ORIGINAL RESEARCH

Assessment of cases of ectopic pregnancy

Dr. Swati Jain

Assistant Professor, Department of Obstetrics and Gynaecology, Career Institute of Medical Sciences, Lucknow, UP, India

Corresponding Author
Dr. Swati Jain
Assistant Professor, Department of Obstetrics and Gynaecology, Career Institute of Medical Sciences, Lucknow, UP, India

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ABSTRACT
Background: Any intrauterine or extrauterine pregnancy in which the fertilized ovum implants at an abnormal location that is detrimental to its growth and development is referred to as an ectopic pregnancy. The present study was conducted to assess cases of ectopic pregnancy. **Materials &Methods:** 74 women with ectopic pregnancies were recruited. Clinical signs, condition of the tube, risk factors and site of ectopic pregnancy was recorded. **Results:** Age group 21-30 years had 48, 31-40 years had 20 and 41-50 years had 6 patients. The difference was significant (P< 0.05). Signs were cervical motion tenderness in 51, mass in 46, distension in 32 and mass in fornices in 45. Risk factors were prior history of tubectomy in 12, history of infertility in 7, previous ectopic pregnancy in 3 and appendicectomy in 2 cases. Site was isthmus in 6, ampulla in 37, fimbria in 6, cornual/interstitium in 12, rudimentary horn in 7 and broad ligament pregnancy in 6 cases. Condition of the tube was ruptured in 50 and unruptured in 24 patients. The difference was significant (P< 0.05). **Conclusion:** The results of this study clearly showed that the number of ectopic pregnancies is increasing. A strong index of clinical suspicion was used to diagnose each case, and the USG results were added to the diagnosis.
Keywords: cornual/interstitium, cervical motion tenderness, ectopic pregnancy

INTRODUCTION

Any intrauterine or extrauterine pregnancy in which the fertilized ovum implants at an abnormal location that is detrimental to its growth and development is referred to as an ectopic pregnancy.[1] Because of its rising prevalence and effects on women's fertility, ectopic pregnancy is becoming more significant.[2] The most common cause of maternal deaths in the first trimester of pregnancy is still ectopic pregnancy. Significant technological advancements have been made in the treatment of ectopic pregnancy.[3] Over the past 20 years, unruptured ectopic pregnancies have been definitively managed medically even before these high-risk women experienced clinical symptoms thanks to early diagnosis and treatment of the illness.[4]
The fallopian tube is the dominant site in the majority of cases of tubal ectopic pregnancy. 75–80 % of EPs occur in the ampullary portion, 10–15 % of EPs occur in the isthmic portion and about 5 % of EP is in the fimbrial end of the fallopian tube.[5] The tubal EP can be detected by TVS, and implies an intact fallopian tube with a pregnancy that is likely to be growing and visualized of an inhomogeneous mass that might well be a collapsed sac, which is less likely to contain active trophoblastic tissue.[6]The present study was conducted to assess cases of ectopic pregnancy.

MATERIALS & METHODS

The study was carried out on 74 women with ectopic pregnancies.All gave their written consent to participate in the study.
Data such as name, ageetc. was recorded. A thorough abdominal examination/vaginal examination was carried out. Clinical signs, condition of the tube, risk factors and site of ectopic pregnancy was recorded. Results thus obtained were subjected to statistical analysis. P value < 0.05 was considered significant.

RESULTS

Table I Distribution of patients

Age group (years)	Number	P value
21-30	48	0.01
31-40	20	
41-50	6	

Table I shows that age group 21-30 years had 48, 31-40 years had 20 and 41-50 years had 6 patients. The

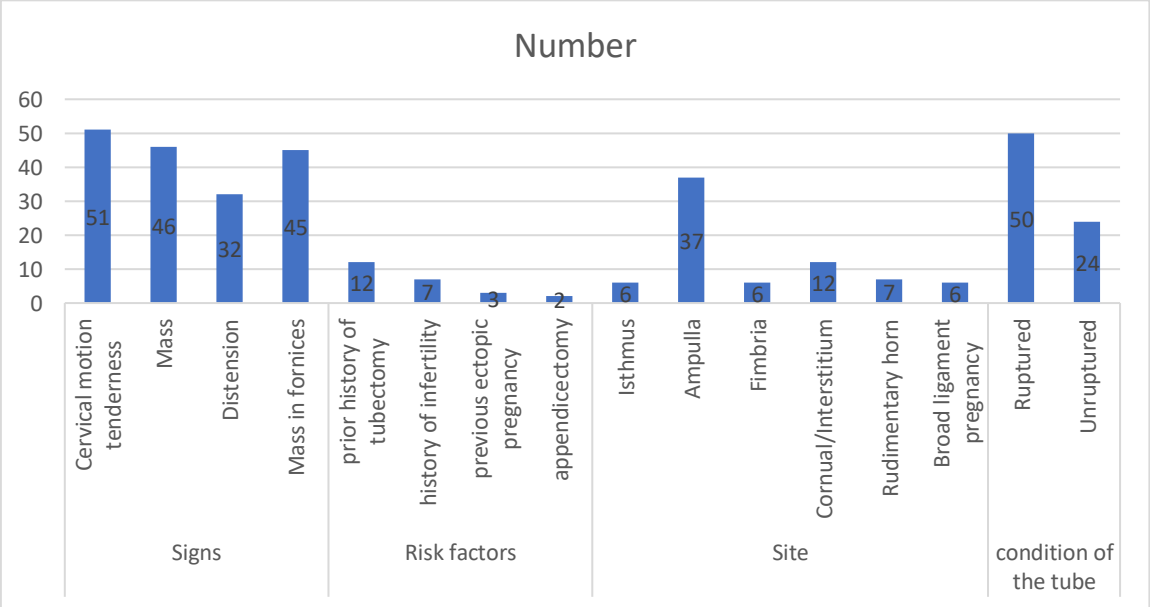
difference was significant (P< 0.05).

Table II Assessment of parameters

Parameters	Variables	Number	P value
Signs	Cervical motion tenderness	51	0.57
	Mass	46	
	Distension	32	
	Mass in fornices	45	
Risk factors	prior history of tubectomy	12	0.09
	history of infertility	7	
	previous ectopic pregnancy	3	
	appendicectomy	2	
Site	Isthmus	6	0.03
	Ampulla	37	
	Fimbria	6	
	Cornual/Interstitium	12	
	Rudimentary horn	7	
	Broad ligament pregnancy	6	
condition of the tube	Ruptured	50	0.01
	Unruptured	24	

Table II, graph I shows that signs were cervical motion tenderness in 51, mass in 46, distension in 32 and mass in fornices in 45. Risk factors were prior history of tubectomy in 12, history of infertility in 7, previous ectopic pregnancy in 3 and appendicectomy in 2 cases. Site was isthmus in 6, ampulla in 37, fimbria in 6, cornual/interstitium in 12, rudimentary horn in 7 and broad ligament pregnancy in 6 cases. Condition of the tube was ruptured in 50 and unruptured in 24 patients. The difference was significant (P< 0.05).

Graph I Assessment of parameters



DISCUSSION

In the past, EP was identified based on clinical signs such lower stomach pain and vaginal bleeding, but this severely limited early diagnosis.[7] The first diagnosis of bleeding in the first trimester is a significant difficulty. Human chorionic gonadotropin (b-hCG) levels in serum and vaginal ultrasonography are two recent methods used to identify EP.[8] Since a single serum measurement of the b-hCG concentration might not reveal the location of the gestational sac, a urinary hCGRP/i-hCG ratio measurement could be useful in the diagnosis of EP.[9] The diagnosis of fetal viability is supported by the typical doubling of blood levels over a 48-hour period, but EP is not ruled out. Failure to increase the b-hCG concentration to 50% indicates non-viability and points to EP.[10]The present study was conducted to assess cases of ectopic pregnancy.

We found that age group 21-30 years had 48, 31-40 years had 20 and 41-50 years had 6 patients. Gaddagi RA et al[11] assessed outcome of the ectopic pregnancy. A total of 37 patients who were diagnosed as ectopic pregnancy cases were analyzed. The incidence of the ectopic pregnancy in the present study was 1:399

pregnancies. A majority of the cases were multigravidas. In most of the cases, there were no identiable risk factors. However, they did present with pain in the abdomen, amenorrhoea and bleeding per vagina in at least 50% of the cases. Almost half (40%) were in a state of shock at admission. Ultrasound, a urine pregnancy test and culdocentesis were the investigative modalities which were used. All the cases were managed by surgical management. On laparotomy, a majority of the cases were found to be ampullary pregnancies, followed by interstitial pregnancies. The tube was ruptured in almost 80% of the cases and there was a haemoperitoneum. Almost all the patients had intraoperative and/ or postoperative blood transfusions. There was no significant post operative morbidity in these cases.

We found that signs were cervical motion tenderness in 51, mass in 46, distension in 32 and mass in fornices in 45. Risk factors were prior history of tubectomy in 12, history of infertility in 7, previous ectopic pregnancy in 3 and appendicectomy in 2 cases. Site was isthmus in 6, ampulla in 37, fimbria in 6, cornual/interstitium in 12, rudimentary horn in 7 and broad ligament pregnancy in 6 cases. Condition of the tube was ruptured in 50 and unruptured in 24 patients. Cacciatore B et al[12]tested prospectively in 200 pregnant women suspected of having an ectopic pregnancy. An ectopic pregnancy was diagnosed in 68 women (34%), a miscarriage in 56 (28%) and a normal pregnancy in 76 (38%). On admission, an intrauterine sac was seen in 89% of the intrauterine pregnancies, but in none of the ectopic pregnancies. Detection of an adnexal mass separate from the ovaries was diagnostic of ectopic pregnancy with a sensitivity of 93%, a specificity of 99%, a positive predictive value of 98% and a negative predictive value of 96%. In 19 patients (9%) the initial sonogram was non-diagnostic and the final diagnosis was obtained after a repeated scan within 6 days. Five of these women had an ectopic pregnancy, 12 a miscarriage and two a normal pregnancy. On admission the hCG level exceeded 1000 iu/l in 77% of all patients and in 67% of those with ectopic pregnancies. In patients with an initial level exceeding 100 iu/l, an intrauterine sac was found in all the intrauterine pregnancies but in none of the ectopic pregnancies.

Surgical treatment is the preferred treatment for EP when there is rupture, hypotension, anemia, diameter of the gestational sac greater than 4 cm on ultrasonography, or pain persisting beyond 24 h. The preferred method of surgical treatment of EP today is diagnostic laparoscopy with salpingostomy and tubal conservation.[13] Laparotomy is indicated in the case of hemodynamic instability because it allows rapid access to pelvic structures. The success rate of salpingostomy is 92% and failure cases can be managed with MTX. Serial b-hCG measurements should be taken until undetectable to be certain that there is no persistence of trophoblastic tissue. Sometimes a prophylactic dose of MTX is given with salpingosotomy.[14]

The shortcoming of the study is small sample size.

CONCLUSION

The results of this study clearly showed that the number of ectopic pregnancies is increasing. A strong index of clinical suspicion was used to diagnose each case, and the USG results were added to the diagnosis.

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