

Diagnostic Laparoscopy in Chronic Pelvic Pain

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Summary : 35 patients presenting with lower abdominal pain for a period of 6 months or more were submitted to diagnostic laparoscopy. Their findings were compared with those of 15 women undergoing laparoscopy for infertility evaluation and 20 women undergoing tubal occlusion. Twenty one (60%) patients had prior pelvic surgery, tubectomy by minilaparotomy being the commonest procedure. Fourteen (40%) patients had normal pelvis. Adhesions, PID and endometriosis were the common conditions observed in 34.2%, 14.3% and 8.6% patients respectively. 20% patients from infertility group and 15% of asymptomatic women also had some pelvic pathology. The accuracy of clinical examination in diagnosing cause of pelvic pain was 65.7%. Pelvic ultrasonography missed 5 cases of pelvic adhesions. Laparoscopy remains the most useful tool to diagnose the cause of chronic pelvic pain which facilitates institution of rational therapy.

Introduction

Chronic pelvic pain (CPP) is a well known frequent and poorly understood complaint in women of reproductive age group. Its incidence varies from 10% to 33% of OPD patients. It leads to variable interference with daily life from occasional absence from work to serious marital disharmony. Despite the wide range of studies published so far, the diagnosis and management of the condition have remained an enigma.

A diagnostic laparoscopy remains the best procedure for establishing accurate diagnosis of pelvic disease in women with CPP.

In the present study, diagnostic laparoscopy has been carried out to evaluate causes of CPP in women from reproductive age group. The findings have been compared with women undergoing laparoscopy as a part of infertility evaluation (in absence of pelvic pain) and asymptomatic women undergoing laparoscopic tubal occlusion.

Material and Methods

35 Patients attending the gynaecological OPD for lower abdominal pain for a period of 6 months or more were

submitted to diagnostic laparoscopy.

Their findings at laparoscopy were compared with those of 15 women undergoing infertility evaluation and 20 asymptomatic women undergoing laparoscopic tubal occlusion.

The laparoscopic findings were analysed to find out the causes of pelvic pain and the correlation of clinical diagnosis, ultrasonographic diagnosis and laparoscopic diagnosis. The findings in control group were analysed to find out the incidence of pelvic pathology in asymptomatic women.

Observations

Age-Thirty four (97.2%) women from CPP group were between 20 and 35 years Parity - Twenty eight (80%) women from CPP group were parous

Clinical presentation - Eleven women (31.4%) from CPP group also presented as infertility, primary (7 cases) or secondary (4 cases).

The pain was noncyclical in 29 (82.6%) women.

The associated symptoms were dysmenorrhoea (24

Table 1
Prior Surgery in CPP Group

	No.	Percentage
Caesarean Section	4	10.0
Tubectomy - Minilap	9	42.8
Tubectomy reversal	1	4.7
Appendicectomy	3	14.3
Laparotomy for other indications	2	9.5
MTP	4	19.0
CuT insertion	2	9.5
D&C	2	9.5

6 patients had more than one surgery.

Table II
Clinical Findings in CPP Group

	No.	Percentage
Abdominal tenderness	9	25.7
Painful cervical excitation and uterine tenderness	11	30.8
Fixed uterus	7	19.9
Adnexal mass	8	20.0
Adnexal tenderness	12	34.2
No significant finding	14	40.0

Table III
Laparoscopic Findings in CPP Group and Control Group

	CPP n=35	Infertility n=15	Asymptomatic n=20
Normal Pelvis	14(40%)	12(80%)	17(85%)
Adhesions	12(34.2%)	2(13.3%)	2(10%)
PID	5(14.3%)	1(6.7%)	1(5%)
Endometriosis	3(8.6%)	-	-
Tuberculosis	2(5.7%)	-	-
Ovarian cysts	2(5.7%)	-	-
Par. Ovarian cyst	1(2.8%)	-	-

cases), dyspareunia (9 cases), leucorrhoea (10 cases), and backache (5 cases.)

Menstrual flow was excessive in 12 (34.4%) cases.

Prior surgery - 21 patients (60%) gave history of prior surgery. Table I gives the nature of prior surgery. Nine women had undergone tubectomy operation by

Table IV
Accuracy of Clinical Diagnosis in CPP Group

	Laparoscopic diagnosis	
	No pathology	Pelvic pathology
Clinical diagnosis		
No Pelvic pathology	8	6
Detectable pelvic pathology	6	15
Total	14	21

minilaparotomy technique.

Clinical findings: Fourteen patients (40%) did not reveal any significant clinical finding on abdominal and pelvic examination (Table II).

Uterine tenderness, adnexal mass, and adnexal tenderness were the common signs observed. Seven patients had fixed uterus.

Table III shows the laparoscopic findings. Fourteen (40%) patients had normal pelvis at laparoscopy. Adhesions (34.2%), PID (14.3%) and endometriosis (8.6%) were the common conditions observed.

20% patients from infertility group without pelvic pain and 15% of asymptomatic women also had some pelvic pathology at laparoscopy.

Table IV shows the accuracy of clinical diagnosis in CPP group. Clinical diagnosis missed 6 cases of pelvic pathology while it over diagnosed 6 others who on laparoscopy did not have any pelvic pathology.

Prior ultrasonography done in 24 patients revealed that 12 patients had normal pelvic scan. Of these five revealed adhesions in pelvis.

Four cases were diagnosed as tuboovarian mass on ultrasound, of whom one actually had evidence of pelvic tuberculosis on laparoscopy.

Five showed evidence of cysts in ovary. Of these one

se had a par ovarian cyst on laparoscopy

Discussion

Leard & Reginold (1988) and Vercellini (1990) have reported 23% and 29.3% incidence of prior history of abdominal surgery. Majority of their patients had an appendectomy in past. Tubectomy has not been mentioned in these studies. In present study however, tubectomy by minilaparotomy technique was the common surgical procedure. No patient had a laparoscopic tubal occlusion. Conventional technique of laparotomy leaving the open stumps of fallopian tube could be responsible for adhesion formation and subsequent pelvic pain. A prospective follow up of larger number of tubectomised women by both methods may throw a light on the possible relation of tubectomy with subsequent chronic pelvic pain.

In the present group 40% of women presenting with CPP and normal pelvic findings at laparoscopy. Similar findings have been reported by Lundberg (1973) and Vercellini (1990).

Role of adhesions in causing pelvic pain

In the present study, 34% of women having pelvic pain revealed adhesions. However 13.3% women undergoing infertility evaluation and 10.0% women undergoing tubal occlusion also revealed adhesions.

Rapkin & Amitrea (1990) observed adhesions in 26% women from pelvic pain group while 39% of asymptomatic infertile women also had adhesions.

Kresh et al (1984) suggested that the quality of adhesions in symptomatic group differs from those observed in asymptomatic group. Adhesions restricting the mobility of pelvic organs could be causing pain. He reported adhesions in 38% women from CPP group as against 12% in asymptomatic controls.

Laparoscopy can reveal unsuspected PID and also

disprove a case wrongly diagnosed as PID. In the present study, two cases of PID were missed by clinical examination while clinical diagnosis of PID was subsequently changed in 6/10 cases.

Krishna (1979) had reported that 87 out of 125 cases (69%) of PID diagnosed at laparoscopy had no abnormal clinical findings.

Low incidence of endometriosis observed in the present study is due to inclusion of women belonging to lower socioeconomic group initiating childbearing at an early age.

Clinical diagnosis and laparoscopic diagnosis

In all, in 23 out of 35 patients (65.71%) the presence or absence of pathology suspected on clinical examination was confirmed at laparoscopy.

The accuracy of clinical examination in diagnosing the cause of pelvic pain was 65.7%.

In the remaining 35% patients, the correct diagnosis could be revealed only by laparoscopy.

Role of ultrasonography

In the present study USG missed 5 cases of pelvic adhesions. The accuracy of sonography in diagnosing conditions like tuboovarian mass, ovarian cyst is high, but for diagnosing conditions like pelvic adhesions, endometriosis and tuberculosis the accuracy is low. Thus, laparoscopy definitely seems to have an edge over Ultrasonography in detecting these conditions.

Thus a diagnostic laparoscopy has a very important role in evaluating causes of chronic pelvic pain. Documentation PID, adhesive disease or endometriosis is possible by actually visualising the lesion.

Laparoscopy eliminates the diagnostic error and corrects the wrong diagnosis. In few cases it may even reveal an

unsuspected etiology. In absence of detectable pathology the patients can be reassured.

Unnecessary medical trials, repeated visits to hospital can be avoided thus saving time and money. Specific therapy can be instituted promptly. Incidence of negative laparotomies can be reduced substantially.

In a well equipped set up, specific therapy can be instituted for most of the conditions responsible for chronic pelvic pain.

Thus, it appears that the women presenting with chronic pelvic pain for 6 months or more should be submitted to a diagnostic laparoscopy in order to offer rational therapy.

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