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STUDY OF RISK FACTORS, MODE OF PRESENTATION AND TREATMENT MODALITIES OF ECTOPIC PREGNANCY

Obstetrics & Gynaecology

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ABSTRACT

Introduction: Ectopic Pregnancy is a life threatening emergency where diagnosis is often missed at the first contact. The present study emphasis more on clinical presentation, risk factors, diagnostic methods, medical and surgical treatment modalities and its associated complications. Therefore elucidating the importance of early diagnosis in the management of ectopic pregnancy. **Materials and methods**: A retrospective analysis done at Government Dharmapuri medical College for the period of three years from may 2019 to may 22. All the patients diagnosed with ectopic pregnancy are included in the study and details regarding the mode of presentation, risk factors,methods of diagnosis, treatment modalities were taken from hospital records. **Result:** Total of 113 patients of ectopic pregnancy were present to hospital during the study period. The maximum number of Ectopic present in the age group of 26-30yrs, most common mode of presentation is amenorrhea which is 79.6%and then pain abdomen 63.7%.and 3.5% patient present in shock. Surgery was the primary modality of treatment in this study 95.6%.only 4.4%were treated by conservative approach by Methotrexate. **Conclusion:** As the incidence of ectopic is on the raise , screening the high risk cases takes priority in early diagnosis of ectopic gestation before it's rupture .The conservative management By Methotrexate is promisingin preventing the emergency situations necessitating surgical procedure and its consequences .

KEYWORDS

Ectopic pregnancy, Transvaginal ultrasound, Methotrexate.

INTRODUCTION

Ectopic Pregnancy is a life-threatening emergency where diagnosis is often missed at the first contact. Any women in reproductive age group with lower abdominal pain and vaginal bleeding should be suspected for ectopic pregnancy. Patients who are unaware of ongoing pregnancy can also present with non specific symptoms and hemodynamic shock. Since maternal mortality and morbidity is high in ruptured ectopic pregnancy this study compiles the risk factors necessary for early identification of ectopic pregnancy. So that it can be treated by conservative management and emergency surgical complications can be avoided .An accurate history and physical examination and its correlation to the modern diagnostic technology are important in diagnosis of Ectopic pregnancy. Mortality and morbidity related to the ectopic pregnancy are in decreasing trend due to the early diagnosis by TVS and early intervention[1]. The present study reveals the clinical presentation, risk factors, age distribution, condition of the fallopian tubes, treatment modalities, success rate of conservative management surgical treatment, complications, mortality and morbidity associated with treatment.

METHODS AND MATERIALS

A Retrospective analysis was done at government Dharmapuri medical college for the period of three years between May 2019 to May 2022. All that the patients diagnosed with ectopic pregnancy during the study period at GDMCH was included in this study.

All the details regarding the patients age, parity, clinical presentation ,risk factors, relevant investigations, treatment given whether conservative or surgical management,it's Post-operative complications like fever ,abdominal distension, blood transfusions were taken from hospital records.

RESULTS

In this study 113 patients of ectopic pregnancy presented to Government Dharmapuri medical College during the period of may 2019 to may 2022 were included. The maximum number of ectopic gestation in the present study occurred between the age group of 26-30 yrs which is 41.7%[FIGURE 1] .The distribution of cases in relation to parity is maximum among multiparous women which is 84%. Among the risk factors previous history of tubectomy for sterilization found to be the most common cause which accounts for 19% and followed by PID 18%.

Traid of symptoms amenorrhea,pain abdomen and bleeding PV was seen in 7% of patients. Amenorrhea was the most common symptom found in 79.6% followed by pain abdomen in 63.7% and 3.5% patients were admitted to to the hospital in state of hemodynamic shock[FIGURE-2].

The most common site of presentation of ectopic gestation was fallopian tube with 77.87% occuring in ampullary region of fallopian tube followed by isthumoampullary region in 20.3% cases[TABLE-I]. In this study 45.1% of the patients presented with tubal rupture and 9.7% ectopic pregnancy had tubal abortion and 45.1% presented before the rupture of fallopian tube[FIGURE-3].

The amount of blood loss was estimated about 500-1000ml in 26.5%patients, 1000-1500 ml in 13.2% patients followed by 1500-2000ml blood loss in 0.4%[FIGURE-4].

Surgery was the primary modality of treatment in 94% of ectopic pregnancy presented to hospital and only 4.4% had conservative treatment by single dose methotrexate injection. unilateralsal phingectomy was done in 64.6% of patients and unilateral salphingectomy with contralateral tubectomy for sterilization was done in 30.9% [TABLE-2]patients. Blood transfusion was 43% of patients. Most of them required 3 to 4units of PRBCS.

Figure 1: Age of Distribution of Ectopic Pregnancy

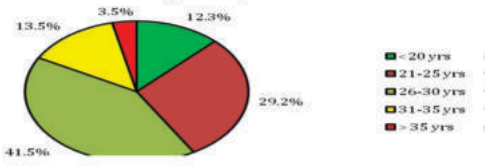

Figure 2 : Mode of Presentation

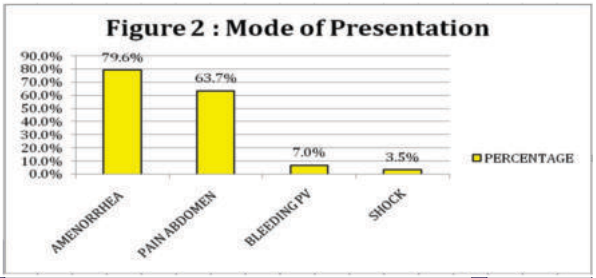

Table 1: Site Of Presentation

SITEOF PRESENTATION	CASES	PERCENTAGE
Ampulla	88	77.87 %
Isthmus	2	1.76
Ampulla+isthmus	20	20.30%

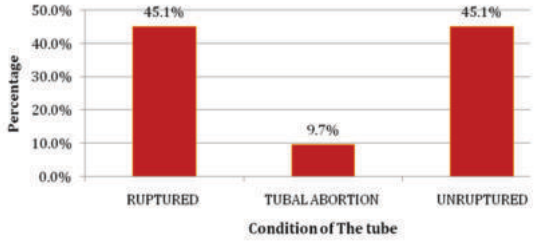

Figure 3 : Condition Of The Fallopion Tube

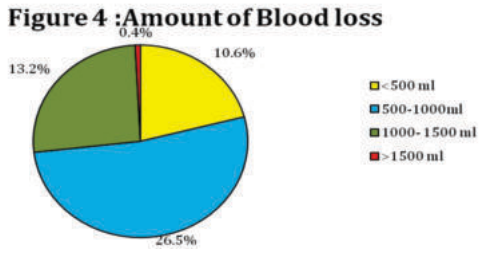

Table 2 : Treatment

MANAGEMENT	CASES	PERCENTAGE
Unilateral Salphingectomy	73	64.6%
U/L salphingectomy with C/Ltubectomy	35	30.9%
Single Dose Methotrexate	5	4.4%

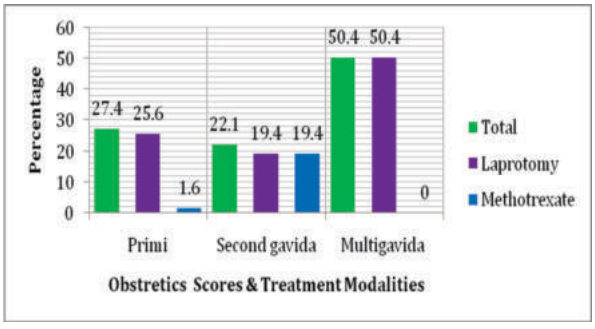

Figure 5 : Obstetrics Scores &treatment Modalities

DISCUSSION

The incidence of ectopic pregnancy has been on raise. Incidence was found to be 3/1000 delivery. In the present study 41% of patients were in the age group of 26-35 years.In the study conducted by swetha et al maximum distribution of ectopic was found between the age 26 to 35yrs group[3].

The incidence of ectopic pregnancy is maximum in multiparous woman accounting for 54% in this study. In panchal et al study 80% of the patients were multiparous women[4] and in Rashmi A gaddagi study incidence was 62% in multiparous women[5].

The most common risk factor in our study was the previous History of tubectomy in 19% of patients followed by PID in 18% of patients. According to the Studies by Savita Devi, Rose et al the incidence of PID as risk factor was 25%[6&7]. Pelvic inflammatory disease following chlamydia infection causes a 3.3 - 6 fold increase in risk of ectopic pregnancy. In our study 19% of cases of ectopic pregnancy occured in patients with previous history of tubal surgery.

According to shah et al the increased risk of ectopic pregnancy following postpartum tubal ligation was due to edematous congestion of the tubes increasing the chance of incomplete occlusion of lumen[8].
The symptoms and sign of ectopic pregnancy often ranges from indefinite to bizarre clinical picture.In the present study classical triad of symptoms were present in 42% of patients and patients with amenorrhea alone in 89.6%, abdominal pain was presenting symptom in 63.7% of patients, Bleeding PV found in 7% of patients. 3.5% patients were admitted to hospital in shock as compared to 16% patients in a study conducted by Shruthiandola and et al study[9].

In Rashmi A gaddagi study 97.3% patient had positive urine pregnancy test which is in comparison to 99% patients in present study .Diagnosis can be made early when a transvaginal ultrasound is used identify the gestation sac in the tubo ovarian site with absence of intrauterine gestation sac in cases with positive Beta HCG test.

In this study 4.4% has undergone conservative management with single dose methotrexate. They were monitored with beta HCG and no patient required second dose methotrexate.The success rate with single dose methotrexate was 100% in this study.The following criteria adhered for the conservative management: hemodynamically stable patients with beta HCG <5000 IU/ ml, unruptured mass <3.5cm and no embryonic cardiac activity. Remaining 96% patients underwent surgical management.

In Ciriket al conservative management of ectopic study, the success rate with single dose methotrexate is 93%[10].According to Tas EE 5 years study on ectopic management, single dose methotrexate was given in 52%of patients, success rate was 72%, 3% required additional dose and 13% cases underwent surgical management after the failure of methotrexate therapy[11]. Stovall et al study showed 96% success rate with single dose methotrexate therapy[12]. In Alsammani et al study overall suceess rate was only 60%.In all these studies patients were monitored with beta HCG values[13].
In this study 25.6% of primi gravida and 19.4% of second gravida patients had undergone laprotomy. These patients may be anxious about future conception which may cause psychological stress on the patients. 45% patients in our study required blood transfusion.

CONCLUSION

Since the early diagnosis of ectopic pregnancy is elusive, clinicians should be aware of the fact that any women in reproductive age group presenting to the hospital with lower abdomen pain, the diagnosis of ectopic pregnancy should be entertained irrespective of the status of amenorrhea and sterilization.

The recent trend in management of ectopic pregnancy is medical management by methotrexate. But in this study salpingectomy was the treatment modality as most of the patients were referred late to the hospital as ruptured ectopic.

In our study ectopic pregnancy accounts for 0.38% of normal population. More than half of the patients about 54.8% presented to the hospital with acute abdomen and required emergency laprotomy. The success rate of conservative management is 100 %.

Creating awareness about ectopic pregnancy and early diagnosis by transvaginal ultrasound in primary health care level makes the methotrexate therapy possible, which has equal success rate as surgical management. This can avoid the surgical emergencies, anesthetic complications, psychological stress associated with future conception, and hence reduce the mortality and morbidity associated with ectopic pregnancy.

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