

A NEW APPROACH TO INVESTIGATE AN INFERTILE COUPLE

By

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SUMMARY

To investigate infertile couple, diagnostic laparoscopy with aspiration of sperm-containing fluid from pouch of Douglas is a useful tool which makes the process short, precise and more informative; and it rules out other exhaustive investigations for infertility.

Besides proving patency of the tube, it also suggests positive sperm incapacitation which is very precise and important factor from conception point of view. It also rules out possibility of cervical mucus hostility and gives an idea about favourable sperm-mucus interaction.

Introduction

Infertility is one of the very specific and complex gynaecological problems, requiring very tedious and laborious investigation.

For most of the time during this investigation, a couple gets tired and frustrated, and many a times it proves to be a futile and just an academic exercise. Here we have made an attempt to shorten the process of investigation and getting maximum information from one single procedure.

Procedure

The patient is called for laparoscopic examination on day 14th or 15th of the cycle (around the time of ovulation). About 6 to 8 hours prior to laparoscopic procedure, the couple is being advised to have intercourse. During the laparoscopy tubes, ovaries, uterus, round ligament, utero-

sacral ligament and pouch of Douglas are examined carefully as usual; and free fluid from pouch of Douglas is aspirated with the double puncture technique, which is examined immediately under microscope for the presence or absence of spermatozoa. If fluid is not adequate, 10 ml of normal saline is injected through double puncture in pouch of Douglas and that fluid is aspirated

Ovary is being examined for graafian follicle or corpus luteum formation.

Results

Forty cases were studied of both, primary and secondary sterility. Results were as follows:

(A)

Total No. of cases for aspiration from pouch of Douglas	40
No. of samples showing positive sperms (motile)	12
No. of negative samples for sperms	25
No. of doubtful samples	3

From: Smt. S. C. L. General Hospital, Ahmedabad.

Accepted for publication on 7-3-89.

(B)

Chromopertubation was done on 28 (25+3) cases, i.e. for negative samples.

Tubal patency positive	20
Tubal patency negative	8

(C)

Pregnancy-Rate: Cases (sperms positive samples) 12

Pregnancy in 6 months	9
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Discussion

Cases showing positive sperms in fluid aspirated from pouch of Douglas suggest the following possibilities:

- (1) Cervical mucus is favourable.
- (2) Anatomical and physiological patency of fallopian tube. It does not require chromopertubation for detection of tubal patency.
- (3) Normal husband semen with positive sperm capacitation factor.

- (4) Hormonal changes around the 14th day of menstrual cycle which will improve cervical mucus. So it will also suggest probability of ovulation.

This group of patients usually conceive in short period. They do not require exhaustive investigations for infertility like hormonal assays, cervical antibodies, P.C.T. hormonal assays, cervical antibodies, P.C.T., etc.

In the present series:

- (1) Nine out of 12 patients became pregnant within 6 months of duration. The other 3 patients required further follow-up.
- (2) In cases showing negative sperms, chromopertubation was done and from them 8 cases showed tubal blockage.
- (3) The cases with tubal patency may require further investigations for male factor and cervical factors.