ORIGINAL RESEARCH PAPER

Gynecology

KEY WORDS:

TO FIND OUT THE INCIDENCE AND RISK FACTORS ASSOCIATED WITH ECTOPIC PREGNANCY ATKRH, GWALIOR

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ABSTRACT

Objectives: 1) to study the parity, risk factors (including age) with patients presented with ectopic pregnancy.2) to identify the features of ectopic pregnancy and outcomes of the cases.

Materials and Methods-: Ninety patients were admitted at KRH with the diagnosis of ectopic pregnancy retrospectively between January 2017 to December 2017 at Kamla Raja Hospital,Gwalior with delivery annually exceeded 7000. Age, risk factors, parity, menstrual history of, history of ART, clinicalfeatures, blood transfusion, USG and surgery were the parameters assessed.

Result-: Ectopic pregnancies between January 2017 to December 2017 accounted to Ninety cases. Age presented 18-35 years mean 26.8. Prior ectopic pregnancy and tubal surgery were important risk factors. Classical triad of ectopic pregnancy was not found in majority of the patients. A larger portion of the patients came with abdominal pain (93.3%) and amenorrhea (84.4%).Commonest site of ectopic pregnancy was ampulla of fallopian tube. Laparotomy was most common performed surgery.

Conclusion -: ectopic pregnancy causes ….morbidity due to anaemia presentation and hemo peritoneum .Early identification of risk factors and diagnostic tools help in reducing the time from presentation to response thereby reducing morbidity improve reproductive outcome.

Background -: Two percent of all first trimester pregnancy in US and 1 in 150 in India ectopic accounting to 6% of pregnancy related deaths. Ninety five percent of pregnancies are implanted in various segments of fallopian tube, 3.5% in ovary and 1% in peritoneal (1)cavity. In modern day practice the main aim is to identify and provide treatment especially interstitial pregnancy as risk of rupture rises beyond 12 weeks of gestation, thereby reducing morbidity and deaths.

Objectives-:

1) To study the parity, risk factors (including age) with patients presented with ectopic pregnancy.
2) To identify the features of ectopic pregnancy and outcomes of the cases.

Materials and Methods-

Ninety patients were admitted at KRH with the diagnosis of ectopic pregnancy retrospectively between January 2017 to December 2017 at Kamla Raja Hospital,Gwalior,Madhya Pradesh with delivery annually exceeded 7000.

Exclusion criteria-:

Those cases were no ectopic gestational sac was found on laparotomy or laparoscopically.(Age ,riskfactors ,parity ,menstrual history ,history of ART , clinical features, bloodtransfusion ,USG and surgery were the parameters assessed).

Result-:

Ectopic pregnancies between January 2017 to December 2017 accountedto Ninety cases.Age presented 18-35 years mean 26.8.Majority being multigravida (70.1%) and primigravida 26.5%.Twenty two percent of the patients had no risk factors although majority had risk factors.

Table 1: Risk factors associated

Risk factors	Number of cases	Percentage
1) Abortion	24	26.6%
2) Infertility	22	24.4%
3) Previous caesarean section	16	17.7%
4) History of OCP'S	4	4.4%
5) History offimbrial surgery	16	17.7%
6) History of previous ectopic	4	4.4%
7) History of IUCD usage	4	4.4%

Our data shows that prior ectopic pregnancy and tubal surgery were important risk factors. The classical triad of ectopic pregnancy was not found in majority of the patients. A larger portion of the patients came with abdominal pain(93.3%) andamenorrhea (84.4%). Other symptoms were abnormal vaginal bleeding (38%), vomiting (35%), syncopalattacks (30%) and dysuria (13%).uncommon symptoms were fever (10%).On examination: tenderness in abdomen (76.7%), guarding and adnexal tenderness.

Table2: Presenting signs

	Number of cases	Percentage
Abdominal tenderness	70	76.7%
Guarding	24	26.6%
Adnexal tenderness	26	28.8%
Cervical motion tenderness	14	15.5%
Abdominal distension	10	11.1%

At presentation 89% patients presented with anaemia and no clinical signs found in 9.8%.Investigations used in majority of the patient were USG and UPT.Ninety eight percent of the presenting patients had a positive pregnancy test. In 52.8% of cases USG revealed an ectopic pregnancy which had ruptured.Heterogenous mass was found in 30% anunruptured pregnancy was present in 4%.When there is a tubal ruptures in first few weeks most likely it is Isthmic and in interstitial end it ruptures later.Rupture in most common in isthmic end and ampullary end usually had abortion.In our study ampullary end was (60%), the most common site of ectopicpregnancy and accounted were 10% at isthmo-ampullary followed by Isthmic end which was 12.2%. (2)

The following classification is recommended:

- If there is an extra uterine gestational sac with yolk sac and embryo-ectopic pregnancy definitive
- If in adnexal area heterogeneous mass seen –it is probably an ectopic pregnancy
- If no evidence of extra uterine or intrauterine pregnancy: location of pregnancy is unknown
- When there is visible intrauterine ring structure it is probably an intrauterine pregnancy
- When there is an intrauterine gestational sac and yolk sac or embryo it is definitive intrauterine pregnancy (3)
- Beta-HCG is an important biochemical marker and its course rather than value is determinative i.e. in ectopic In ectopic pregnancy β HCG levels rises not more than 66%or fall from the baseline level is not more than 33%in 48 hrs(4,5)

Our main aim is intraoperatively was to remove the trophoblastic tissue. Ruptureof fallopian tube was found in 52 cases (57.7%) and was unruptured in 13(14.4%)and there was tubal abortion in 25cases (27.7%).The mean volume of hemoperitoneum 932.06ml. Blood transfusion requirement was 89.9%.No mortality was seen in these cases .However 33.3%needed ICU care and 15% had postoperative fever and diarrhoea presented in 2% cases .Mean hospital stay was 7 days.

Table 3: Intraoperative findings

	Number of cases	Percentage
Ruptured ectopic	52	(57.7%)
Tubal abortion	25	(27.7%)
Unruptured	13	(14.4%)

Discussion-: surgical indication of ectopic pregnancy was hemodynamic instability ,symptoms of pain abdomen,rupture, suspected heterotopic pregnancy and diagnostic laparoscopy .(6) β HCG falls to half first day post-surgery.In our cases bilateral salpingectomy was done in 10 cases, salpingo-oopherectomyin 10 cases,and unilateral salpingectomy with contralateral tubectomy in 18, unilateral salpingectomy in 50 cases.

Table 4: surgical procedure performed

	Number of cases	Percentage
Unilateral salpingectomy	50	55.5%
Unilateral salpingectomy with contralateral tubectomy	18	20%
Salpingo-oopherectomy	10	11.1%
Bilateral salpingectomy	10	11.1%

Whether organ preserving surgery is possible or not determined by:

1) prior h/o infertility or tubal pregnancy or any wish forfuture fertility
2) ARTavailability
3) Size of tubal pregnancy
4) Condition of the fallopian tube damaged or not and contralateral fallopian tube
5) Skill of surgeon (2)

In our study ectopic pregnancy had incidence of 1:133comparable with Coste(7) and Rashmi (8) .It was also noted that majority of the patients were multigravida. As per the clinical features most common was pain (95%) followed by amenorrhoea in 4 month In 32% of casesvaginal bleeding was reported .Vomiting, dizziness and syncopal attacks were uncommon symptoms. Eighty two percent cases had pallor comparable with Gupta R(9) and Shraddha Shetty (10) Predisposing factor were tubectomy, D&C,previous ectopic and h/o infertility . Study by Roussas D(11) showed that in womenwith history of ectopic pregnancy rupture of tube was more common than in women with full term pregnancy.The most common site of location was ampulla of fallopian tube Swende TZ(4) and Berek JS(12).The ampullary end was most common site . GoUdingo et al(13) reported that left tube was involved in 40%cases and right tube was involved 59.1% In our study ruptured ectopic pregnancy presented in 61% cases,22.1%had unruptured ectopic and 13.1%had tubal abortion .This was consistent with Latchaw(14) whose study showed rupture in 59% and unrupture in 41% cases.Concluding that h/o ectopic was more likely to develop ectopic.

Seasonal variation in our study was January to June. Study at Abha maternity hospital, Abu Dhabi (15) also reported a higher incidence in winters(16) The reason could be influence of season on ovarian axis No mortality noted ,it was comparable with A abbas and Akram(17)Serum β HCG, UPT,USG were main diagnostic tools when result were undetermined USG was the main diagnostic tool β HCG and progesterone were used when there were other differential diagnosis(18)

Conclusion-:

ectopic pregnancy causes serious morbidity due to anaemia presentation and haemo peritoneum .Early identification of risk factors and diagnostic tools help in reducing the time from presentation to response thereby reducing morbidity and improve reproductive outcome.

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