

**RUPTURE ECTOPIC PREGNANCY-A PROSPECTIVE STUDY AT FARIDPUR
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ABSTRACT

Introduction: Ectopic pregnancy is a significant cause of maternal morbidity and mortality as well as fetal loss and a leading cause of pregnancy related death. In first trimester. ultrasonography and other test rarely done in developing countries like Bangladesh. **Method:** It is a prospective study of 60 cases of rupture ectopic pregnancy designed to find-out the prevalence, analyze clinical presentation and per-operative findings of laparotomy, usually pfannenstiell (transverse) incision given, and repaired intradermally without retaining abdominal drain tube, done in Obstetrics and Gynaecology department, Faridpur Medical College Hospital, Faridpur Bangladesh from September 2003 to August 2005. **Result:** 68 cases of ectopic pregnancy patients was found during the study period, 60 cases was rupture ectopic and 8 cases was chronic and silent ectopic among the total gynaecologic patients of 1213. All the patients were treated by laparotomy most of the patents were pre-pregnant anaemic and was in critical condition due to poverty and lack of knowledge. There was no death after operation or after admission in gynae. ward. Peak age of ectopic pregnancy was 21-25 years (35%) and low parity was most cases (36.67%). Symptoms of presentation was abdominal pain, amenorrhoea, shock and syncopal attack. Duration of amenorrhoea was 6-8 weeks 65% cases, history of PID was 40% patients, right tubal affection was 65% cases. **Conclusion:** It reveals different parameters of ectopic pregnancy of Bangladesh, much of morbidity can be prevented by better obstetrics and family planning care.

INTRODUCTION

Ectopic pregnancy is one in which a fertilized ovum implants in an area other than the endometrial lining of the uterus.^[1] Rupture ectopic pregnancy is a significant cause of maternal morbidity and mortality as well as fetal loss. It is the leading cause of pregnancy related death in the first trimester and accounts for 9% of all pregnancy related deaths.^[2]

In tubal ectopic pregnancy, implantation is typically in the wall of the tube, In the connective tissue beneath the serosa. There may be little or no Decidual reaction and minimal defense against the permeating trophoblast. The trophoblast invades blood vessels to cause local haemorrhage.^[3] A haematoma in the sub serosal space enlarges as pregnancy progresses. Distention of the tube then pre-disposes to rupture.

Ectopic tubal pregnancy was first described in 963 AD by Albucasin, afa mous Arabic writer on surgical topics.^[4] Ectopic tubal pregnancy was first discussed as an obstetrical complication by F. Mauriceau in his obstetrical text book in 17th century.^[5] The first successful operation for rctopic pregnancy was

performed on march 1, 1883 by Lawson Tait in England.^[6,7] He performed a salpingectomy. During the past two decades incidence of tubal pregnancy has increased. The incidence of tubal pregnancy varies from country to country, race to race, even among the different communities in the same country.^[8,9,10] An estimated eight ectopic implantation occurred for cvery 1,000 conceptions as revealed by a study conducted abroad.^[11] Similar observation (i, e. 8 per 1000 pregnancies, a hospital statistics) had also been described in a local Study here in Bangladesh.^[12] The incidence is about 1 in 100 pregnancie.

Over 75% are diagnosed before 12th week of gestation. Ectopic pregnancy May occur any time from menarche to menopause, over 40% occur in Women between ages 20 and 29 years. But it appears that the relative risk of an ectopic pregnancy increases with the age of the women, history of pelvic inflammatory disease. history of sexually transmitted disease, use of intra-uterine contraceptive decives, tubal sterilization, history of infertility and past pelvic (mainly tubal) surgery.

Early detection of tubal pregnancy before rupture presents a diagnostic Challenge. Early diagnosis of tubal pregnancy before rupture would significantly reduce the complication rate by permitting the conservative tubal surgery. While Kader suggests that at the time of surgery only 5-15% of tubal pregnancies are unruptured.^[12] Sherman *et al.* reported that 58% of their tubal pregnancies are unruptured at surgery.^[13]

Accurate history taking and proper physical examination is most important in the diagnosis of ruptured ectopic pregnancy. It is well known that ruptured ectopic pregnancy is difficult as the patient may present varied clinical picture. Many patients are misdiagnosed as suffering from acute appendicitis because the severity of their physical stage leads to a hurried and inadequate history. The mode of presentation and clinical features are sometimes confusing and there is often considerable delay before the diagnosis can be made with confidence.^[14]

As soon as the diagnosis of ruptured ectopic pregnancy is made, immediate operation treatment is essential because ruptured ectopic pregnancy is life threatening to the mother. Many of the unruptured tubal pregnancy as well as ruptured pregnancy may be managed by laparoscopic technique. Conservative surgical measures include milking of the tube, liner Salpingostomy. Advantages of conservative management are significant reduction of operative morbidity, hospital stay as well as cost, improved chance of subsequent successful pregnancy may be a potential benefit.

To save maternal life and future, high index of suspicion, easy and accurate diagnosis, immediate and skillful surgery is the moral responsibility of management of ruptured ectopic pregnancy. Most of the patients are diagnosed when tubal damage has already taken place either by rupture or by severe haemorrhage when immediate laparotomy and clamping of the bleeding

vessels may be the only means of saving the life of a morbid patient.

MATERIALS AND METHODS

This is a prospective study of 60 cases of ruptured ectopic pregnancy. The study was conducted in the department of obstetrics and Gynaecology, Faridpur Medical College Hospital, Faridpur. Some patients who were misdiagnosed as other diseases and were admitted in surgery and Medicine unit of the same hospital were also included in this study. The study was conducted for 2 years from September 2003 to August 2005. Total patients were 5216, obstetric patients 4306, abortion 842, ectopic pregnancy 68 - chronic silent 8 patients and ruptured ectopic 60.

After taking a careful history with detailed information of the menstrual, obstetric and contraceptive history, a thorough physical examination was performed to diagnose ectopic pregnancy clinically. A pre-structured questionnaire (clinical data sheet) was filled up by interviewing patients when they were haemodynamically stable after resuscitation.

In some cases, investigations (e.g. pregnancy test, culdocentesis and Ultrasonography) were done to support the clinical diagnosis. Haemoglobin estimation and blood grouping was done in all cases. Histopathological confirmation was done in most of the cases.

Data compilation and necessary statistical analysis was done using computer-based software statistical Package for Social Science (SPSS).

OBJECTIVE

Objective of this study is to find out the prevalence, analyze clinical presentation and per-operative findings of laparotomy, usually Pfannenstiel (transverse) incision given, and repaired intradermally without retaining abdominal drain tube.

RESULT

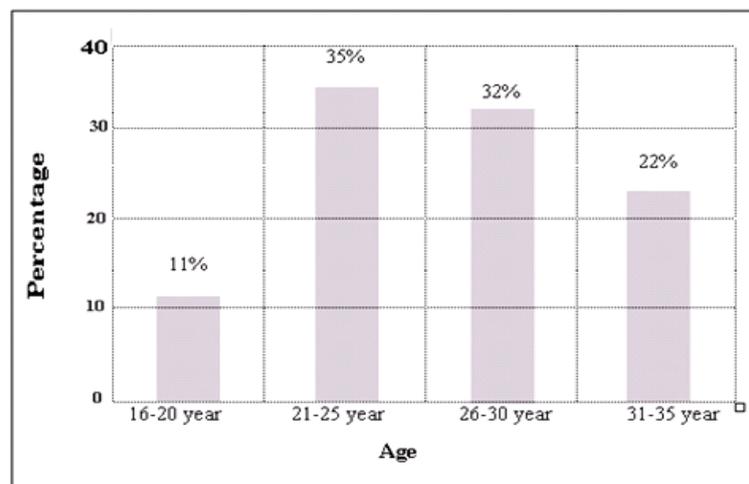


Fig. 1: Age distribution of patients with ruptured ectopic pregnancy. (n=60)

35% of our cases were between 21-25 years age group. The range varies between 17 and 35 years. Mean (\pm SD)

age of the patients was 25.88 ± 4.463 years, median 26 years range 17-35 years.

Table I: Presenting symptoms of rupture ectopic pregnancy.

Symptoms	No. of cases	Percentage
Abdominal pain	60	100%
H/O amenorrhoea	57	95%
P/v- Bleeding	36	60%
Syncopal attack	38	63%
Shock	56	93%
Early pregnancy symptoms	29	48%

All cases had abdominal pain and most patients had H/O-amenorrhoea (95%) and shock (93%); 63% patient presents with syncopal attack, 60% With p/v- bleeding and 48% patient had early pregnancy symptoms.

This table shows that most of the patients presented with H/O amenorrhoea (95%), but 6.67% patients had no H/O amenorrhoea. 63.33% patients presented with short period of amenorrhoea (6-8 weeks). The mean, median and range of period of amenorrhoea was as follow:

Table II: Amenorrhoea associated with rupture ectopic pregnancy.

Amenorrhoea	No. of cases	Percentage
6-8 weeks	39	65%
>8-10 weeks	14	23.33%
> 10 weeks	4	6.67%
No. H/O-Amenorrhoea	4	5%
Total	60	100%

Parameter	Mean \pm SD	Median	Range
Amenorrhoea in weeks	8.09 \pm 1.98	8	6-16

Table III: Mode of clinical presentation (n=60).

Presentation	No. of cases	Percentage	
Acute	24	40%	
Sub-acute	Irregular vaginal bleeding with fainting attack	10	16.67%
	Painless vaginal bleeding	7	11.67%
	Vaginal bleeding with Abdominal pain and occasional Passage of decidual cast	16	26.66%
	Heavy vaginal cast	1	1.67%
Silent	2	3.33%	

Patient presented in 3 different ways (Table-VI) like acute, sub-acute and Silent. About 57% patient in this series presented with sub-acute form of presentation. On

the other hand 40% patients presented in acute form. i.e; With massive intraperitoneal hemorrhage and collapse.

Table IV: Signs of rupture ectopic pregnancy.

Sign	No. of cases	Percentage
Abdominal tenderness	60	100%
Abdominal rigidity	39	65%
Abdominal distension	29	48%
Adnexal lump	7	11.67%
Pain on movement of cervix (CET)	46	76.67%
Per-Vaginal bleeding	36	60%

(CET-standards for cervical excitation tenderness)

All cases had abdominal tenderness. Most of the cases had pain on movement of cervix, 11.67% had lump in the fornix, 76.67% pain on P/V examination and 60% presented with abnormal p/v-bleeding.

Table V: Predisposing factors.

Risk factor	No. of cases	Percentage
Chronic pelvic inflammatory Disease (Chr. PID)	24	40%
H/O-Pervious abortion/MR	21	35%
Previous Plevic operation	2	3.33%
Intrauterine contraceptive device	4	6.67%
Following tubectomy device	1	1.67%
H/O-infertility	4	6.67%
H/O- Cesarean section	1	1.67%
No Obvious predisposing factors	3	5%

Among the Predisposing factors past history of Chr. PID tops the list (40%), followed by history of previous abortion M/R (35%). Number of Predisposing factor was found is 5% of patient.

Table VI: Result of culdocentesis. Culdocentesis was done in 35 cases and was positive in 74.29% cases.

Result	No. of cases	Percentage
Positive	26	74.29%
Negative	9	25.714%
Total	35	100%

Table VII: Aids required for the diagnosis of the ectopic pregnancy.

Diagnostic aid	No. of cases	Percentage
History, physical examination plus culdocentesis	48	80%
Ultrasonography	10	16.67%
Laparotomy	2	3.33%
Total	60 cases	100%

Table VII, shows 80% patients could be diagnosed as ectopic pregnancy.

Only by history, physical examination and culdocentesis. Ultrasonographic Help was needed in 16.67%; final diagnosis by laparotomy was required in 3.33% cases.

Table VIII: Types of operation performed.

Types of operation	No. of cases	Percentage
Unilateral salpingectomy	43	71.67%
Unilateral salpingo-oophorectomy	3	5%
Salpingectomy with contralateral tubectomy	13	21.66%
salpingectomy	1	1.67%
Total	60 cases	100%

In table- VIII showed out of 60 cases unilateral salpingectomy was done in 71.67% cases, unilateral salpingo-oophorectomy in 5% cases, Salpingectomy with contralateral tubectomy 21.67% cases and Salpingectomy in 1.67% cases.

Table IX: Outcome of immediate operation.

Outcome	No. of cases	Percentage
Smooth and uneventful recovery	44	73.33%
Minor complication	14	23.33%
Major complication	2	3.33%

In table IX showed that about three-fourth of the patients had smooth recovery. There was no death in this series of operation.

DISCUSSION

Patients of ectopic pregnancy may present to the general practitioners, gynaecologists and surgeons. Prevalence of ectopic pregnancy is increasing all over the world,

Suggestive of attention should be directed towards improved diagnosis and its management.^[15]

Rupture ectopic pregnancy is the leading cause of pregnancy related death in first trimester and accounts for about 9% of all pregnancy related deaths.^[16]

A prospective study of 60 cases of rupture ectopic pregnancy was done in Faridpur medical college Hospital, Faridpur Bangladesh from September 2003 to August 2005. Detailed and methodical study of 60 cases of rupture ectopic pregnancy was done among the total gynaecologic patients of 1213 in study period, there was 8 cases chronic and silent ectopic pregnancy.^[17] Percentage of rupture ectopic pregnancy was 1.15%.

Figure-I shows that peak age of ectopic pregnancy is 21-25 years and is about 35% and then 26-30 years is 32% the range of ectopic pregnancy varies from 17-35 years. But Schiffer MA showed in his study, the largest number being 20-34 years of age group.^[20]

In this series table I shows 100% patients came with abdominal pain; 95% patients came amenorrhoea; 93% patients with shock; 60% patients with per-vaginal bleeding and only 48% patients with early pregnancy symptoms. Weckstein LN in his survey showed that 75-95% of his patients were amenorrhoeic and 50-80% patients presented with vaginal bleeding.^[6]

Table II: shows 63.33% patients gave history of amenorrhoea of 6-8 weeks, 5% patients gave history of no amenorrhoea. More than 10 weeks of amenorrhoea present only in 6.67% patients.

In table III: it is shown that 40% of the patients came in the hospital in a state of massive intraperitoneal haemorrhage with cardio-vascular collapse, but in the rest 60% cases there is sign- symptoms of intraperitoneal haemorrhage but they were quite alert and anxious.

In table IV, clinical sign of examination were abdominal tenderness 100% cases, abdominal rigidity 65% cases, pain on movement of cervix was 76.67% and abdominal distention was 48% patients, 11.67% patients had a palpable lump in the adnexa. Tancer *et al.* found the above states sign of abdominal tenderness in 90.8% cases.

In table V, among the risk factors identified in my series history, pelvic Infection (40%) and previous history of abortion/ MR(35%) occupies the top of the list. Next comes the patients who used IUCD (6.67%) And following tubectomy (1.67%). No patients had IUCD in situ when presented with rupture ectopic pregnancy.

In table VI, shows culdocentesis for diagnosis of ectopic pregnancy, it was positive in 74.29% cases. A negative finding does not rule out the presence of an ectopic pregnancy.

In this series table VII shows, diagnostic aide required for diagnosis of ectopic pregnancy. However 80% of our cases were diagnosed from history, physical examination plus culdocentesis.^[18]

From table VIII, it was found that unilateral salpingectomy was done in 71.67% cases; unilateral salpingo-oophorectomy 5% cases and salpingectomy with contralateral tubectomy 21.66% cases. Right tube was affected in 65% cases.^[19]

From table IX, it is found that recovery of 73.33% patients was smooth and uneventful. There was no death after operation or after admission in gynae ward.

CONCLUSION

The present series is a prospective study of 60 cases of rupture ectopic pregnancies but there were another 8 cases of chronic and silent ectopic pregnancies, all the patients were treated by laparotomy. All of them were instructed to come and inform immediately after they conceive subsequently. Outcome of emergency operation of ectopic pregnancy in this series is good but follow up period for the post-operative patients for their subsequent pregnancies was not sufficient. But outcome of immediate management was smooth.

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