

DIAGNOSTIC LAPAROSCOPY

(A Review of 800 Cases)

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SUMMARY

800 diagnostic laparoscopies were done at Government RSRM Lying-in Hospital, Madras, over a period of 5 years. The major indication was primary and secondary infertility 70% and 6.9% respectively. Pre-operative evaluation prior to tuboplasty was done in 5.1% of cases. Tubal factors were responsible for 28.5% of primary infertility and 34.6% of secondary infertility. Out of 80 cases with unexplained infertility there were no positive findings in 52.5% of cases. While selecting the case for tuboplasty, out of 41 women studied, major surgical procedures were avoided in 11. Out of 19 patients where ectopic pregnancy was suspected 52.7% showed pelvic adhesions.

Introduction

In most parts of the world infertility constitutes one of the major problems to the Gynaecologists. Experience has shown that pathological condition in the pelvis among the infertile women is frequently not well appreciated by routine pelvic examination and the usual diagnostic procedures. For this reason diagnostic laparoscopy is mandatory for complete evaluation of various pelvic organs under direct vision.

Methods and Materials

During a period of 5 years 800 laparoscopies were done at Govt. RSRM Lying-

in Hospital, Madras and the results analysed.

Observation and Discussion

Diagnostic laparoscopy was done for various indications such as primary and secondary infertility (70% and 6.9%) pre-operative evaluation prior to tuboplasty in 5.1% of cases, primary amenorrhoea in 4.9% of cases, and unexplained pelvic mass and pain in 6.7% of cases. In Rohini Merchant's series diagnostic laparoscopy has been done for infertility in 55% of cases, Tubo ovarian mass in 14% of cases and unexplained pelvic pain in 17% of cases.

Tubal factors such as blocked tubes, hydrosalpinx and peritubal adhesions were responsible for 28.5% of primary infertility and 34.6% of secondary infertility. In a series reviewed by Sud *et al*

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tubal factors were responsible for 46.66% of primary infertility and 60.53% of secondary infertility. Polycystic ovaries were seen in 17.8% of primary infertility group and 41.8% of secondary infertility group. There were 18 cases of genital tuberculosis and 12 cases of endometriosis. In 42.8% of cases there was no positive pelvic pathology in the pelvis. Thankam Varma's report had shown pelvic pathology in 33.3% of infertile patients. Our observations are listed in Table I.

post operative follow-up to assess the success of surgery. Out of 41 cases studied, major surgical procedures were avoided in 11 cases because of dense adhesions and complete destruction of both fimbriae. In Robert's series laparoscopy eliminated major surgical procedures in 41% of 44 patients.

In 14 women laparoscopy was done to assess the success of surgery, where hydrosalpinx was seen in 2 patients, Tubo ovarian Mass in 2 cases and adhesions in

TABLE I
Findings in Infertility

Findings	Primary		Secondary	
	No.	%	No.	%
Tubal Block	100	17.8	11	20
Hydrosalpinx	20	3.4	4	7.3
Pelvic adhesions	33	5.9	4	7.3
Fimbrial Phimosi	37	1.2	—	—
Hypoplastic tube	1	.2	—	—
Polycystic ovaries	100	17.8	23	41.8
Ovarian Cyst	10	1.8	4	7.3
Tubo ovarian masses	5	.9	1	1.8
Uterine fibroids	12	2.2	5	9.3
Hypoplastic Uterus	6	1.1	—	—
Uterine didelphys	7	.2	—	—
Pelvic tuberculosis	15	2.6	3	5.5
Endometriosis	12	2.1	—	—
Normal Pelvic Organs	240	42.8	—	—
	562	100.00	55	100.00

Out of 80 cases with unexplained infertility there were no positive findings in 52.5% of cases, 16.4% of patients showed polycystic ovaries, 13.7% had tubal block, 2.7% had tuberculosis and 5% of patients showed endometriosis. In Peterson's series out of 204 patients with unexplained infertility 1/3rd were found to have endometriosis.

Laparoscopy is essential in order to select or reject a case for various plastic procedures and unnecessary laparotomies can be avoided and is helpful in the

2 cases. One side tube was patent in 5 patients and both the tubes in 3.

Diagnostic Laparoscopy was done in 39 patients with primary amenorrhoea and 27 patients with secondary amenorrhoea. Out of 39 patients with primary amenorrhoea Mullerian agenesis was seen in 48.7%, Streak ovaries in 25.7%, Polycystic ovaries in 7.7% and Pelvic tuberculosis in 5%. Among secondary amenorrhoea patients, polycystic ovary was seen in 55.6% of cases. 7.4% showed pelvic

tuberculosis and 11.1% showed hydrosalpinx.

Diagnostic laparoscopy is of great help in the diagnosis of obscure pelvic pain and masses. In 19 patients laparoscopy was done for unexplained pelvic pain. 26.5% of patients showed pelvic adhesions, 10.5% hydrosalpinx, 21% tubo ovarian masses and 10.5% showed pelvic tuberculosis. Out of 19 patients where laparoscopy was done for suspected ectopic pregnancies, Pelvic Inflammatory disease was seen in 52.7%, pelvic adhesions in 21% and ovarian cyst (more than 6 cms in diameter) in 5.3% of patients. In Sud's series out of 17 suspected ectopic pregnancies, 9 were tubal abortions and in 2 cases pelvic organs were normal. In 15 patients with various pelvic masses ovarian cyst was seen in 66.6%, tubo ovarian masses in 26.7% and uterine fibroid in one patient.

Complications were minimal in this series. 15 patients had minimal wound infection. 4 patients had abdominal wall haematoma. There were no major complications.

To conclude, laparoscopy is the most useful diagnostic tool in closing the gap between clinical evaluation and major surgical explorations and should rest securely in the armamentarium of the practising Gynaecologist.

References

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