

RELEVANCE OF DIAGNOSTIC LAPAROSCOPY IN SHORT PERIOD INFERTILITY

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SUMMARY

Diagnostic laparoscopy plays a valuable role in the investigation of an infertile female. This invasive procedure most often is done only when indicated. This study is conducted to know its value in women with short period of infertility in whom laparoscopy most often is not performed. Results indicate that equal percentage of women have an abnormal pelvic finding in women with short period of infertility compared with women with long period of infertility.

INTRODUCTION

Laparoscopy plays a valuable role in evaluating infertile female. It has a definite place in the surgical armamentarium of the gynaecologist. Approximately 80% of married couples initiate pregnancy within 12 months of attempting to achieve a conception and about 90% within 2 years (Moghissi 1979). Hence the tendency is always to defer this invasive procedure of laparoscopy by 2-3 years. The objective of the present study is to know how relevant is this in women who present with short period of infertility. Is it to be postponed just because it is an invasive procedure or should it be done at the first instant.

MATERIAL AND METHODS

The present study was carried out in 350 infertile couples who attended our unit of

OBG at Kasturba Hospital, Manipal, over a period of 15 months from May 1988 to August 1989. All women underwent detailed clinical examination after thorough interrogation. The male partner was evaluated during the same visit by a Urologist. Ninety couples with anovulation as the cause for infertility and 25 couples with anovulation as the cause for infertility were excluded from the present study. Among the rest, 154 women underwent a diagnostic laparoscopy with chromotubation as a diagnostic procedure. For comparison, these women were grouped into group A women with married life less than 3 years and group B women with married life more than 3 years. 34 women belonged to group A and 120 women belonged to group B.

OBSERVATIONS

Analysis of group A and group B women was as follows. Total No. of women in

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group A were 34. At laparoscopy no abnormality was detected in 15 women and abnormality attributable to infertility was found in 19 of these 34 women, 14 (41%) women had significant and specific symptoms (Table I) and 20 (59%) women were asymptomatic. Laparoscopic findings were compared between symptomatic and asymptomatic women. Of 14 symptomatic women only 3 women (22%) had normal findings and 11 women (78%) had detectable pathology (Table II). Of 20 asymptomatic women 12 women (60%) had normal laparoscopic findings and 8 women (40%) had abnormality.

TABLE I

Shows symptoms of significance

Symptoms	Group A	Group B
	N=14	N=45
Menorrhagia	3	10
Dysmenorrhoea	4	14
Dysparunea	2	7
Menorrhagia + dysmenorrhoea	3	10
Dysmenorrhoea + dysparunea	1	2
Chronic pelvic pain	1	2

In group B we had 120 women. At laparoscopy 72 women had normal findings and 48 women had abnormality attributable to infertility. Of these 120 women, 45 women (37%) were symptomatic and 75 women (63%) were asymptomatic which matches very well with women of group A. Of 45 symptomatic women 20 women (45%) had normal findings at laparoscopy and 25 women (55%) had abnormality. Of 75 women who were asymp-

tomatic, 52 women (70%) had normal findings at laparoscopy and 23 women (30%) had abnormality.

Comparative analysis is shown in Table III.

DISCUSSION

There is no doubt that introduction of laparoscopy has transformed the ability to investigate long standing infertility. As about 90% women conceive within 2 years of marriage (Moghissi 1979, Kistner) many feel that laparoscopy be deferred and performed only if there is an abnormal HSG or women does not conceive even after a reasonable period of time. It should be done in couples with more than 2 years infertility where all other investigations for infertility have been normal. Present study of analysis of 154 diagnostic laparoscopies was conducted to study the relevance of this procedure in women with short periods of infertility.

In women in group A no abnormality was detected at laparoscopy in 44%, which is in agreement with Cohen (1968) 37% Neurwith's (1970) 38% and Gupta (1984) 38.3%. In group B women no abnormality was detected at laparoscopy in 60% which is in agreement with Thankem Verma (1978) 66.7% and Sholapurkar (1984) of 67%. Thus irrespective of period of infertility a about 50% infertile women on an average have normal findings at laparoscopy Padma Rao (1972) and the other 50% have an abnormality which needs further evaluation and treatment. It is thus obvious that there is no reason why laparoscopy should be withheld. Further with our present data, it is seen that women with significant symptoms and shorter period of infertility had greater evidence of pelvic pathology (78%) in contrast to women without symp-

TABLE II

Shows abnormal laparoscopic findings

Abnormality detected	Group A N=19		Group B N=48	
	Symptomatic women	Asymptomatic	Symptomatic women	Asymptomatic
	N=11	N=8	N=25	N=23
Peritubal adhesions	3	1	5	10
Tubal blocks	1	3	2	5
Endometriosis	4		9	2
Fibriod uterus	2	2	5	2
T.O. mass	1		2	1
Hydrosalpinx		1	1	1
T.B. Salpingitis		1	1	
Ovarian cysts			2	

TABLE III

Shows results of comparative analysis

	Group A		Group B	
	No.	%age	No.	%age
Total No. of women	34		120	
(a) Normal findings at laparoscopy	15	44	72	60
(b) Abnormal findings	19	44	72	60
Symptomatic women	14/34	41	45/120	37
(a) Normal findings	3/14	22	20/45	45
(b) Abnormal findings	11/14	78	25/45	55
Asymptomatic women	20/34	59	75/120	63
(a) Normal findings	12/20	60	52/75	70
(b) Abnormal findings	8/20	40	23/75	30

toms, where an abnormality was seen in only 40%. Same symptoms with longer period of infertility had only about 55% incidence of detectable pathology. There was no significant difference in abnormalities detected at laparoscopy between two groups.

CONCLUSION

Laparoscopy thus is a useful tool in investigating infertile female. It should be adopted as a primary modality of investigation in infertile women irrespective of period of infertility. It is specially indicated in women with symptoms where a higher incidence of abnormality could be detected. It should thus be stressed that laparoscopy is a mandatory investigation as "Eyes can see many things

which the hands cannot feel"

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TABLE III

Shows results of comparative analysis

Group B		Group A		Total no. of women
No.	Age	No.	Age	
12	25-30	12	25-30	(a) Normal findings
18	31-35	18	31-35	(b) Abnormal findings
30	36-40	30	36-40	Symptomatic women
42	41-45	42	41-45	(a) Normal findings
54	46-50	54	46-50	(b) Abnormal findings
66	51-55	66	51-55	Asymptomatic women
78	56-60	78	56-60	(a) Normal findings
90	61-65	90	61-65	(b) Abnormal findings