

ECTOPIC PREGNANCY

(125 Cases)

by

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Many pathological conditions present a percentage of variables but only a few have greater disparity of symptoms, signs, opinions and reports than ectopic pregnancy. It is this inconsistency that made ectopic pregnancy both an interesting and challenging problem which is at times so difficult to diagnose and manage.

It has been observed by many workers that the incidence of ectopic pregnancy is increasing in recent years. This is explained by the fact that penicillin and other antibiotics are keeping more tubes with salpingitis patent, so that fertilization is possible but progress of the fertilized ova is restricted to the damaged tubes (Poddar, 1957). Treatment of genital tuberculosis is probably much more common than suspected and merits more consideration (Halbrecht, 1957).

In spite of the advances in diagnostic methods and management, ectopic pregnancy still remains a very serious threat to maternal

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safety. An accurate history and physical examination is believed to be the most important consideration in the diagnosis. An acute sense of suspicion or being 'ectopic pregnancy conscious' helps a great deal in arriving at a correct diagnosis. It is a surgical emergency in which missed or delayed diagnosis is outstanding contributory factor to the mortality. Culdocentesis has served as a very valuable diagnostic procedure to confirm the diagnosis (Bartzen, 1965).

The present study comprises of 125 cases of suspected ectopic pregnancy and proved ectopic pregnancy, admitted in S.M.R. and Lady Elgin Hospital, Jabalpur, from 1963 to 1965.

Each case was subjected to complete clinical examination, particular attention was paid to history, mode of presentation, symptoms and signs present per abdomen and on bimanual examination.

Past history of patient was enquired in detail, especially history and treatment of sterility, pelvic inflammation or any abdominal operation performed.

Following investigations were carried out:

- (1) Haemogram, total and dif-

erential count, erythrocyte sedimentation rate, Kahn and V.D.R.L. tests.

- (2) Urine examination.
- (3) Culdocentesis.
- (4) Histo-pathological examination of the specimen obtained at operation.
- (5) Dilatation and curettage in a few cases.

The type of surgery done in each case was decided on individual cases, considering her general condition, parity, type of ectopic pregnancy and facilities available. In few cases, auto-haemotransfusion was also given.

Patients were followed with special reference to recurrence of ectopic

The maximum number of ectopic pregnancies was in 26-30 years of age-group. The youngest patient was 16 years old and oldest was 44 years. The average was 28.77 years.

Our analysis of the parity revealed that ectopic pregnancy is quite common among nulliparous women, 24%, whilst it appeared to be rare in parity above five. The average parity being 2-3.

Predisposing and Etiological Factors:

Etiology of ectopic pregnancy is varied. The incidence of the various possible factors found in our series is presented in Table II.

TABLE I

	1963	1964	1965	TOTAL
1. Number of ectopic pregnancies	40	50	35	125
2. Ratio of ectopic pregnancies to deliveries ..	1:70.85; 1.4%	1:66.58; 1.5%	1:82.51; 1.2%	1:72.41; 1.38%
3. Ratio of ectopic pregnancies to intra-uterine pregnancy	1:89.32; 1.03%	1:84.42; 1.18%	1:104.62; 0.95%	1:95.64; 1.09%
4. Ectopic pregnancy as per cent of gynaecological cases	3.2%	4.31%	4.3%	3.87%

pregnancy and future gestation, specially in cases where conservative surgery was performed.

Incidence

From the study of the above Table, it is observed that there was variation in the incidence during these three years. In 1963, the number was 40, in 1964, the figure went up to 50, but in the following years, it again fell to 35. This variation has occurred with the rise and fall of total number of deliveries in the hospital. Incidence in our series appears to be higher than commonly reported by others.

TABLE II

Etiological factors:	No. of cases	Percentage
(1) Long period of infertility, (more than 5 years)	52	41.6
(2) Sterility	27	21.6
(3) Salpingitis	21	16.8
(4) Pelvic inflammation	21	16.8
(5) Treated for sterility	18	14.4
(6) Previous abortion	16	12.8
(7) Previous operation	15	12.0
(8) S.T.S. for syphilis—positive (K.T. & V.D.R.L.)	11	8.8
(9) Puerperal sepsis	5	4.0
(10) History of tuberculosis	4	3.2
(11) Previous ectopic-gestation	3	2.4

Symptoms

The incidence of various symptoms, given by the patient on admission, is shown in Table III. It will be seen that pain in abdomen, vaginal bleeding and amenorrhoea were the most frequent complaints.

TABLE III

Symptoms:	No. of cases	Percentage
(1) Pain in abdomen	122	97.6
(2) Bleeding per-vaginam	79	63.2
(3) Amenorrhoea	68	54.4
(4) Fainting/giddiness	42	33.6
(5) Urinary symptoms	33	26.4
(6) Irregular menstrual— periods	30	24.0
(7) Nausea/vomiting	29	23.2
(8) Rectal symptoms	24	19.2
(9) Weakness	20	16.0
(10) Epigastric pain	13	10.4
(11) Loss of appetite	10	8.0
(12) Fever	9	7.2
(13) Shoulder pain	8	6.4
(14) Discharge per vaginum	8	6.4
(15) Perspiration	6	4.8
(16) Others	7	5.6

Aids in Diagnosis

The following procedures (listed in Table V with frequency) were used as an aid to arrive at or confirm

the diagnosis of ectopic pregnancy. Out of these, culdocentesis was done in 77 cases with promising results. The reasons for doing it more frequently were, it was a very simple procedure, did not require any anaesthesia, and gave high percentage of accurate results. In case of abdominal pregnancy, x-ray abdomen, hysterosalpingography and sounding of uterus were found to be very helpful.

TABLE V

Aids in diagnosis:	No. of cases	Percentage
1. Culdocentesis done in	77	61.6
—Positive for unclotted blood	71	92.2
—False negative	6	7.8
2. Examined under anaes- thesia	26	20.8
3. X-ray abdomen	4	3.2
4. Hysterosalpingography	1	0.8
5. Sounding of uterus	6	4.8
6. Diagnostic curettage	7	5.6

Biological tests for pregnancy were not undertaken due to lack of facilities. Moreover, in acute cases, there was no time for such elaborate tests.

TABLE IV

The accuracy of diagnosis

Diagnosis:	No. of cases			Total	Percentage
	1963	1964	1965		
(1) Pre-operatively— diagnosed	26	31	22	79	63.2
(2) Pre-operatively— suspected	14	17	13	44	35.2
(3) Diagnosed only at laparotomy	Nil	2	Nil	2	1.6
Total	40	50	35	125	100.0

TABLE VI

Operative Procedures:	No. of cases	Percentage	Date of previous operation: for ectopic pregnancy	Comments:
I. Unilateral salpingectomy	31	24.8	3. 29-1-1964:	— 6th para having bad obstetric history, all babies expired except one aged 25 years) Normal delivery on 3-1-1965.
II. Bilateral salpingectomy	12	9.6	4. 19-3-1964:	— (Nulliparous) Normal delivery on 3-4-1965.
III. Bilateral partial salpingectomy & salpingostomy	2	1.6	Left partial salpingectomy with anterior colporrhaphy, post, colpo-perineoraphy, plication of round ligament	
IV. Partial salpingectomy and salpingostomy	17	13.6	5. 2-6-1965:	— Came to hospital again on 29-12-1965, was carrying 3 months intrauterine pregnancy.
V. Salpingectomy combined with operations	26	20.8	Partial salpingectomy	
VI. Salpingo-oophorectomy	11	8.8		
VII. Partial salpingo-oophorectomy with other combinations	2	1.6		
VIII. Other combinations of salpingo-oophorectomy	19	15.2		
IX. Hysterectomy (abdominal)	1	0.8		
X. Laparotomy*	1	0.8		

* Abdominal pregnancy, delivery of macerated foetus and placenta with membranes and marsupialization of sac done.

In the present series on follow-up, conception occurred in eight cases. In five, intrauterine and in the other 3, repeat ectopic pregnancy occurred.

Five cases of intrauterine pregnancy following ectopic 4%

*Repeat Ectopic Pregnancy
3 Cases 2.3%*

Date of previous operation: for ectopic pregnancy	Comments:	Previous operation for Ectopic Pregnancy	Repeat Ectopic Pregnancy
1. 21-1-1963: Right salpingostomy	— Had one abortion 5 months later, on 1-6-1963, followed by normal pregnancy and delivery on 12-10-64.	1. 16-3-1964: Left salpingectomy	— (Nulliparous married 12 years back) Repeat ectopic on 12-8-1964 operated on opposite tube.
2. 20-2-1963: Right partial salpingectomy with ventral suspension	— (Nulliparous. married 10 years back) normal delivery on 1-1-1964.	2. 10-8-1964: Partial salpingectomy (left) and salpingostomy	— 16-10-1964. Ectopic pregnancy (right). Third para willing for sterilization. Hysterectomy done, with appendicectomy, right salpingo - oophorectomy.
		3. 16-9-1964: Left salpingo-oophorectomy and plication of round ligament done	— 10-1-1965. Right side tubal pregnancy (Marked adhesions seen) Right salpingo-oophorectomy done.

Hysterosalpingography was done after tuboplasty. Only in one case, tubes were found to be patent. Others who attended the hospital were having only minor complaints (e.g. vague pain in abdomen; backache, leucorrhoea),

We feel that if the follow-up is extended for a longer period more concluding information can be obtained.

Mortality

The over-all morbidity was much less. There was only one death amongst 125 cases, mortality being 0.8%. King (1954) says that mortality is decreasing over past many years. Douglas (1951) and Ward (1951) had 0.78% and 0.7% mortality respectively in their series. Webster *et al* noted 0.14% mortality rate. Our figures of mortality closely parallel those of others. Mitha (1965) had reported a high mortality (2.9%).

Factors responsible for low mortality in this study are: (1) Specialist service, (2) early diagnosis, (3) quick treatment, (4) the facilities of blood transfusion, and (5) use of antibiotics.

Follow-up

Out of 125 patients in our series, 31 patients were left sterilized after surgery. In the remaining patients, a conception rate of 8.5% was recorded. Five cases had normal intra-uterine pregnancy, while other 3 had repeat ectopic. We believe that if the patients are followed for a longer period, a higher conception rate will emerge.

Hysterosalpingography was done in 3 cases after tubopalsy; in one case the patency of tube was demonstrated. Others who attended the hospital were having minor complaints only (e.g. vague pain in abdomen, backache leucorrhoea).

The response to follow-up in the present series was affected by the following factors:

1. Three years period of study is not enough to give opinion on future fertility of patients in our series.

2. Patients are usually reluctant to come for checkup unless severely ill.

3. Cases who delivered or aborted at home or private nursing homes could not be covered for analysis.

4. Some patients reside at long distance and have to face socio-economic factors to come for follow-up.

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