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EXTRA UTERINE GESTATIONS, A 3 YEAR EXPERIENCE IN A TERTIARY CARE HOSPITAL IN SOUTH INDIA

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INTRODUCTION

Ectopic pregnancy is one of the major causes of maternal death[1] and its incidence has been increasing for years and currently two to three times higher than it was 20 or 25 years ago. The increase in incidence in the past few decades is thought to be due to Pelvic inflammatory disease (PID) and improved diagnostic modalities.[2] Ectopic pregnancy occurs when the developing blastocyst becomes implanted at the site other than the endometrium of the uterine cavity. The most common site of ectopic pregnancy is the Fallopian tube followed by cervix, ovary, abdomen, intestine and the caesarean scar.[2] Most common risk factors associated with ectopic pregnancy are PID, past history of ectopic pregnancy, smoking at the time of conception, previous pelvic surgery, induction of ovulation and intrauterine device usage.[3] Other risk factors, such as douching, early onset of sexual activity, and multiple partners probably increase the risk of ectopic pregnancy indirectly by increasing the risk of infection.[4] Though the use of contraceptives decreases the rate of pregnancy, but it increases the risk of ectopic pregnancy.[5] Majority of patients exhibit a wide range of symptoms though abdominal pain, amenorrhea and unusual vaginal bleeding are the most common presentation. In late stages, patient may present with shock in case of rupture which is one of the most common cause of mortality in the reproductive age group.[1] Although majority of the ectopic pregnancies are located in ampulla of fallopian tube, relative infrequency of implantation sites like cornual, ovary, abdominal makes the study of treatment efficacy difficult. In our study, we attempt to summarize the relative incidence of various sites of pregnancy implantation, risk factors, age group and its relation to parity in a tertiary care centre.

MATERIALS AND METHODS

A detailed non-random prospective study of 149 cases of extra uterine gestation were carried out in the department of Pathology, Modern Government Maternity Hospital, Hyderabad for 3 years and 4 months from January 2013 to April 2016. Patients suspected of ectopic pregnancy were further evaluated by ultrasonography and beta HCG levels and surgery was done in the department of Obstetrics and Gynaecology ,after taking informed consent. All the gross specimens of ectopic pregnancy were received in the department of Pathology in 10% of Neutral Buffered formalin solution. The sections were taken after proper fixation, processed and stained with routine Haematoxylin and Eosin and further evaluated under microscope.

Ethical consent was taken for this study.

OBSERVATION AND RESULTS

During the study period from Jan 2013 to April 2016, total numbers of pregnancies admitted in Modern Government Maternity hospital, Hyderabad were 52,410. Among them, 149 cases were admitted with ectopic pregnancies. Detailed analysis of these cases were done. Majority of the patients were in the age group of 20-30 years (80%) (Figure 1). Most of them were primipara (59.7%) (Figure 2). In our study, abdominal pain, amenorrhoea and abnormal vaginal bleeding were the most common presentations. Though 9 patients admitted with weak peripheral pulse in shock condition. Immediate surgical management done with blood transfusion. Gestational age of presentation was 4-12 weeks and a single abdominal case was presented at the age of 18 weeks (Figure 3). Comparatively ovarian pregnancies (4-6 weeks) presented earlier than tubal (6-12 weeks). In our study, 145 cases (97.3%) of ectopic pregnancies were in fallopian tube followed by ovary (2%) and abdominal (<1%) (Figure 4). Left sided fallopian tube (74 cases) was more commonly involved than right sided (71 cases). Ampullary region (41.3%) of the fallopian was the most common site of ectopic pregnancy followed by cornual (37.2%), isthmus (12%) and fimbria (8.96%) (Figure 5). Grossly, in majority of the suspected cases, fetal parts were identified in the cut section. There was one case of abdominal pregnancy with fetus outside the uterine cavity and microscopically,

routine H & E sections revealed chorionic villi line by cytotrophoblasts and syncytiotrophoblasts. In few cases of tubal pregnancies, cut section of fallopian tube showed fetal contents and Haemorrhage confirmed under microscopically. Case of ovarian ectopic pregnancies too showed microscopic evidence chorionic villi..

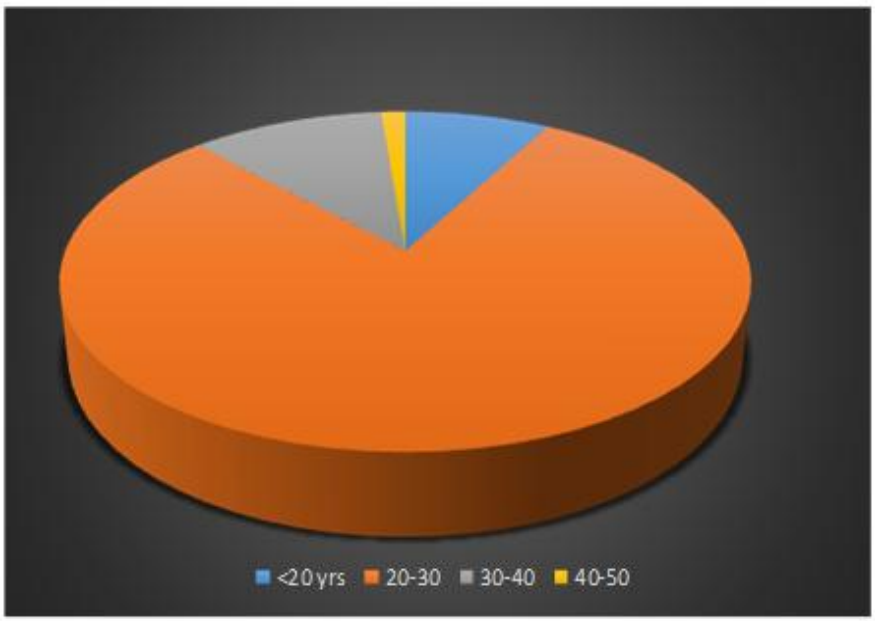

Figure 1: Age incidence of ectopic pregnancy.

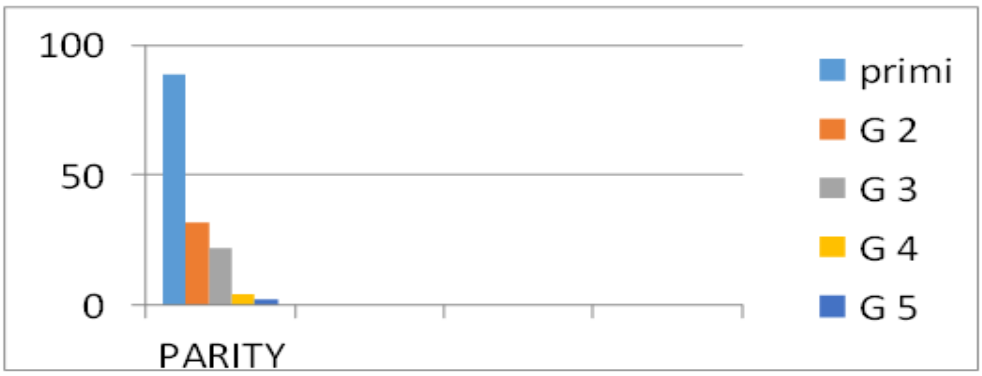

Figure 2: Incidence of parity in ectopic pregnancies.

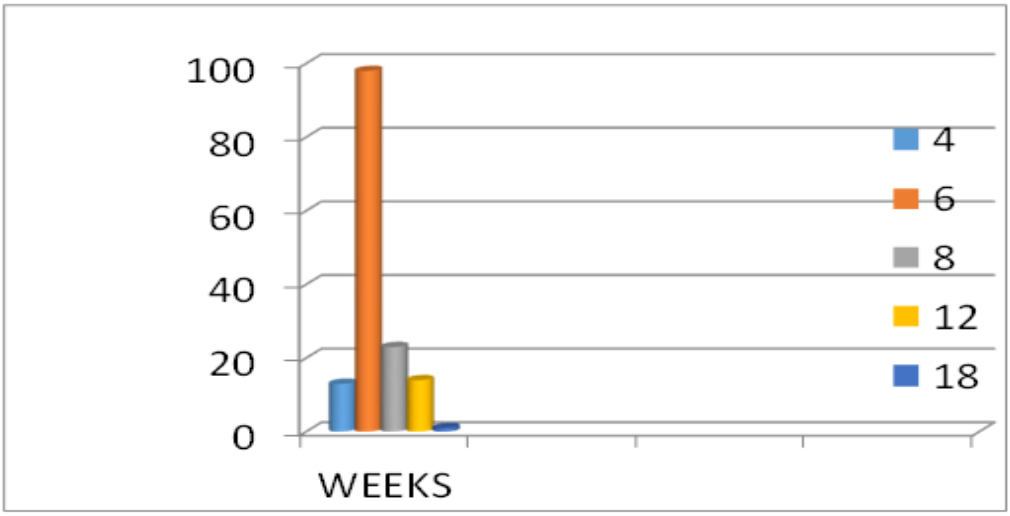

Figure 3: Incidence of weeks of gestation in ectopic pregnancy.

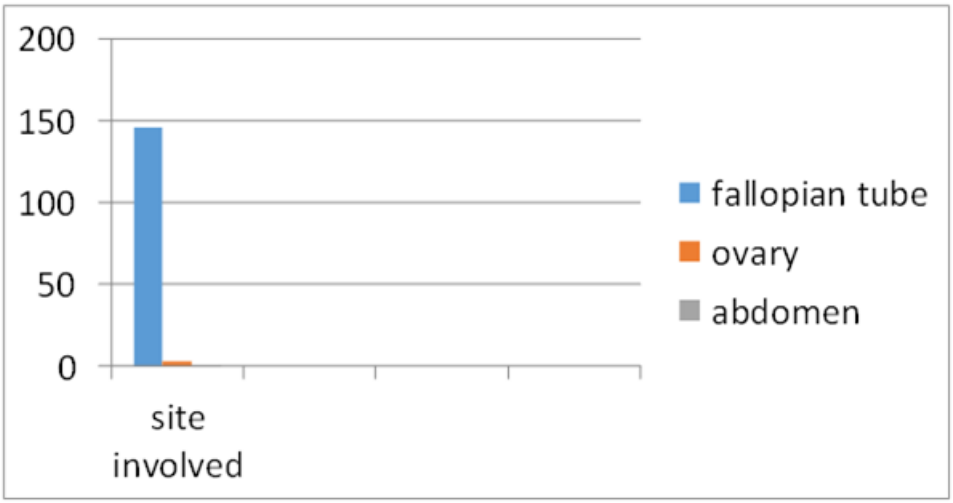

Figure 4 showing sites of ectopic pregnancy.

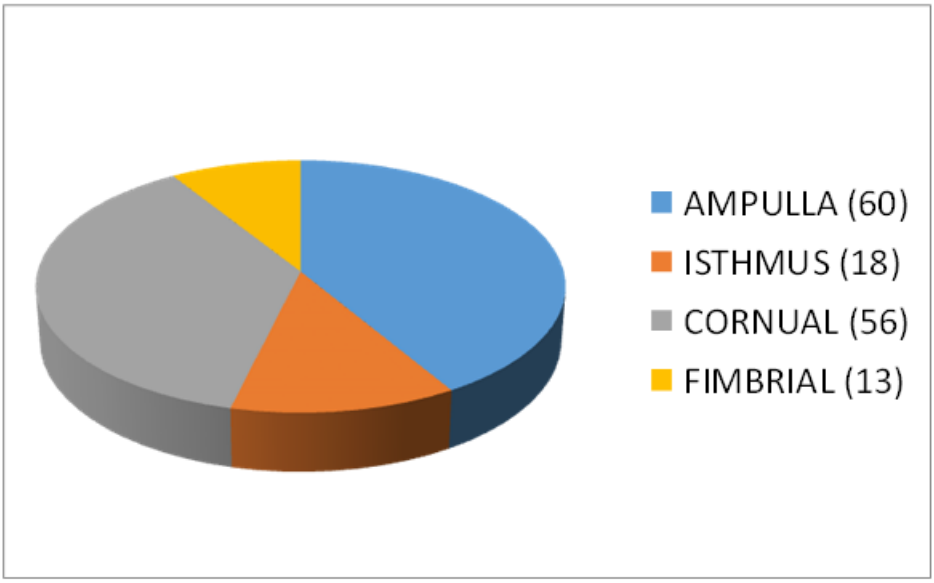

Figure 5: Site in tubal ectopic.

DISCUSSION

Ectopic pregnancy is one of the major cause of maternal mortality. The estimated prevalence of ectopic pregnancy worldwide is about 1-2%.[6] In our study, incidence of ectopic pregnancy is about 0.35%. Serious adverse outcomes in ectopic pregnancies are predominantly caused by delayed diagnosis. Early diagnosis in first trimester prevents further complications. Thus risk factors and symptoms associated with ectopic pregnancy should be familiar by both healthcare professionals and patients. According to F. Khaleeque et al.[7], most common risk factors associated with ectopic pregnancy are previous abortion, infertility medical treatment where as Prasanna B et al[8] had found that PID and previous abortion. In our study, only 40% of cases had identifiable risk factors in which 60% associated with PID, 20% pelvic surgeries, 15% treatment with clomiphene citrate and 5% previous abortion. Most of the cases presented with abdominal pain (55%), amenorrhea (30%) during the 4-10 weeks period (88%), 12 weeks (11%) and a single abdominal pregnancy presented at 18weeks of gestation. 9 cases were presented with vaginal bleeding and in shock condition. Most of the patients were in 18-30 years age group with mean age 27 years. In a study by Bansal et al[9] and Rohan shah et al[10] common age group of presentation was 18-25 years.

Table 1: showing various parameters of ectopic pregnancy in MGMH hospital, Hyderabad.

Parameter	MGMH/OMC, Hyderabad
Incidence of ectopic pregnancy	0.33%
Most common age	20-30 years
Parity	Primipara
Gestational age	6 weeks
Most common presentation	Abdominal pain
Most common site	Ampulla of fallopian tube

In our study, ectopic pregnancy was more common in primipara patients similar to Porwal Sanjay et al[3] and Rohan shah et al[10] whereas multigravida patients (61%) were more common in F. Khaleeque et al[7] and LaxmiKarki et al[11] Tubal pregnancy (97.3%) is the most common site of involvement followed by ovary and abdominal. Though there is not much statistical significance, but left sided fallopian tube involvement is slightly higher than right sided fallopian tube. Ovarian pregnancies are presented earlier than tubal and abdominal. In our study, ovarian pregnancies presented at 4-6 weeks with abdominal pain and diagnosed radiologically and further confirmed by histopathological examination of excised biopsy. Abdominal pregnancy was presented at late gestational age (18 weeks) and the patient was asymptomatic before presentation. Viability of the fetus established under ultrasonographically which further complicated the management. Molinaro T et al[12] stated that risk of haemorrhage, disseminated intravascular haemorrhage, bowel obstruction and fistulae is more common in case of abdominal ectopic pregnancy. Here in our case, surgical management followed by blood transfusions done in view of haemorrhage and could successfully save the patient.

Table 2: The present study is reviewed and compared with the other studies.

Site of ectopic pregnancy	Job Spira, Fernandez et al (1992-2010)[13]	MGMH/OMC Hyderabad
Fallopian tube	96.4%	97.3%
Ampulla	70%	40.2%
Isthmus	12%	12.0%
Fimbriae	11%	8.72%
Interstitium	2.4%	37.5%
Ovary	3.2%	2.01%
Abdomen	1.3%	0.67%

Commonest site of ectopic pregnancy in fallopian tube is ampullary region similar to many other studies.[14, 15] Next to ampullary region, cornua, isthmus and fimbria were involved. Maternal mortality is nil in our study consistent with many other studies.

CONCLUSION

Early diagnosis of pregnancy prevents the risk of maternal complications and allows more conservative medical management to be employed. Though most of the causes of extra uterine gestation are unidentifiable, pelvic inflammatory disease is the common identifiable risk factor in our study followed by pelvic surgeries. Ampulla and interstitium of fallopian tube are the most common site of extra uterine gestation. Abdominal pregnancies has late presentation which complicates the management.

REFERENCES

1. Khan KS, Wojdyla D, Say L, G??lmezoglu AM, Vsan Look PF. WHO analysis of causes of maternal death: a systematic review. Lancet, 2006; 367(9516): 1066–74.
2. Cecchino GN, Araujo E, Elito J. Methotrexate for ectopic pregnancy: When and how. Arch Gynecol Obstet, 2014; 290(3): 417–23.
3. Gupta R, Porwal S, Swarnkar M, Sharma N, Maheshwari P, Assistant MS. Incidence , trends and risk factors for Ectopic Pregnancies in a tertiary care hospital of Rajasthan, 2012; 16(16): 7–10.
4. KRIEBS J, FAHEY J. Ectopic Pregnancy. J Midwifery Womens Health [Internet], 2006; 51(6): 431–9.
5. Li C, Zhao W-H, Meng C-X, Ping H, Qin G-J, et al. (2014) Contraceptive Use and the Risk of Ectopic Pregnancy: A Multi-Center Case-Control Study. PLoS ONE, 9(12): e115031. doi:10.1371/ journal.pone.0115031.
6. Jurkovic D, Wilkinson H. Diagnosis and management of ectopic pregnancy. BMJ, 2011 Jun 10; 342: d3397.
7. Khaleeque F, Siddiqui RI, Jafarey SN. Ectopic pregnancies: A three year study. J Pak Med Assoc, 2001; 51(7): 240–3.
8. Prasanna B, Jhansi CB, Swathi K, Shaik MV. A study on risk factors and clinical presentation of ectopic pregnancy in women attending a tertiary care centre. IAIM, 2016; 3(1): 90-96.
9. Bansal N., Nanda A., Gupta V. Profile of Ectopic Pregnancy in Tertiary Level Hospital in Uttarakhand, India. Open Journal of Obstetrics and Gynecology, 2015; 5: 185-91.
10. Shah R, Darawade S, Potdar J, Naphade P. Study of Risk Factors of Ectopic Pregnancy and it's Management. Global Journal For Research Analysis, 2016 Apr 2; 5(3).
11. R. C (Karki) L, Pradhan B, Duwa S. Annual Analysis of Ectopic Pregnancy in Tertiary Care Hospital. PMJN, 2011; 11: 5-8.
12. Molinaro TA, Barnhart KT. Ectopic pregnancies in unusual locations. Semin Reprod Med, 2007; 25(2): 123–30.
13. Bouyer J, Coste J, Fernandez H, Pouly JL, Job-Spira N. Sites of ectopic pregnancy: a 10 year population-based study of 1800 cases. Human Reproduction, 2002 Dec 1; 17(12): 3224-30.
14. Swende TZ. Jogo AA. Ruptured tubal pregnancy in Makurdi, North Central Nigeria. Niger J Med, 2008; 17(1): 75-7.
15. Abbas A, Akram H. Ectopic Pregnancy; Audit at Maula Bakhsh Teaching Hospital Sargodha. Prof Med J, 2011; 18(1): 24-27.
16. Lozeau AM, Potter B. Diagnosis and management of ectopic pregnancy. Am Fam Physician, 2005; 72: 1707–14.