VALUE OF LAPAROSCOPY IN ENDOMETRIOSIS AS A CAUSE OF INFERTILITY

By

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SUMMARY

This is a study of 200 cases of infertility over a period of one year at Nowrosjee Wadia Maternity Hospital, Bombay, on whom laparoscopy was performed. Eighteen of the 200 cases were confirmed to have endometriosis. A thorough work up was done taking detailed clinical history and examination. Based on these laparoscopy findings and Kistner's classification the cases were divided as mild, moderate, severe (Stage I, Stage IIA, IIB, Stage III, Stage IV) and their mode of therapy (Medical/Surgical) was decided. Finally proper follow-up of the cases was studied.

Introduction

Endometriosis, one of the common problems of our infertility practice, has drawn attention of many gynaecologists over the years. It is generally acknowledged that there is a correlation between endometriosis and infertility, albeit the exact mechanism is not known. Because of the enormous variability in symptoms it is difficult to study endometriosis as a single entity and to draw conclusions regarding its therapy.

The approach presented herein places emphasis on laparoscopy for the diagnosis of endometriosis and assessment of its severity. It also allows consultation with the infertile couple for the review of findings and prognosis.

Materials and Methods

Two hundred cases of infertility on whom laparoscopy was done were studied over a period of one year at Nowrosjee Wadia Maternity Hospital, Bombay. Eighteen out of these cases were confirmed to be having endometriosis whose treatment was decided based on the laparoscopy findings. Finally proper follow-up was studied.

Results

Table I shows analysis of two hundred patients of infertility. Eighteen out of these had endometriosis. At the same time laparoscopy has given us an insight into certain other pathologies where proper management can be decided.

Table II shows symptomatology of these 18 patients. Dysmenorrhoea is the commonest symptom. History of dyspareunia cannot be elicited in significant number of cases owing to the socio-economic class of the patient.

Based on the laparoscopy findings, the patients were classified according to Kistner's classification. There were 6 patients

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TABLE I
Analytical Study of 200 Patients of Infertility

	Number	Per cent in our study
Total cases of infertility on whom laparoscopy was done	200	
Confirmed to be having endometriosis	18	9.0
Pelvic inflammatory disease—		
(1) Dense pelvic adhesions	21	10.5
(2) Tubo-ovarian masses	9	4.5
(3) Tuberculosis	7	3.5
(4) Hydrosalpinx	6	3.0
Ovarian cyst	2	1.0

TABLE II
Symptomatology

Presenting complaint	Number	Per cent in our study	Per cent in Behrman (1981) study
Dysmenorrhoea	15	83.33	90.6
Pelvic tenderness	14	77.7	93.7
Pelvic pain	13	72.2	87.5
Dyspareunia	6	33.3	68.7

each in Stage I and Stage IIA which can be considered as mild variety. There were 4 patients in Stage IIB while in moderate to severe class i.e. Stage III, there were 2 patients. No patient was present in Stage IV.

TABLE III
Kistner's Classification

	Number
Stage I	6
Stage IIA	6
Stage IIB	4
Stage III	2
Stage IV	—

Table IV shows different modes of management of these patients based on their laparoscopy findings.

Twelve patients required some sort of surgical management. Only adhesiolysis was carried out in 5 patients out of which

TABLE IV
Management of the Patients

Surgical management	—	12
—Excision of the cyst with or without adhesiolysis	5	
—Adhesiolysis at the time of exploration	3	
—Through laparoscope	2	
—Abdominal hysterectomy	2	
Medical management	—	6
—Danazol therapy	4	
—Oestrogen-progesterone therapy	2	

2 had adhesiolysis through laparoscope. Medical management was carried out in 6 patients. Danazol therapy or estrogen-progesterone therapy was decided depending on the socio-economic class of the patient. There were 2 patients 37 and 39 years of age respectively. Both were in Stage III. Abdominal hysterectomy was

carried out in these patients after consulting their husbands.

Table V shows follow-up of these patients. It is to be noted that pregnancy resulted in 6 out of 18 patients i.e. 33.3%.

TABLE V

Follow-up

	Number	Per cent in current study (%)	Per cent in Behrman (1981) study
Total cases	18	—	—
No follow-up	8	44.4	10.0
Symptomatic relief	8	44.4	50.0
Pregnancy	6	33.3	—
Recurrence	2	11.1	26.6

Discussion

In anxious, tense infertile couples who wait until late in life to attempt conception, it is important to reach the cause of infertility as quickly as possible and decide the proper management.

Endometriosis which was originally described by Rokitansi in 1861, has got a good prognosis.

Laparoscopy is one of the best investigative procedures to evaluate this problem as it is safe, at times can be performed as an O.P.D. procedure and gives an accurate idea about therapy. It can also help us to diagnose certain other problems like PID and ovarian cyst where a proper management can be decided. In our series 9% of the infertility cases were confirmed to have endometriosis.

Dysmenorrhoea, pelvic pain and tenderness have been the common complaints in our study. More or less similar incidence has been shown by Behrman (1981). While deciding about the mode of management as high as 12 out of 18 patients required some form of surgical management. Medical management was given in patients with mild endometriosis.

In the treatment of endometriosis, there is no question that total surgical removal of pelvic structures is curative and beneficial. However, when preservation of fertility is desired no single medical or surgical regimen has been found to be successful, but by far surgical treatment appears to be a better deal owing to the selection of the patient.

We do not have follow-up of all patients to reach any definite conclusion but, pregnancy rate was found to be 33.3% in our study. Dmowski and Cohen (1975) showed a pregnancy rate of 72%, Sulewaski Curcio (1980) reported a 45% rate while Garcia and David (1979) reported 37.7%.

Conclusion

In conclusion we believe that all inexplicably infertile women should be suspected of having endometriosis. They deserve confirmation of the suspicion by laparoscopy. And we as gynaecologist should concern ourselves with the chal-

lenge of giving the best obstetrical career to these patients.

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References

1. Behrman, S. J.: Amer. J. Obstet. Gynec. 139: 646, 1981.
2. Dmowski, W. P. and Cohen, M. R.: J. Obstet. Gynec., 147: 46, 1975.
3. Garcia, C. R. and David, S. S.: Am. J. Obstet. Gynec. 129: 740, 1979.
4. Sulewaski, J. M. and Curcio, F. D.: Am. J. Obstet. Gynec. 138: 128, 1980.