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STUDY OF ECTOPICS IN EMERGENCY SURGICAL ADMISSIONS

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ABSTRACT

AIMS &OBJECTIVES: Ectopic pregnancy continues to be a leading cause of maternal morbidity and tubal rupture it is still a life threatening complication. The objectives of present study are to evaluate maternal obstetric related risk factors with respect to ectopic pregnancy. and various clinical presentation and modalities of treatment of ectopic pregnancy maternal outcome

METHODS: A total of 124 pregnant women with ectopic pregnancy were included in the study [5.9 per 1000 pregnancies] , admitted as emergency cases from December 2014 to September2016 at Government General hospital, Kakinada, attached to Rangaraya Medical College, a teaching &referral hospital with more rural patients and referrals. A detailed history and clinical evaluation was done Diagnosis is done by urine pregnancy test,culdocentesis paracentesis,USG. All patients were subjected to laparotomy.
Admissions were analysed for obstetric risk factors, clinical presentation, gestational age, surgical procedures and maternal outcome. Results werestatistically analysed with SPSSversion.

RESULTS: The most common age of women was between 25-30yrs ,mean age of 26.5 yrsunbooked AN cases. The mean gestational age with ruptured tube was 7.2 +/- 2.2 weeks in 61%.Pain abdomen and bleeding PV were common symptoms in 92.7%. . Most common site is tube (97.5%) more so at Ampullary ectopics accounted to 66.29%. Isthmus 16.1%, fimbrial,12.9% ovarian 0.8% and Heterotropic 0.8% Tubal rupture was more often in women with multiparous women in 68.5% .History of ectopic pregnancy was found in 35%. Post tubectomy 29.3 %., pelvic inflammatory disease24.2% There were no cases of infertility under evaluation and treatment. In 86.2% of cases had haemoperitoneum was more than 250 ml. Salpingectomy is the most common treatment done in 72.58%. Anaemia Paralytic ileus were common postoperative complications There were 3 cases of maternal deaths: due to haemorrhagic shock ,septicaemia with renal failure, ventilator associated pneumonia.

CONCLUSION: Management of Ectopic gestation has changed from radical to conservative medical and minimally invasive surgical methods. But in the present study most of the patients presented late with ruptured variety, underwent emergency surgery.Improvement in health seeking behaviour,.high degree of suspicion,timely recognition and intervention are required in obstetric ectopic emergencies to reduce maternal morbidity and mortality.

KEYWORDS : ectopic pregnancy,tubal rupture,morbidity

Introduction

Ectopic pregnancy was first recognized in 1693 by Busiere when he was examining the body of a prisoner executed in Paris. Gifford of England made a more complete report in 1731 that described the condition of a fertilized ovum implanted outside the uterine cavity.[1] Ectopic pregnancy is one of the most common acute abdominal emergencies. The word ectopic means out of place[2]. . Quite often delayed or mistaken diagnosis delays surgical treatment and endangers the life of the patient. There is a rapid increase in incidence of ectopic pregnancy observed in last decade and has been ascribed to an increase in STD s , ART s, use of IUCD s ,previous abdominal pelvic surgeries3. The diagnosis of ectopic pregnancy has become frequent during the last decades, but the incidence of ectopic pregnancy rupture has declined7.This declined due to quantitative HCG measurements, non invasive procedures, minimally invasive procedures and laparoscopy. Early diagnosis reduces the risk of tubal rupture and allows conservative management.

AIM AND OBJECTIVES STUDY: To study age group, parity and the risk factors with respect to ectopic pregnancy.and various clinical presentation and modalities of treatment of ectopic pregnancy in emergency surgical admissions.

MATERIALS AND METHODS: A total of 124 pregnant women with ectopic pregnancy were included in the study, Out of 24,416 deliveries 124 were ectopic pregnancies, with incidence of[5.9 per 1000 pregnancies] that is 1 in 170, admitted from December 2014 to September2016 at Government General hospital, Kakinada

attached to Rangaraya Medical College, a teaching &referral hospital. Diagnosis is done by urine pregnancy test, culdocentesis paracentesis USG. Admissions were analysed for obstetric risk factors, clinical presentation ,gestational age,surgical procedures and maternal outcome.Results were analysed with SPSS version

Study design : Non randomized longitudinal prospective observational study.

Total patients were,n=124 The Mean age of incidence was 26.5 yrs shown in Table1, Most Common in Multiparous Women Incidence in Nulligravida is 31.4%Incidence in Multigravida is 68.5%

INCIDENCE OF ECTOPIC PREGNANCY - AGE
Table1

Age in years	No 124.	%
<20 years	24	19.3
21-25years	53	42.7
26-30years	38	30.6
>31years	9	7.2

In our study INCIDENCE OF ECTOPIC PREGNANCY - PREDISPOSING FACTORS
Table2

	No	%
Post tubectomy	36	29.3
PID	30	24.19
No identifiable risk factors	25	20.16
Post LSCS	16	13.7
Abortion	14	11.2
Infertility treatment	7	5.6
Pulmonary tuberculosis	2	1.6
Previous ectopic	1	0.8
Uterine anomalies	1	0.8
IUCD	1	0.8

In our study, the Incidence of post tubectomy and pelvic inflammatory disease is high,3 cases were HIV positive, suggesting, the increased incidence of sexually transmitted disease. As shown in table 2. A bout 56.45% of patients presented with classical triad symptoms ie. Pain abdomen, amenorrhoea, vaginal bleeding.

Symptom-most common symptom is pain abdomen. urine pregnancy test is 96.7% and ultra sound is 95% in diagnosis of ectopic pregnancy.S.Bhcg was done in only few patients as laparotomy was done . Majority are ruptured ectopic pregnancies constituting 88.9% in our study.

DISCUSSION

Most of the women are in the age group of 25-30 years with mean age of incidence is 26.9 years and are multigravidas, more common in reproductive age group. Incidence of ectopic pregnancy is raising and following are the incidences in various studies. Shown in table 3

ICMR	1990	1:250
Rose jophy et all	2002	15.2 :1000
Rashmi A Gaddagi	2012	5.6 in 1000 1 in285 deliveries
Shraddha shetty	2014	1 : 399
Present study	2014-	5.9 in 1000 and 1:170

Table 3 Showing ectopic incidence

Present study showing increased incidence of ectopics due to increase in PID,post tubectomy failures,previous history of abortions,pelvic surgeries increasing investigative procedure s.Results of our study correlated with other studies(6,8,9,10) Most of the women are multiparous i.e the incidence is 68.5%,that is correlating with the studies conducted by Vishma ,Muralidhar LakshmiDevi 2014, by V.S.Sudha,Delphine Rose Thangaraj 2016 ,study conducted by Prasanna B ,Jhansi CB,Swathi K,Shaik MV 2016.(11-16)

The aetiological / risk factors in the present study showed no identifiable risk factors in 20.16%,history of PID in 21.7%,post tubectomy failures 29.3%, post caesarean pregnancies 13.7%, history of abortions 11.2 %and ART in 5.6%.other risk factors in our study are uterine anomalies,IUD insertion,known case of tuberculosis,patients with HIV infections.Incidence of PID correlating with prasanna B,Jhansi CB,Swathi K Study and showing an increasing trend.Highest incidence seen in post tubectomy (29%),PID (24.19%),post caesarean pregnancies(13%) and history of previous abortions withD&C.

Patients who took infertility treatment in the present study is 5.6%.No history of ART in the present study as patients from low socioeconomic status.Tubectomy failure was statistically significant from our data p value less than 0.002

In the present study the most common presenting complaint is abdominal pain (92.7%) followed by amenorrhoea (88.7%) and followed by vaginal bleeding(73.38%),coinciding with the studies conducted by Lawani ,B.Anozie and pawl 2013,Rashmi A Gaddagi ,Chandrasekhar study 2012, Rajendra Wakankar ,Kshama Kedar 2015, V.S.Sudha ,Delphine Rose 2016.

Patients presented with the classical traid of ectopic pregnancy symptoms that is pain abdomen,amenorrhoea,bleeding p/v is 56.45%,coinciding with the studies of Rajendra Wakankar,Kshama Kedar 2015,Begum Shaikh,Sandhya Jampala ,S.Shyamala Devi,M.Mallika 2016.Others symptoms observed in the study are nausea/ vomiting 12.09%,syncope in 24.1%,fever 3.2%,and shoulder pain 0.8%.

Majority proportion of the patients in the study had haemoperiton eum 81.45% due to ruptured ectopics and 30% of the patients presented in shock. Majority needed 2-3 units blood transfusion and 51.6 % have abdominal tenderness, 62.6 % have cervical movement tenderness.

Most of the patients in our study presented with ruptured ectopic (66.9%) followed by tubal abortion and unruptured ectopic.Out of 66.9% ruptured ectopic 30 members (24.1%) presented in shock.Out of 30 members mortality is seen in 3 members (2.4%).

Most of the patients 96% have urine pregnancy test positive showing high accuracy for diagnosis of ectopic pregnancy, similar observation made in North Westren University by Joisel Tenore,study conducted by Dr.Rashmi A Gaddagi, Dr.A.P. Chandrasekhar (97.3%).2012.

All the patients have correlated with U/S findings 95% that is the presence of ectopic pregnancy of which 6 members with tubal abortion wrongly diagnosed as ruptured ectopic correlating with the study done by Vishma . H.,Some Gowda,Lakshmidevi Muralidhar 2012.Most common is tubal pregnancy 97.6%.in Ampulla (65.3%),followed by isthmus 16%,fimbrial 12% and interstitial 3.2% and similar results are found in studies conducted Rashmi A Gaddagiand A.P.Chandrasekhar.2012,Rajendra Wakankar,Kshama Kedar 2015, V.S.Sudha,Delphine Rose Thangaraj 2016

TABLE 4- ECTOPIC IN AMPULLARY PART OF FALLOPIAN TUBE- IN VARIOUS STUDIES.

Rashmi A Gaddagi, A.P.Chandrasekhar	2012	69.7%
L.Lawani,B.Anozie,pawl	2014	55.1%
Prasanna B,Jhansi CB,SWATHI K,	2016	64.2%
V.S.Sudha,Delphine Rose Thangaraj	2016	63.15%
Present study	2015	65.3%

There were 10 cases of unruptured ectopics ,with only 2 cases satisfying medical management but patients refused consent for medical management.

In the present study all patients underwent emergency laparotomy and most common treatment is salpingectomy 70.9% ,followed by salpingoophorectomy 16% because most of the patients were acute with ruptured ectopic at the time of their presentation correlating with the studies of Ritu Gupta ,Sanjay Porwal 2012,Shraddha Shetty, Anil Shetty 2014, V.S.Sudha ,Delphine Rose Thangaraj 2016.

Fimbriectomy done in 9.6%, partial oophorectomy done in case of ovarian pregnancy and salpingectomy with removal of rudimentary horn done in case of secondary abdominal pregnancy.

66.9% of cases are ruptured ectopic ,followed by 24.8% are tubal abortions and 8% are unruptured ectopic correlating with the studies conducted by Rajendra Wakankar,Kshma Kedar 2015, V.S.Sudha, Delphine Rose Thangaraj 201617.

Most of the patients presented with ruptured ectopic most of them are anaemic post operatively and needed blood transfusion. paralytic ileus developed in 11.2 %,secondary suturing required in 8% and mortality seen in 2.4% of cases due to direct haemorrhagic shock in one patient and sepsis with multiorgan failure and ventilator associated pneumonia.

CONCLUSION

This is one of the most common acute abdominal emergencies Delayed or mistaken diagnosis delays surgical treatment and endangers the life of the patient.Out of 24,416 deliveries 124 were ectopic pregnancies,with incidence of 5.9 in 1000 deliveries that is 1 in 170. The mode of treatment has also been changed from radical to medical and expectant management conservative surgery .But in the present study most of the patients landed for emergency surgery due to late referral. Improvement in health seeking behaviour,.high degree of suspicion,timely recognition and intervention are required in obstetric ectopic emergencies to reduce maternal morbidity and mortality.

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Disclosure

The authors report no conflicts of interest in this work

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