

# ECTOPIC PREGNANCY; AUDIT AT MAULA BAKHSH TEACHING HOSPITAL SARGODHA

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**ABSTRACT...Objective:** To find out the causative factors for rising rate of ectopic pregnancy in young women at periphery. **Design:** Descriptive study. **Place and Duration of Study:** Maula Bakhsh Teaching Hospital ( Obstetrical and gynaecological unit) Sargodha , from January 2008 – December 2008. **Patients and Methods:** All patients who were presented in labour room emergency and gynaecological out patients department with confirmed diagnosis of ectopic pregnancy on USG were included in the study. A pre-formed proforma was used to record the details about the demographic features, pre-existing risk factors for ectopic pregnancy, clinical features at presentation and management. **Results:** Frequency of ectopic pregnancy was too high in our study compared to international studies. Majority of patients were young and nullipara. Leading risk factor is pelvic inflammatory disease due to septic induced abortion. 92% of patients had acute presentation. **Conclusions:** Rising rate of ectopic pregnancy was found in young, nulliparous women secondary to pelvic inflammatory disease. The frequency can be reduced by awareness of reproductive health care, liberal contraceptive utilization, acceptable adequate planned family. Early diagnosis and timely referral may be helpful in treating the patients prior to tubal rupture with decreased morbidity and mortality.

**Key words:** Ectopic Pregnancy, Nullipara, Pelvic Inflammatory Disease, Open Surgery.

## INTRODUCTION

Ectopic pregnancy is a pregnancy in which the fertilized ovum implants in any location other than the endometrial lining of uterus<sup>1</sup>. More than 95% of ectopic pregnancies occur in fallopian tubes<sup>2</sup> followed by ovary, cervix, cornu of uterus and abdominal cavity. Moreover the caesarean scar is recently identified as a nidus for ectopic gestation<sup>3</sup> these abnormal sites always carry a risk of catastrophic haemorrhage and have been traditionally managed by laparotomy<sup>2</sup>. Worldwide around 10-15% of maternal deaths in 1<sup>st</sup> trimester are contributed by ectopic pregnancy<sup>2</sup>. Upto 1/3 of patients of the patients may die at home despite consultation with the physician or gynaecologist due to a variety of clinical presentations<sup>4</sup>. Current century is witnessing a four fold increase in the incidence of ectopic pregnancy in the industrialized countries<sup>1</sup> and such rise is mainly attributed to advanced techniques for diagnosing early ectopic and increased prevalence of pelvic inflammatory disease<sup>5</sup>. Despite a rising incidence, the related morbidity and mortality is declining in the developed countries due to well organized health - care delivery system and the availability of sophisticated techniques for the early recognition and treatment of ectopic pregnancies<sup>3</sup>. The availability of medical therapy, laparoscopic techniques<sup>6</sup> and more recently uterine artery ligation<sup>7</sup> have appeared promising in terms of better conservation of fertility,

shorter hospital stay and the related surgical morbidity.

In Pakistan the reported incidence has been cited as 1:112 to 1:130<sup>8</sup> but the real figures could be higher due to under diagnosis and poor statistical record. Poverty, quackery, lack of health awareness and poor co-ordination between the health care providers lead to delayed recognition and management. As a result patients are frequently seen in a moribund state and usually managed by laparotomy with significant impairment of fertility.

## OBJECTIVE

This study was designed to find out the causative factors for rising rate of ectopic pregnancy in young women at periphery.

## DESIGN

Descriptive study.

## PLACE AND DURATION OF STUDY

Maula Bakhsh Hospital (Obstetrical and gynaecological unit) Sargodha. From January 2008 – December 2008.

## PATIENTS AND METHODS

This was descriptive study conducted over 12 months (Jan 2008 - Dec 2008) on 27 patients who presented at

Maula Baksh Hospital (Teaching Unit) Sargodha.

### INCLUSION CRITERIA

All patients who presented at labour room emergency and outpatients department, with confirmed diagnosis of ectopic pregnancy on USG were included in study.

### EXCLUSION CRITERIA

All patients who presented with early pregnancy bleeding not consistent with diagnosis of ectopic pregnancy were excluded.

### METHODOLOGY

At admission, detailed history would be taken by the patient i.e age, parity, M/F, LMP, amenorrhea, lower abdominal pain, vaginal spotting and bleeding (Triad of symptoms) and past history to rule out risk factors i.e previous history of ectopic pregnancy. Previous history of instrumentation by dai, H/O vaginal discharge, H/O fever, H/O contraception especially for IUCD, H/O ovulation induction. After detailed history, GPE especially for vitals done. Abdominal examination for tenderness and cervical excitation.

Diagnosis of ectopic pregnancy was confirmed by urine for pregnancy test and pelvic USG (uterus empty, adenexal mass and fluid in cul de sac).  $\beta$ HCG was sent in hemodynamically stable patient.

Majority of patients in this study had presented in emergency so after confirmation of diagnosis, baseline investigations and blood group for cross match were sent. After consent, laparotomy was done. In doubtful cases laparoscopy proceed laparotomy was done. All details were entered in pre-formed proforma.

### RESULTS

Frequency of ectopic pregnancy was too high in our study compared to international studies. As total 27 patients were presented at Maula Bakhsh Hospital in 12 months i.e in selected period for study [January 2008 –December 2008]. Out of 27 patients, 20 patients got typical acute presentation of amenorrhoea and lower abdominal pain. Urine for pregnancy was positive and on ultrasound ectopic pregnancy was diagnosed. Four patients got no symptoms except vaginal spotting. Three

patients got subacute presentation with only H/O missed period and on examination, tenderness in one of fornices and cervical excitation.

All patients presented in this study were between 25 – 30 years of age except 2, one was 35 and other was 40 years old. Majority patients were primigravida i.e 22 vs 5.

As far as risk factor is concerned pelvic inflammatory disease is one of leading risk factor which is proved in this study. 21 patients had pelvic infection due to past H/O induced abortion by Dai under septic conditions which is comparable to study done by Kamwendo F in 2000<sup>10</sup>. Two patients had previous H/O tubal pregnancy. Two patients had H/O IUCD insertion for more than 3 years. One patient had H/O ovulation induction with clomephene citrate which is also risk factor for tubal pregnancy as shown in references<sup>14</sup>.

All patients got open surgery i.e laparotomy with salpingectomy. Those 3 patients who had subacute presentation, on laparotomy, they had tubal abortion. No patients were managed conservatively in this study due to their acute presentation.

### DISCUSSION

Ectopic pregnancy is common amongst first trimester complications. Frequency of ectopic pregnancy was high in our study as compared to international studies (Total 27 patients) because this is district unit draining most of tehsil units and small clinics.

Careful inquiry of menstrual history, availability of sensitive one-step urine pregnancy test and ultrasound confirm the diagnosis of ectopic pregnancy. In this study, out of 27, 20 got typical symptoms of ectopic pregnancy and remaining 7 were diagnosed by +ve urine test and confirmed by ultrasound.

In this study, aim was to find out causative factors for increasing rate of ectopic pregnancy in those patients who presented at Maula Bakhsh Hospital Sargodha. Pelvic inflammatory disease is leading causative factor as proved in this study (21 patients out of total 27 patients had H/O infection) because at periphery, induced

abortion under septic conditions and introduction of vaginal suppositories for treatment of infertility is common practices used by dai which lead to pelvic inflammatory disease and later lead to ectopic pregnancy, this is comparable to study by Kammendo F in 2000<sup>10</sup>. Majority of the patients were of low parity, younger age and had the pelvic inflammatory disease as the main risk factor. The trend of early marriages in our society coupled with lack of knowledge regarding sexual health predisposes the young women to sexually transmitted diseases. Moreover there is a very common practice of vaginal insertion of home made herbal medicines under extreme unhygienic conditions for the cure of sexual illness, thus the women often become victims of chronic pelvic inflammatory disease. Westrom and Piri found pelvic inflammatory disease as the strongest risk factor for the pathogenesis of ectopic pregnancy<sup>12</sup>. Rose reported a 9 fold increased risk for ectopic pregnancy in patients with pelvic inflammatory disease and emphasized the importance of usage of condoms<sup>13</sup>. The alarming rise of pelvic inflammatory disease need a preventive strategy with promotion of health education, in particular the safe sexual practice in our community. Emphasis should be towards treatment of both partners for complete cure.

In remaining patients 2 had H/O IUCD insertion for >3 years which lead to loss of cilia from tubal epithelium 1 patient had H/O ovulation induction.

As far as management is concerned, all patients underwent surgery. Majority of patients required complete or partial salpingectomy. None of the patients in our study fulfilled the criteria for the medical therapy. Laparoscopy and medical therapy have now emerged as the widely used therapeutic modalities with great success terms of reduced morbidity, shorter hospital stay and conservation of fertility<sup>3</sup>. However choice depends upon early identification of ectopic pregnancy and stable condition of patients<sup>15</sup>. Since most of our patients presented late in a critical state they could not be offered these modern management options. Establishment of early pregnancy units like one in the industrialized nations can help in early diagnosis and

management with reduced morbidity and better conservation of fertility.

We did not find any maternal death in our study and this correlated well with the trend of reduced mortality related to ectopic pregnancy in the developed world. However this should be cautiously commented. Our results may only be depictive of the tip of an ice-berg and many of the deaths due to ectopic pregnancies could have been under-reported and unexplored. Another reason may be the prompt surgical intervention in our cases.

### CONCLUSION

Rising rate of ectopic pregnancy was found in young, nulliparous women secondary to pelvic inflammatory disease. The frequency can be reduced by awareness of reproductive health care, liberal contraceptive utilization, acceptable adequate planned family. Early diagnosis and timely referral may be helpful in treating the patients prior to tubal rupture with decreased morbidity and mortality.

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## PREVIOUS RELATED STUDIES

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**Just when I think I have  
learned the way to live,  
life changes.**

*Hugh Prather*