



ECTOPIC PREGNANCY – PRESENTATION AND TREATMENT MODALITIES IN RURAL SET-UP

Surgery

Dr. Madhu Kapoor Chib

Assistant Professor, Dept. of Gynecology & Obstetrics, GMC Doda, J&K.

Dr. Sumat-ul-Khurshid

Assistant Professor, Dept. of Pathology, GMC Doda, J&K.

Dr. Altaf Ahmed Malik*

Assistant Professor, Dept. of General Surgery, GMC Doda, J&K. *Corresponding Author

ABSTRACT

INTRODUCTION: Ectopic pregnancy is leading cause of maternal death during first trimester. The present study was done to determine incidence, clinical features, risk factors and mode of management associated with ectopic pregnancy in rural Medical College of North India (GMC Doda) J&K. **MATERIAL & METHODS:** The present study was conducted over a period of 1 year from January 1 2019 to 31 December 2019, in department of Obstetrics & Gynaecology of GMC Doda. A total 56 cases of ectopic pregnancy were seen during this period. **RESULTS:** 56 cases were diagnosed as ectopic pregnancy out of 2572 antenatal cases in our institutions (accounting 2.17%). Incidence was maximum in the age group of 26-30 years (39.79%). 78.57% cases were found in multipara. 55.30% have one or more identified risk factors. Ruptured ectopic were seen in 71.42% & tubal abortion was found in 16.57%. Maximum number of patients were managed surgically by laparotomy (98.17%). No morbidity & mortality were seen in our setup. **CONCLUSION:** Careful history, proper examination & high level of suspicion is key to early diagnosis. Future fertility can be preserved by early diagnosis by conservative and medical management.

KEYWORDS

Ectopic pregnancy, Hemoperitoneum, Methotrexate, Salpingectomy.

INTRODUCTION:

Ectopic pregnancy presents as a major health problem for the women of child bearing age. It is defined as any intra/extra uterine pregnancy in which the ovum implants at an abnormal site which is not proper for its growth & development. It is a major cause of morbidity and mortality. During first trimester incidence of ectopic pregnancy varies from 1-2%. There has been significant increase in number of cases of ectopic pregnancy. Ectopic pregnancy has greater importance because of its increasing incidence & its impact on women fertility. Risk factor of ectopic pregnancy includes tubal damage, previous ectopic pregnancy, infertility, use of intra-uterine contraceptive device (IUCD), history of smoking at the time of pregnancy, previous surgeries of pelvis & abdomen. Patient with ectopic pregnancy usually presents with amenorrhoea, pain abdomen (cutting) with slight bleeding P/V at 6-8 weeks of gestation. Due to early diagnosis there seems to be increased trend in incidence of ectopic pregnancy, but the maternal mortality & morbidity has declined.

AIMS & OBJECTIVES: The Study was done to determine the incidence, age, parity, risk factors, clinical features and modalities of treatment & mortality associated with ectopic pregnancy in rural & hilly area of Jammu & Kashmir (Doda).

MATERIALS & METHOD:

This prospective study was conducted over a period of 1 year from January 1 2019 to December 31 in 2019 in department of Gynaecology & Obstetrics in Rural Medical College of Jammu & Kashmir (GMC Doda). 56 cases of ectopic pregnancy were seen during this period. Patients were admitted in emergency or through OPD and some were referred from lower centres like PHC & CHC. Careful history taking, thorough physical examination are important for diagnosis. Routine surgical investigations, urine for pregnancy test & ultrasonography were done for confirming diagnosis in all patients except one who required diagnostic laparoscopy to confirm the diagnosis.

RESULTS: During this study total number of deliveries including caesarean section & normal vaginal deliveries were 2572 out of which 56 cases (2.17%) were diagnosed as ectopic pregnancy. In all the cases UPT was positive. USG was done in all cases and 49 cases showed frank hemo-peritoneum & gestation age was 6-14 weeks. Most frequent was 6-8 weeks. Right sided ectopic pregnancy was more common than left pregnancy.

Table 1: Age Wise Distribution Of Patients' Show The Maximum Number Of Patients Were In Age 26-30 Years (39.28%).

Age	Number of patients	%age
Less than 20 years	2	3.57%
20-25	14	25%
26-30	22	39.28%
31-35	15	26.7%
More than 35	3	5.35

Table 2: Distribution according to parity shows 78.57% were multiparous.

Parity	Number of patients	%age
Primi para	12	21.42%
Multi para	44	78.57%

In our study 55.35% has 1 or more risk factors like abortion 7.14%, history of PID in 12.01%, history of smoking 3.57%, L.S.C.S. 13.57% previous ectopic in 1.78% & history of OCP used irregularly in 1.78%.

Table 3: Risk factors associated with ectopic pregnancy.

Risk factors	Number of patients	%age
Elderly Gravida more than 35 years	3	5.35
Infertility	3	5.35
Previous ectopic	1	1.78
Previous LSCS	2	3.57
Ligated	4	7.14
History of smoking	2	3.57
History of ATT	1	1.78
History of surgery appendectomy	1	1.78
Use of emergency contraceptive	2	3.57
OCP use	1	1.78
History of abortion	4	7.14
History of PID	7	12.5
No risk factors	25	44.64

In our 69.64% were right sided & 28.27% were left sided while 1.78% were bilateral ectopic. A very rare condition (Picture 1).

Table 4: Distribution of ectopic according to side of ectopic pregnancy.

Side	Number of patients	%age
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Right	39	69.64
Left	16	28.57
Bilateral	1	1.78

Table 5: Clinical presentation.

Sign & symptom	Number of patients	%age
Pain	56	100
Bleeding PV	50	89.28
History of Amenorrhoea	48	85.71
Classic triad	52	57.14
Shock	29	51.78
Abdominal Tenderness	52	92.85
Distension	18	32.14

Pain was present in 100% patients in our study followed by bleeding per-vagina.

Table 6: Distribution of patients according to tubal status

Side	Number of patients	%age
Ruptured	40	71.42
Un-ruptured	7	12.5
Tubal Abortion	9	16.07

71.42% came with ruptured ectopic & 12.5% were un-ruptured with 16.07% as tubal abortion.

In our study ampulla was most common site of ectopic pregnancy (67.85%) followed isthmus & fimbria (17.95% & 8.92% respectively). Cornual & rudimentary pregnancy are rare.

Table 7: Distribution according to site of ectopic pregnancy.

Site	Number of patients	%age
Ampulla	38	67.85
Isthmus	10	17.85
Fimbrial	05	8.92
Cornual (10 weeks)	02	3.57
Rudimentary horn (14 weeks)	01	1.78

Atypical findings seen in our study includes ovarian cyst on other side (one patient), partial mole with ectopic pregnancy on histopathological examination (one patient), endometrial spots (one patient) and fibroid of anterior wall of uterus (two patients).

Blood transfusion more than 1 point were needed in 78.57%. Post op wound infection was very rare in 1.78%. General Anaesthesia was required in 51.28% & post-operative hospital stay more than 10 days was seen in 19.64%. No mortality was seen in our study.

Table 8: Morbidity associated with ectopic pregnancy in present study:

Indications	Number of patients	%age
Blood transfusion	44	78.57
Post op hospital stay (average 6 days)	46	78.57
More than 10 days	11	19.64
Post op wound complication	1	1.78
ICU admission	0	0
GA requirement	9	51.78
ARF UTI	0	0
Motility	0	0

Being a newly opened rural Medical College 98.21% were managed surgically because of lack of specialised facilities. One patient was managed medically.

Table 9: Modalities of management in present study

Line of management	Number of patients	%age
Linear salpingectomy	2	7.14

Partial salpingostomy	3	5.35
Complete salpingectomy	41	73.21
Partial Salpingectomy	10	17.85
Salpingo Oophorectomy	2	35.7
Utrine / corneal / horn reconstruction	3	5.35
Medical Treatment	1	1.78
Bilateral salpingectomy	1	1.78

DISCUSSION:

Ectopic pregnancy accounts for 3.5 to 7.1 % of maternal mortality in India. Majority of our patients (39.28%) belonged to age group of 26-30 years. This is because of early marriage in our region. The next group most commonly associated with ectopic pregnancy was between 31 to 35 years (26.7%). Hoover K.W. et al reported that rate of ectopic pregnancy increases with increasing age, 0.3% were girls & women aged 15 to 19 years and 1.0% among women aged 35-44 years (1). In the present study majority with ectopic pregnancy were multi-gravidae (78.57%) co-relating with studies done by Shaddha Shetty K. et al (83.9%). Wakankar et al and Khan et al (2, 3, 4).

44% of our patients were not associated with any risk factor but the most common risk factor was history of PID (12.5%) similar to that reported by Singh et al and Mufti et al followed by history of abortion (7.14%), history of ligation 7.14% (5, 6). Post abortion infection leads to tubal damage and increases the chances of ectopic pregnancies. These risk factors were reported by Gupta et al, Rashmi Gaddagi et al (7, 8).

Rupture ectopic pregnancy was present in 71.42%, 16.07% had tubal abortion & 12.5% had un-rupture ectopic pregnancy. Similar findings were reported by Udigwe G.O. and Igwegbe A. (9, 10). The reason for the above could be travelling so much distance by foot in hilly areas and by the time patient reaches hospital after travelling such a long distance, ectopic pregnancy already ruptures.

Right sided tubal pregnancy was present in 69.64% cases & left tubal involvement 28.5% cases, a pattern that is consistent with other studies. Bilateral ectopic pregnancy was observed in 1.78% cases coinciding with study done by Mohamed Fouad Salim et al (11).

The most common site of ectopic pregnancy was observed to be ampulla of fallopian tube noted in 67.85% cases. This is consistent with that reported by Chow et al (12). Ampulla being most common site for ectopic pregnancy as fertilization occurs in this region. Ampulla has many plica and these plicae agglutinate due to PID leading to entrapment of zygote. Other sites were isthmus (17.85%), fimbriae (8.92%), cornua (3.57%) and rudimentary horn (1.78%). Our findings correlate with studies done by Yakasai et al and Poonam et al (13, 14). In our study unilateral complete Salpingectomy was done in 73.21% cases followed by partial Salpingectomy in 17.85% followed by linear Salpingectomy (7.14%) and uterine / cornual horn reconstruction in (5.35%). These results matched with Yakasai et al, Khaleeqe et al & Mufti et al (6, 13, 14). Medical management was successfully implemented in one case where patient was managed by a single dose of injection Methotrexate intramuscular and was monitored subsequently for decreasing serum levels of beta HCG successfully.

100% of the patient presented with pain abdomen which was followed by bleeding per-vagina in 89.28% patients. Clinical signs included abdominal tenderness, cervical excitation and adnexal tenderness. This is same as that reported by Porwal Sanjay et al and Patel et al (7, 16).

Co-incidental findings seen with ectopic pregnancy were right sided ectopic with left ovarian cyst, right sided ectopic with HPE showing partial mole, ectopic pregnancy with endometriotic spots in POD and ectopic with fibroid in anterior wall in in concordance with study conducted by Yonkers, New York, USA and Govender NS, Goldstein DP (17, 18).

Morbidity included blood transfusion in 78.57%, post op hospital stay more than 6 days in 78.57% and more than 10 days in 19.64% followed by general anaesthesia requirement in 51.78% and post op wound complications in 1.78%. No mortality was noted in our study. Similar findings were reported by Abbas and Akram H (19).

CONCLUSION:

Careful history, proper examination & high level of suspicion is key to early diagnosis. Early diagnosis results in decreased morbidity and mortality. Future fertility can be preserved by early diagnosis by conservative and medical management.

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