

POSTPONING THE NEED OF LAPAROSCOPY IN ROUTINE INFERTILITY WORK-UP

PANKAJ DESAI ● A.P. MANJUNATH ● MALINI DESAI ● DIPTI MODI

SUMMARY

308 and 542 cases enrolled for infertility workup were studied in two phases. In first phase of earlier years laparoscopic evaluation was done early without any treatment initiation. In the second phase similar evaluation was done after noninvasive evaluation and treatment like ovulation induction. It was found that the need for laparoscopic evaluation declined from 31.49% to 15.03%. At the same time instances when laparoscopy picked up abnormalities rose significantly from 22.7% to 55.43%.

INTRODUCTION

Laparoscopy has become an integral part of infertility work up of a couple. In spite of all its well known advantages of 'key hole surgery' it is essentially an invasive procedure. Any invasive procedure has its inherent handicap of morbidity and mortality. 24.2% minor and 0.3% major complications rates have been reported recently in

an IAGE survey (1994). Peterson et al (1988) reported a mortality rate of 5.4 per 1,00,000 procedures.

Influx of modern technology especially ultrasonography including endosonography has proved to be remarkable in infertility work up. Its non-invasiveness gives it an obvious advantage over others.

In the present study we examine the possibility of postponing laparoscopy with the help of other noninvasive investigative methodologies.

Dept. of Obst. & Gynec., Medical College & S.S.G. Hospital, Baroda.

Accepted for Publication on Nov. 96

MATERIAL AND METHODS

This study has been carried out in Unit III/I of the dept. of Obst. & Gynec., Medical College & SSG Hospital, Baroda. It is divided into two phases of duration.

Phase I : Jan. 1987 to Dec. 1991

Phase II : Jan 1992 to June 1996

In phase I of the study laparoscopic evaluation of an infertile couple was routinely done. In phase II laparoscopy was done only after a sonographic study and/or endocrinal profile. In anovulatory subjects suspected on history and sonography, induction of ovulation was done for 3 to 6 months. If after three ovulatory responses the subject failed to conceive, laparoscopy was done.

Before 1992, we did not have an access to sonography. After 1992 it became accessible to us, initially from the

private sonologists and then at our institution itself. Those subjects who did not reveal any abnormal finding on laparoscopy were grouped as normal. This included conditions producing tuboperitoneal factors for infertility. However cases with absence of ovulatory stigma on any of the ovaries were not included in 'abnormal findings' group as this was not a tuboperitoneal factor and was easily detectable on sonography.

We do not perform sonosalpingography and continue to use methylene blue dye chromopertubation test for assessing tubal patency.

Results of the first group were compared with those of the second so as to validate or otherwise, our change in policy from early laparoscopic evaluation to postponed evaluation.

RESULTS

In phase I of the study (1987-91) in all, 308 subjects were enrolled for infer-

Table I
DETAILS OF TWO PHASES

	Cases enrolled	No. of Laparoscopies	%	Normal findings	Abnormal findings
Phase I	308	97	*31.49	75 (77.3%)	*22 (22.7%)
Phase II	542	92	*15.03	41 (44.57%)	*51 (55.43%)

* Difference statistically significant.

Table II
POSSIBILITY OF DOING LAP. EARLIER

Total	07 (7.6%)
* Endometriosis	03
* Tuberculous PID	02
* Nonspecific PID	02

tility evaluation in the unit. This figure was 542 in phase II (1992-1996 mid).

As shown in Table I, enrollments for infertility workup increased in phase II. But number of laparoscopies performed declined from 97 in phase I to 92 in phase II. Percentagewise this decline was from 31.49% to 15.03%. This difference was statistically significant ($P < 0.001$).

Interestingly, abnormal findings on laparoscopy rose from 22.7% in phase I to 55.43% in phase II. It is therefore obvious that inspite of the number of laparoscopies declining the percentage of cases where abnormal findings were more, rose significantly.

There were 7 cases wherein it was thought that laparoscopies should not have been postponed as shown in Table II. Incidentally these were cases of endometriosis or chronic PID, 7 out of 92 brings to a small figure of 7.6%.

DISCUSSION

Laparoscopic evaluation of a female

infertile patient has become an important exercise in the workup of the case. However, with the advent of ultrasonography including endosonography, early resort to an invasive procedure like laparoscopy seems to be unnecessary. It has been found in the present study that when the policy of early laparoscopy was adopted nearly 30% subjects were so evaluated. Of these only 22.7% had abnormal findings. However, in the second phase though the number of laparoscopies declined, occasions on which abnormal findings were found rose from 22.7% to 55.3%. This shows that laparoscopy was now done more purposefully.

During the period in which ovulation induction, sonographic evaluation and endocrinal evaluation and treatment (as per the indication) were done many women conceived. These were probably those cases in whom if laparoscopy would have been done, no abnormality would have been found. This is not to undermine the importance of laparoscopy

but to stress the need to use it judiciously. At the same time the importance of newer noninvasive methods is acknowledged.

ACKNOWLEDGEMENT

The authors are thankful to the Dean, Medical College, Baroda and The Superintendent, SSG Hospital, Baroda for permission to carry

out this study and publish hospital data.

REFERENCES

1. *IAGE Survey*. Khandwala S.D. *J. Obstet & Gynec. Ind*; 44, 268, 1994
2. Peterson H.B., Hulka J.F., Philips J.M. : *American Association of Gynaecological Laparoscopists, 1988 ; Membership Survey 1988* : AAGI Publishers, California, USA, 195.