoscopy is still the conventional therapy.

KEYWORDS: Ectopic pregnancy, fertility, P/V bleeding.

INTRODUCTION

An ectopic pregnancy occurs when the fertilized ovum implants in a location other than the typical uterine cavity.^[1] It is a major source of maternal illness and mortality, as well as fetal loss.^[2]

Human blastocysts often implant in the endometrium along the anterior or posterior wall of the uterus, most commonly in the posterior wall.

Ectopic pregnancy occurs when the blastocyst implants in a location other than the typical uterine cavity. The fallopian tube, ovary, abdominal cavity, wide ligament, rudimentary horn of a bicornuate uterus, and cervix are all conceivable locations. The fallopian tube, on the other hand, is the most frequent.

Tubal pregnancy accounts for approximately 95% of all ectopic pregnancies. The following locations are found

within the tube: ampullary (55 percent), isthmic (25 percent), fimbrial (17 percent), and interstitial.^[1]

Ectopic pregnancies are more common in infertile women from lower socioeconomic groups and in women who have previously experienced an ectopic pregnancy.

Lower abdomen discomfort, delayed or irregular menstruation, vaginal bleeding or brown discharge, and syncopal attack are frequent presenting symptoms.^[3-4]

Early detection and treatment not only minimize death but also morbidity. The diagnosis of ectopic pregnancy was made by careful physical examination, obtaining a thorough history, and measuring serial -hCG, ultrasonography (transvaginal is preferable to transabdominal), serum progesterone, and direct vision by laparoscopy.^[2]

Over the last decade, the treatment of ectopic pregnancy has shifted from a dramatic surgical strategy (salpingectomy) to a more cautious surgical or medicinal approach.^[5]

The standard treatment for ectopic pregnancy is to remove the damaged fallopian tube. With advancements in diagnostic technology, the great majority of ectopic pregnancies are discovered in their unruptured forms, which has fueled tendencies toward nonsurgical treatment.

The majority of these nonsurgical, conservative treatments have proven effective in 80-90 percent of correctly chosen situations.^[3]

Management must be customized to the women's current status and future fertility needs.^[6]

The optimum management strategy, ranging from expectant care to outpatient medication to conservative vs drastic surgery, is determined by the patient's clinical state, ectopic variables such as size, signs of rupture, or pace of -hCG increase, and the patient's desires. In this study our goal is to investigate ectopic pregnancy cases in order to provide early and accurate diagnosis, rapid and effective care of ectopic pregnancy, and identification of risk factors in our circumstance.

OBJECTIVE

- To evaluate the Incidence and management of Ectopic pregnancy.

METHODOLOGY

This cross sectional study was carried out at kustia general hospital, from September 2018 to october2019. Where a total of 62 women who were Clinically suspected ectopic pregnancy included in the study. Patients who were clinically suspected but laparotomy findings ruled out ectopic pregnancy ere excluded from the study.

After taking informed consent from each patient, a very careful history with particular attention to socio-demographic, menstrual, obstetric and contraceptive history, a through physical examination was done and diagnosis was established clinically in majority of cases. Pregnancy test and ultrasonography were done in most cases to support the clinical diagnosis. Hemoglobin estimation and blood grouping were done in all cases. Finally, laparotomy was done to confirm the diagnosis and manage the case. All the data were collected in a pre-designed data collection sheet.

Data were analyzed in computer based programme Statistical Analysis for Social Science (SPSS) for windows version 12.

RESULTS

In table-1 shows age distribution of the study where 72.58% of the patients belonged to the age groups of <30 years. The following table is given below in detail:

Table 1: Age distribution of ectopic pregnancy (n-80).

Age in years	Number of patients	Percentage
<30 years	45	72.58%
>30 years	17	27.42%

In figure-1 shows distribution of the patients according to residential area where majority were coming from urban.

The following figure is given below in detail:

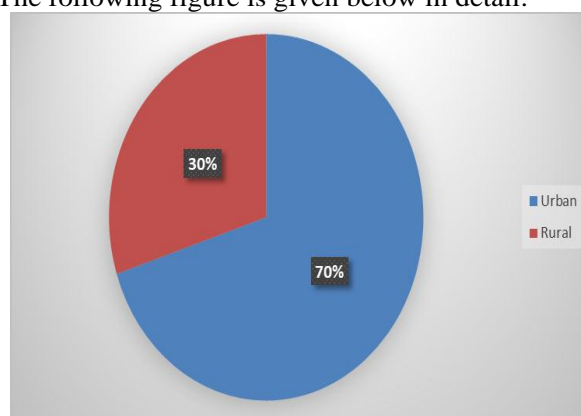


Figure 1: Distribution of the patients according to residential area.

In table-2 shows demographic status of the patients where majority were literate, 75% and 70% were housewife.

The following table is given below in detail:

Table 2: Demographic status of the patients.

Educational status	Percentage (%)
Literate	65%
Illiterate	35%
Occupational status	%
Housewife	70%
Service holder	20%
Student	10%
Monthly family income (monthly)	%
<10000 Tk	20%
10001-20000 Tk	55%
>20000 Tk	25%

In table-3 shows parity distribution of the study group where the peak incidence was among the multiparous (69.35%).

The following table is given below in detail:

Table 3: Parity in patients with ectopic pregnancy. (n-62).

Parity	Number	Percentage
Prime	17	30.65%
Multipara	43	69.35%

In table-4 shows clinical status of the patients where 35.48% cases had HTN followed by 19.35% had history of infertility, 80.65% cases visited ANS ≤ 4 times.

The following table is given below in detail:

Table-4: Clinical status of the patients

Pregnancy comorbidity	Number	Percentage (%)
HTN	22	35.48
Others	40	64.52
Number of ANS		
≤ 4 times	50	80.65
> 4 times	12	19.35
History of infertility		
Yes	12	19.35
No	50	80.65
History of PID		
Yes	18	29.03
No	44	70.97

In table-5 shows sign of the patients where 54.45% mild abdominal tenderness cases were seen followed by 53.22% moderate cases were anemic, 83.87% cases BP was $> 120/80$.

The following table is given below in detail:

Table 5: Sign of the patients.

Sign	Number	Percentage (%)
H/O abdominal tenderness		
Mild	35	56.45
Moderate	20	32.25
Severe	7	11.30
H/O anemia		
Mild	18	29.03
Moderate	33	53.22
Severe	7	17.75
Hemodynamic status		
Stable	52	83.87
Shock	10	16.13
BP		
$< 120/80$	6	9.68
$> 120/80$	52	83.87
HTN	4	6.45
Hemoperitoneum		
Yes	20	32.25
No	42	67.75

In table-6 shows symptoms of the patients where 91.93% cases had H/O P/V bleeding and 88.71% had H/O lower abdominal pain.

The following table is given below in detail:

Table 6: Symptoms of the patients.

Symptoms	Number	Percentage (%)
H/O Amenorrhea		
< 5 weeks	40	64.52
> 5 weeks	10	16.13
< 8 weeks	7	11.29
> 8 weeks	6	8.06
H/O P/V bleeding		
Absent	5	8.07
Present	57	91.93
H/O lower abdominal pain		
Mild	3	4.84
Moderate	4	6.45
Severe	55	88.71

In table-7 shows risk factor of ectopic pregnancy where history of tubal ligation, 19.35% followed by PID history, 29.03%, 32.25% history of ligation cases were common risk factor seen in ectopic patients.

The following table is given below in detail:

Table 7: Risk factor of ectopic pregnancy.

Risk factors	Number	Percentage (%)
H/O infertility		
• Yes	12	19.35
• No	50	80.65
H/O PID		
• Yes	18	29.03
• No	44	70.97
H/O abortion		
• Yes	12	19.35
• No	50	80.65
H/O ectopic pregnancy		
• Yes	2	3.23
• No	60	96.77
H/O tubal ligation		
• Yes	10	19.35
• No	52	80.65
H/O IUCD		
• Yes	18	28.03
• No	45	71.97
H/O pelvic surgery		
• Yes	4	6.45
• No	58	93.55
H/O OCD		
• Yes	2	3.22
• No	60	96.78
H/O ligation		
• Yes	20	32.25
• No	42	67.75
H.O appendices		
• Yes	6	9.68
• No	56	90.32

In table-8 shows method of investigations where 67,75% cases right tube were affected and all cases were undergone laparoscopy.

The following table is given in detail:

Table 8: Method of investigations.

Method	Number	Percentage (%)
HB%:		
<10gm%	56	90.32
>10gm%	6	9.68
Tube affected:		
Right	20	32.25
Left	42	67.75
Laparoscopy:		
Yes	62	100
No		

In figure-2 shows management status of the patients where 80% cases were managed by surgically.

The following figure is given below in detail:

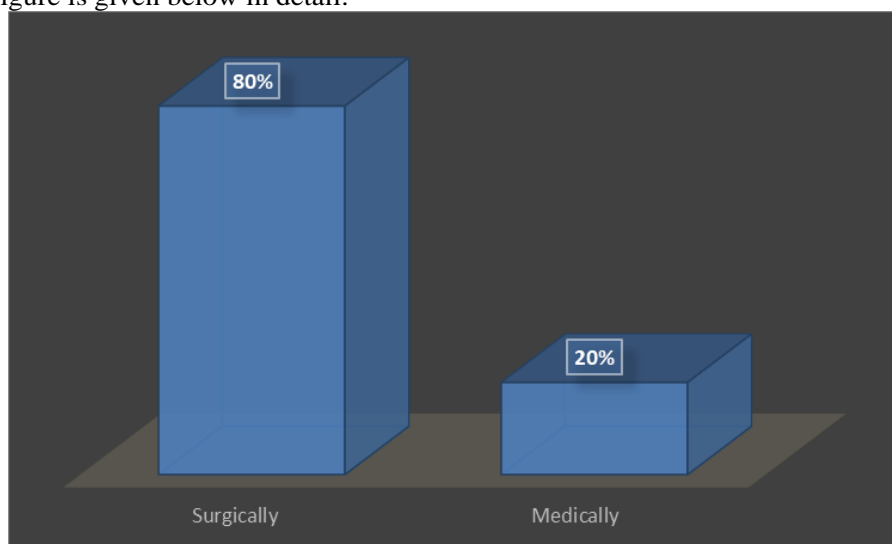


Figure 2: Management status of the patients.

DISCUSSION

Ectopic pregnancy may occur at any age during the reproductive period.⁶ In this study 72.58% of the patients belonged to the age groups of <30 years which similar to one study where found 65% of cases were between the ages of 26-35 years.¹⁷

In this study, the peak incidence was among the multiparous (69.35%). Another study has shown almost similar observation para-0 (39.5%) and para-1 (35.6%).¹⁸

In one study the identifiable risk factor for ectopic pregnancy were mainly pelvic infection (26.25%), previous MR (16.25%), induced abortion (17.5%) and subfertility (11.25%) Less frequently there was history of IUCD insertion, LUCS, D&C and pelvic surgery.¹⁹

Subfertility is a risk factor for ectopic pregnancy in our country. History of subfertility was found 4.59% cases in a study done by one study.¹⁰ Use of IUCD is another

risk factor for ectopic pregnancy. Another study has found 17% cases had H/O IUCD insertion. But no patient had IUCD in situ when presented with ectopic pregnancy.¹¹ Where as in our study, history of tubal ligation, 19.35% followed by PID history, 29.03%, 32.25% history of ligation, 28.03% IUCD cases were common risk factor seen in ectopic patients.

The one study symptoms of ectopic pregnancy were analyzed 96.25% cases had lower abdominal pain, 78.75% had H/O Amenorrhoea, 53.75% had per vaginal bleeding, 21.25% gave history of syncopal attack and 45% cases was in hypovolumic shock.¹² In our cases symptoms such as 91.93% cases had H/O P/V bleeding and 88.71% had H/O lower abdominal pain and signs like 54.45% mild abdominal tenderness cases were seen followed by 53.22% moderate cases were anemic, 83.87% cases BP was >120/80 were seen.

Types of operation varied as revealed in different studies conducted by different persons.^[13] One study revealed unilateral salpingectomy in 71%, unilateral salpingectomy with contralateral tubectomy in 24% and resection of rudimentary horn of bicornuate uterus in 10% cases.^[14] Which is supported to our study where 80% cases undergone clinically managed.

CONCLUSION

While ectopic pregnancy mortality has decreased dramatically due to improved diagnosis and care procedures, it remains a severe gynecologic emergency. Delays in diagnosis or treatment might have disastrous consequences. Clinicians should be aware of the limitations of various studies and have an open mind when it comes to ectopic pregnancy. The mother's life would be saved if vigorous resuscitation and laparotomy were performed as soon as possible. Lower abdomen discomfort, amenorrhea, and P/V bleeding were the most common symptoms. The primary risk variables were tubal ligation history, PID history, ligation history, and IUCD. In many circumstances, laparoscopy is still the conventional therapy.

REFERENCE

1. Jeffcoate's N. "Ectopic pregnancy" Jeffcoate's principles of Gynaecology international (7th) edition Batla Arnold, 2001; 208-224.
2. Garmel SH, "Early pregnancy risk" current Obstetrics and Gynaecologic diagnosis and treatment. 9th edition Decheryne AH & Nathan L, Lange Medical Book/Mcgraw Hill company, 2002; 272-285.
3. Sivasuriya M. Ectopic pregnancy. In obstetrics and Gynaecology. 2nd edition. Chapter 30, Ratnam S.S, RAO K.B., Arul Kumaran S, India, Orent Longman, 1999; 2: 394-407.
4. Grudzinkas J.G. "Miscarriage, ectopic pregnancy and trophoblastic disease" Dewhurst's Text book of Obstetrics and Gyanecology for postgraduates. 6th edition, Edmods, Blackwell Science Ltd, 1999; 61-75.
5. DUTTA D.C Haemorrhage in early pregnancy (Ectopic pregnancy); TEXT BOOK OF OBSTETRICS. 5th edition, New central Book Agency P. Ltd., 2002; 190-206.
6. Setting standards to improve women's health Royal college of Obstetricians and Gynecologists Management of Tubal pregnancy, RCOG Guideline, May 2004; 21: 1 of 10.
7. Sadler T.W. Ovulation to implantation, Bilimmar germ disc, In: Langman's medical embryology, 8th edition, chapter-2, 3, Baltimore, willams and wilkins, 2000; 31-40.
8. Caccitore Tiitinen A and stenman DH. Normal early pregnancy: Serum HCG levels and vaginal ultrasound findings, Br, J Obstet. Gynaecol, 1990; 97: 899-903.
9. ICMR task force project. Multicentric case control study of ectopic pregnancy in India, J. obstet Gynaecol, India., 1990; 40: 425-430.
10. Ectopic pregnancy United states, 1990-1992. MMWR Morb Mortal WKly Rep., 1995; 44(3): 46-8.
11. Lawson HW, Atrash HK, Saftlas AF, et al. Ectopic pregnancy in the United States, 1970-1986. MMWR CDC Surveill Summ, 1989; 38(2): 1-10.
12. Reece EA, Petrie RH, Sirmans MF, et al. Combined intrauterine and extrauterine gestations: a review. Am J obstet Gynecol, 1983; 146(3): 323-30.
13. Hajeninius PJ, Mol BW, Bossuyt PM, Ankum WM, Van Der veen F. Intervention for tubal ectopic pregnancy. Cochranne Database System Rev., 2000; 2: CD 000324.
14. ANNE-MARIE Lozeau, M.D., M.S. and Beth Potter, M.D. Diagnosis and Management of Ectopic pregnancy, American family Physician, November, 2005; 72: 9.