# LAPAROSCOPY - A METHOD OF CHOICE TO DIAGNOSE CHRONIC ECTOPICS AND ITS DIFFERENTIAL DIAGNOSIS

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#### SUMMARY

Diagnostic laparoscopy is an excellent single method to confirm or exclude chronic ectopic pregnancy, Laparoscopy was done in 50 haemodynamically stable cases of suspected ectopic or whenever there was uncertainty of diagnosis. Chronic ectopic was present in 18 cases (36%) and 32 cases 64%) belonged to non-ectopic group. First clinical diagnosis as ectopic was made in only 7 cases (38.8% out of 18 cases of ectopics. 6 cases (33.3%) inectopic were treated earlier with antibiotics for one week to one month due to wrong diagnosis. Pelvic inflammatory disease was the commonest differential diagnosis and was present in 16 (50%) out of 32 cases of non-ectopic group followed by endometriosis, cysticovary and miscellaneous group. In one case (2%) out of 50 cases of laparoscoy, there was uncertainty of diagnosis, even after laparoscopy in ectopic group and one case (2%) in one- ectopic group was opened for wrong diagnosis of ectopic. Total of 21 laparotomies (42%) were done following laparoscopy.

Haemoglobin, parity and clinical picture were of no help in differentiating ectopics from non-ectopics group. USG was done in 12 cases in ectopic group and in 50% of cases conclusive diagnosis could not be made out on ultra sonography alone. Urine pregnancy test (Pregcolor) was negative in 2 cases of ectopic group.

Once the clinical diagnosis of ectopic pregnancy has been seriously entertained it is essential to visualise adenexa by laparoscopy before discharging the patient.

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Clinical diagnosis of ectopic pregnancy had been greatly aided by (1) development of rapid and sensitive pregnancy tests (2) U.S.G. and (3) laparoscopy. While U.S.G. and serum Beta H.C.G. levels are of immense value in diagnosing unruptured ectopic, diagnostic laparsocopy is required for confirming the diagnosis and even for managing these cases. However, in chronicectopics clinical information may be misleading U.S.G. may be equivocal and urine pregnancy tests result depend on sensitivity of tests. Serum Beta H.C.G. facility is not available every where and this too may be negative in 4% cases of ectopic. Laparoscopic assessment of clinically stable patient gives quick and firm opinion about the diagnosis.

#### MATERIAL, METHOD AND RESULTS

This is retrospective study carri3ed out in the Department of Obstand Gyane. M.A.M. College, New Delhi. Fifty consecutive cases of diagnostic laparoscopy for suspected ectopic or when the diagnosis was uncertain were included in the study. All the cases were

laparosopy. Final diagnosis of cases is shown in Table I. Out of 50 cases only 18 (36%) had ectopic while 32 (64%) constituted non-ectopic group. Correct diagnosis helped in managing properly the non-ectopic group also.

Out of 18 cases of ectopic diagnosis was uncertain even on laproscopy in one case. Table II shows age, parity, Hb range and clinical presentation of the cases. Table III shows first clinical diagnosis at admission.

### ECTOPIC GROUP

One patient had hysterotomy and sterilisation in past. Three cases had D and C during current illness and one had undergone M.T.P. for wrong diagnosis of intrauterine pregnancy before coming to us. Clinical diagnosis was correctly made in 7 cases only (38.8%). Six cases 33.3%) had antibiotics for one week to one month before final diagnosis and in three cases diagnosis was not

TABLE I

## Final Diagnosis

Non-Ectopic Group								
in to see	Total No. of cases	Ectopic Group	PID	Endomet riosis	Cystic ovarJT.B.	Miscelle Varico coele	eneous Bicornuate euterus	Normal
No. of cases	50	18	16	6+1*	5+2** 2	1	1	1
% age	d value -	36%	32%	14%	14% 4%	2%	29	6 2%

<sup>\*</sup> One case had associated PID; was included in that Group too.

done under G.A. and 21 of these had laparotomy immediately after diagnositic

suspected at all on initial examination (Table III). Two cases had urine pregnancy test (preg

<sup>\*\*</sup> Two cases had associated PID and were included in the P.I.D. Group too.

TABLE II

	NON-ECTOPIC GROUP						
	Ectopic	PID	Endometriosis	Cystici ovary	Miscelleneous		
Total No.	18	16	7	7	5		
Age < 30 year	s 83.2%	81.2%	100%	85.6%	80%		
Parous	77.7%	81.2%	71.4%	100%	100%		
Hb range	7-10 gm%	6-10.5 hm%	8.5-10 gm%	8.5-10 gm%	5.5-9.8 gm%		
Bleeding	72.2%	43.71%	85.7%	42.8%	60%		
Pain	66.6%	81.2%	71.4%	57.1%	100%		
Am, enorrhea	33.3%	25%		28.5%	20%		
Mass	72.2%	43.7%	57.1%	57.1%	80%		
Others	33.2%	68.5%	14.2%	42.7%	40%		

TABLE III

FIRST CLINICAL DIAGNOSIS AT ADMISSION						
Final Diagnosis	Total Number	Ectopic	PID	Fibroid	Pregnancy	Cystici ovary
Ectopic	18	7(38.8%)	7(38.8%)	3(16.7%)	1(5.5%)	
PID	16	6(37.5%)	10(62.5%)		-	
Endometriosis	7	4(57.1%)	3(42.8%)			
Cystic ovary	7	4(57.1%)	2(28.5%)		-	
Miscellaneous	5	4(80.0%)	1(20.0%)		-	

colour) negative; one was a case of tubal mole and other was ruptured ectopic with mymptoms for 3.6 months. U.S.G. was done in 12 cases in this group. Ectopic was diagnosed in 6 cases, in one there was wrong diagnosis of overian cyst and in 5 it was equivocal and could not be differentiated from PID on U.S.G.

All the 18 cases had laparotomy and salping ectomy was done on affected side while tubectomy was done on other side in five cases. One patient had excision of acces-

sory horn which was present close to ruptured rube.

## NON-ECTOPIC GROUP (NEG)

32 cases belonged to this category, 9NEG). Pelvicinflammatory disease (PID):- It was diagnosed in 16 cases on laparoscopy. There was past history of laprotomy in one, sterlisation in three, ectopic in one, D and C in one and CuTuse in thee. Two patients had D and C in current illness. Clinical picture and Hb level are of no help in differentiating

this condition from ectopic (Table II). Out of 16 cases, in 6 (37.5%) patients first diagnosis was made as ectopic (Table III). U.S.G. also suspected ectopic in 2 cases wrongly although pregnancy test was negative. In one case in this group, pregnancy test was false positive.

## (NEG) ENDOMETRIOSIS

The third important condition which made differential diagnosis in the present series was endometriosis and in none of the case correct pre-operative diagnosis was made (Table III). Two patients had undergone sterillisation in past and 2 had D and C in this group. Two laparotomies were done in this group following laparoscopy for chocolate cyst of ovary and the patients were put on danazole or Primolut N.

## (NEG) CYSTIC OVARY

Table II and III show details of this group and in one patient U.S.G. wrongly diagnosed it as ectopic although urine pregnancy test was negative. In past one had undergone sterilisation operation and 3 had D and C.

#### (NEG) MISCELLANEOUS

Table I, II and III show details of this group. It included two cases of abdominal and pelvic tuberculosis, one case of bicornuate uterus, one broadligament vericocele and one normal case. In one case of tuberculosis false positive diagnosis of ectopic was made on laparsocopy and laparotomy revealed intestinal and pelvic tuberculosis. On laparoscopy adnexa could not be visualised in this case and there were pockets of fresh blood (trickled from abdominal incision). This was

the only case in the present series which was wrongly diagnosed as ectopic.

## DISCUSSION

Ectopic pregnancy is suspected ten times more often than it occurs Samnelsson and Sjovell (1972). In the present series out of 50 cases of suspected ectopic, ectopic was actually present only in 18 (36%). Out of these 18 cases in only 38.8% first clinical diagnosis was ectopic and in three cases it was missed completely on an initial examination. Urine pregnancy test was negative in two cases and U.S.G. Xcould diagnose ectopic in 50% only. Commonest differential diagnosis was PID. In ectopic group also 6 cases (33.3%) had antibiotics for wrong diagnosis of PID (for one week to the one month). In PID group U.S.G. wrongly diagnosed ectopic in 2 cases but urine pregnancy test was negative.

Endometriosis also contributed to confusion. In none of the cases correct pre-operative diagnosis was made. Diagnostic laparoscopy helped in making correct diagnosis and two laparotomies were done for chocolate cyst.

Hb%, parity and clinical presentation were of no help in setting the diagnosis. In one case of tuberculosis, laparotomy was done for wrong diagnosis of ectopic and Hb% of this patient was 5.5 GMS%, U.S.G. without hormonal assessment is not of much help in chronic cases. Urgent serum Beta HCG facilities are not present every where. It may also negative in 4% cases of ectopic: Thorborn et al (1983).

Samuellsson & Sjovall (1972) found 98.5% diagnostic accuracy for laparoscopy in

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489 cases of suspected ectopic. Ectopic was missed in 0.6% cases when laparoscopy was technically feasible and 43% cases had no pathology in their series.

Out of 50, one case was opened up wrongly in present series and in 1(2%) case there was doubt regarding the correct diagnostic laparoscopy can miss the diagnosis in 3-4% cases but there 55 false positive rate (Weckstein, 1985).

Diagnostic laparoscopy is an excellent single method to confirm or exclude ectopic pregnancy. It helps in making firm decision about the case and helps in managing the patient in more scientific manner. It can save prolonged observation and morbidity resulting from chronic ectopic and different conditions which make the differential conditions which make the differential diagnosis. Few technical advances have led simultaneously to reduction in clinical errors and the cost of treating patient as has laparoscopy.

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