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Original Research Paper

Pathology

THE FACETS OF ECTOPIC TUBAL PREGNANCY IN ADJUNCT WITH DIAGNOSTIC MODALITIES IN A TERTIARY CARE HOSPITAL IN NORTH EASTERN SECTOR OF INDIA - A CLINICOPATHOLOGICAL STUDY OF 3YEARS PERIOD

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ABSTRACT

BACKGROUND: The study was taken up to know the about the various diagnostic criteria used for ectopic pregnancy.

METHODS: This study included seventy patients diagnosed as ectopic pregnancy. Clinical signs, symptoms and physical findings were recorded. Urine pregnancy test, serum β hCG and abdominal ultrasound were the main diagnostic modalities. Findings at laparoscopy and laparotomy were analysed.

RESULTS: Majority of the women presented with abdominal pain (90%) and amenorrhea (97.14%).Majority(82.84%) had amenorrhea ranging from 4 weeks or less to 8 weeks. Cervical excitation was positive in 64.28% and adenexal mass was palpable in 15.7%. Urine pregnancy test and serum β hCG were positive in 82.8% and 95.2%. , respectively. Findings suggestive of ectopic were found in 81.42% on transabdominal ultrasound exam. Twenty-five patients (35.6%) underwent diagnostic laparoscopy while 98.5% underwent laparotomy.

CONCLUSION: Availability of sensitive and specific radio-immunoassays of β-human chorionic gonadotrophin (-hCG) and high resolution transvaginal ultrasound (TVS) allows early detection of ectopic pregnancies

KEYWORDS : Ectopic pregnancy , Serum β- hCG,Laporoscopy

INTRODUCTION:

Detection of ectopic pregnancy in early gestation has been achieved mainly due to enhanced diagnostic capability. The conservative surgery is only possible with early diagnosis.[1] Ectopic pregnancy remains a source of serious maternal morbidity and mortality worldwide, especially in countries with poor prenatal care inspite of latest technology and diagnostic modalities.[2]

MATERIAL AND METHODS

The present study was collabaratively conducted in military hospital shillong and NEIGRHIMS multispeciality hospital which is a tertiary referral centre ,during 2 year period from Dec 2015 to Dec 2017. Seventy consecutive patients, diagnosed and treated as ectopic pregnancy, were enrolled. Clinical presentations and physical findings were recorded. Urine pregnancy test, serum ß hCG and abdominal ultrasound were the main diagnostic modalities. Findings at laparoscopy and laparotomy were analysed.

RESULTS:

Patients came to the clinics with abdominal pain (90%) and amenorrhea (97.14%) (Table 1). Maximum patients had an amenorrhea of 4 to 12 weeks (Table 2). Pelvic findings amongst the patients were Adenexal mass 11 (15.7%), Adenexal tenderness 33(47.14%),Cervical excitation 45 (64.28%),Bulky uterus 43(61.42%),Normal size uterus 21(30%).Urine pregnancy test were Positive in 60 cases(95.21%) ,Negative 1 (1.4%),Not done 7 (10.%) . Findings suggestive of ectopic were found Positive in 57 (89.06%) ,Negative 7 (10%) and was not done in 6 patients(8%).

Twenty-five patients (35.6%) underwent diagnostic laparoscopy while (98.5%) underwent laparotomy (Table 3). Amongst the seventy cases 69 underwent laparotomy through a pfannenstiel incision of < 6 cm, after opening the peritoneal cavity(Table4). Haemostatis was secured by identifying the site, operative procedure was performed and specimen sent for histopathology. Cases with persistent trophoblast were not seen. Patients were discharged on Day 5 and follow-up given.

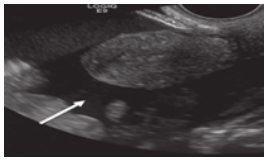

Fig 1-Adnexal mass with free

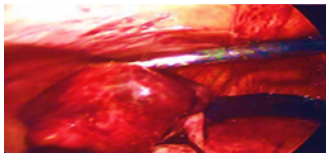

Fig-2Dilated fallopian tube with ectopic ,hemorrhage

Fig 3-Adnexal mass gross

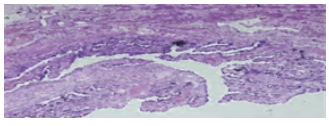

Fig 4-Histopathology of tube with ectopic

Table 1: Ectopic Pregnancy- Clinical Presentation

Symptoms	No	%
Amenorrhoea	67	97.13%
Pain lower abdomen	63	90%
Nausea and syncope	17	24.2%
Vaginal bleed	52	74.2%

Table 2: Weeks of amenorrhea relating to Ectopic pregnancy(n=70)

Weeks	No.	Percentage
<4 weeks	13	18.57%
5-6 weeks	22	31.42%
7-8 weeks	23	32.85%
9-12 weeks	08	11.4%
>12 weeks	01	1.4%
Lactational amenorrhea	03	4.2%

Table 3: Ectopic Pregnancy- Urine pregnancy test

Investigation	No	(%)
Positive	58	(87.87)
Negative	6	(8.5)
Not clear	2	(2.8)
Not done	4	(5.7)

Table 4: Ectopic pregnancy- laparotomy findings

Findings on surgery	No	(%)
Done and positive	69	98.50
Haemoperitoneum	60	85.70
Ruptured ectopic	29	41.42
Unruptured ectopic	24	34.20
Tubal abortion	14	20.00
Corpus leuteum cyst	12	17.14
Endometriosis	2	2.8

DISCUSSION

Ectopic pregnancies is the pregnancy in which the zygote is implanted out-side the endometrial cavity almost 2% of all pregnancies [3]and often present with vaginal bleeding or abdominal pain. Diagnosis is ascertained by a transvaginal ultrasound and elevated hCG levels, as recommended by the American Congress of Obstetricians and Gynecologists[4].A combination of ultrasound and hCG has a 96% sensitivity and 97% specificity for diagnosis of ectopic pregnancy. Occasionaly in ectopic pregnancy, the hCG is elevated and increases abnormally, rising <53% in 48 hour[5].Daniilidis et al described similar findings. [5]Since 1987, eight cases of ruptured ectopic pregnancy have been reported with a negative urine pregnancy test. All of the patients were taken to the operating room for suspected hemoperitoneum [6]. Above mentioned cases and ours suggest that ectopic pregnancy should be considered even with a negative pregnancy test. Our patient previously had methotrexate. Current recommendations for methotrexate therapy in ectopic pregnancy include a single or multidose regimen in patients who are hemodynamically stable and have no medical contraindications for methotrexate. Surveillance after methotrexate includes serial hCG levels. Treatment Failures are defined as failure of hCG to decrease by at least 15% from day 4 to day 7 after treatment.[8] Early diagnosis of Ectopic pregnancy allows the clinician to be able to give the option of medical treatment and if surgery is required then minimal surgical procedure can be done.[9,10]Studies show that abdominal pain, vaginal bleeding and amenorrhea of less than 12 weeks, are the commonest presentaitons.[11,12,13]Lab investigations show that sensitivity of urine pregnancy ,tests kits is improved which can now detect even 25 IU/l of ß-Hcg. [14]Studies on ß-hCG dynamics provide evidence that 85% of viable intra-uterine pregnancy will show a 66% rise in ß-hCG levels in every 48 hr period in the first 40 days of gestation. On the contrary only 13% of ectopic pregnancies will show a 66%rise.[15,16]In present study Transabdominal ultrasound scan(TAS) was performed which showed positive results in 89.06%. Several studies have shown that TVS is valuable tool in early diagnosis of ectopic pregnancy.The sensitivity of TVS for prediction of ectopic pregnancy is 87% and specificity is 94%.[18,19]Laparoscopy has been mentioned as a gold standard for diagnosis and management of ectopic pregnancy.We had only diagnostic laparoscopy available in ourhospital. In our study 25 cases had laparoscopy and 23 were positive giving 92% as positive the 2 negative laparoscopies that were constituted by acute pelvic inflammatorydisease (PID) and the other was appendicitis. With the availability of the Operative laparoscopy minimally invasive surgeries and conservative surgery can be performed.[19,20]A laparoscopic approach is superior to a laparotomy in terms of recovery from surgery, subsequent intrauterine pregnancy rate and recurrent ectopic rate but is associated with a higher risk of persistent trophoblast. Recommendations include following hCG weeklyafter 7 daysuntillevelsarenegative.

CONCLUSION :

Study performed by us concludes and emphasis on the importance of combining physical examination findings with hCG levels to ensure successful detection ,diagnosis and management of ectopic pregnancies, yet the delusional images presented in this condition can be varied.

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