

Tuboplasty or Recanalisation

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Planning parenthood is important to the couple for developing a happy family life, but it also depends upon their ability to procreate. In India procreation does not seem to be a problem as the population of the country is growing at a tremendous rate. Government of India launched family planning programme in fifties, mainly to control birth rate. As well known, there are temporary and permanent methods for controlling reproduction. Tubal ligation is one of the popular methods adopted by most women.

Sometimes, after getting sterilized the couple may lose all their children due to some calamity or otherwise, because the mortality rate among children is still high in our country. Tuboplasty or Recanalization is a ray of hope for couple who are faced with such a problem.

Recanalisation or tuboplasty means resection of adhesions on already ligated part of the fallopian tubes and doing end to end anastomosis of the remaining part of the tubes to maintain the patency of the tubes. It facilitates the transport of the ovum to the tubes for fertilization in cases where the cause is purely abnormality of the tubes.

Tuboplasty can also be done in the following conditions leading to infertility; Pathological adhesions of tubes due to tuberculosis system; secondary infertility where the adhesions are followed by caesarean section, M.T.P., ectopic pregnancy or even after normal delivery; primary infertility due

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to blocked fallopian tubes.

The main objective of this surgical intervention is to make the fallopian tubes patent for the ova to get fertilized. The outcome of tuboplasty is pregnancy in nearly 30 to 50 percent women, in some cases there may be ectopic pregnancy, failure to conceive or failure of patency of the tubes. Prognosis is dependent upon the types of tubal ligation, length of the remaining tube, location of the anastomosis, interval since tubal ligation, ovarian function and experience of the surgeon.

The following are to be ensured before the reconstruction surgery:

There is no other correctable method available, the tubal abnormality is accurately recognized, and fertility prognosis is with other alternative treatments.

The investigations and diagnostic procedures necessary prior to surgery, are assessment of male fertility (seminal fluid analysis). Mid-Luteal progesterone level, proof of ovulation, absence of general infection, and assessment of tubal status. (X-Ray salpingography, Laparoscopy with tubal hydrotubation and/or hysteroscopy).

Tuboplasty is contra-indicated, when the age of the patient is more than 35 years, or previous sterilization procedure may not be compatible with reversal. And in cases of previous pelvic sepsis, and when there is unexplained male infertility. When a woman faced with major surgery and long hospitalization, or if there is distal tube disease, and if the length of the tube is less than 4 cm, less than 50% of ampulla. In patients with failed

previous tubal surgery, and as in all cases of surgical risk. The classification of Tuboplasty can be classified as Adhesiolysis: i.e. Liberation of adhesion. Salpingolysis: Liberation of peritubal adhesions. If plastic operations; are done tube itself such a tubouterine implantation, isthmus implantation is also done. Tubotubal anastomosis creation of new isthmus, i.e Salpingoneostomies and Fimbrioplasty of Reconstruction of fimbria by deglutination and dilatation.

Nursing Management: The preparation for surgery is similar to any gynaecological operation, under general anaesthesia. Many surgeons use steroids post-operatively to reduce the post-operation adhesions, and follow two regimes, one is by giving injection Dexamethasone 20 mg-into the peritoneal cavity at the end of the surgery followed by 12 doses of 20 mg at 4 hourly interval, the second regime is:

Injection Dexamethasone - 8 mg I/M in the evening prior to surgery:

- 20 mg one hour prior to surgery.
- 8 mg in the evening after surgery.
- 8 mg B.D. on 1st postoperative day
- 1 mg four times a day on 2nd day
- 0.5 mg four items a day on 3rd day

At the end of the operation, paritoneal lavage with ringer's lactate solution helps to remove any small blood clots or debris, where as prostaglandin synthetase inhibitors are effective postoperatively.

Flagyl is the drug of choice in antibiotic therapy to prevent post-operative infection. The abdominal sutures are removed on 5th past-operative day

and the follow-up is done after 6 to 8 weeks after surgery to check continuation of regular ovulatory cycles and wound healing.

The women has to be encouraged to try for a pregnancy after one normal period and regular fertility follow-up is continued. If pregnancy has not occurred after 6 months then repeat laparoscopy is done to check tubal patency and adhesions. But if pregnancy occurs, then regular antenatal examination is done. She should be treated as high risk mother, and hospitalized before reaching term. The mode of delivery should be decided according to the condition. Sometimes in vitro-fertilization can be advised if conception does not take place after the corrective tubal surgery.

Case study:

Mrs. Kaur, 30 year old was hospitalized on October 28., 1985 for recanalization of tubes. She had two children and underwent tubal ligation. She was deserted by her husband. She got remarried and wanted to have another child.

Diagnostic laparoscopy revealed massive adhesions. Histo-salpingiography revealed fallopian tubal blockage due to tubal ligation. Her menstrual cycle was regular, and her husband's semen analysis showed sperm count 115 million/cc and 80 percent motile.

The pre-operative preparation was, as for any gynecological operation, under G.A. Injection Wymesome 20 mg Phanergan 25 mg I/M4 hourly were given, i.e., 2 doses before surgery and 10 doses post-operately. She was put on antibiotic (Septran) 2 tab. B.D. for 5 days.

Laparotomy incision was given and the abdomen was opened longitudinally. There was lots of adhesions in the omentum and abdominal wall. Tubes was removed. End to end

anastomosis of remaining tubes was done, and incision closed after peritoneal lavage.

Hydrotubation was done on 3rd and 4th post-operative day with saline, and patency of tubes confirmed. Post operative period was uneventful, recovery was fast. The abdominal sutures were removed on 7th post operative day and she was discharged from hospital on November 5, 1985.

Follow-up included Hydrotubation was repeated on November 20, 1985, November 23, 1985 and November 26, 1985. Injection Plecentrex OD for two days was given to dissolve the adhesions, and regular check-ups in O.P.D.

Mrs. Kaur conceived in April, 1986, and her IMP was April 18, 1986. Her urine test for pregnancy done on June 2, 1986, was positive. Her pregnancy was supervised throughout and she was hospitalized on December 1, 1986 (before term) for caesarean section. The indication for LSCS was previous caesarian due to C.P.D. Mrs. Kaur delivered a female baby on December 20, 1986 through caesarean, and both mother and child were doing well. Both were discharged from hospital on December 28, 1986. The child is 4 1/2 years old now.

The family is happy and thankful to the medical developments. There are many more women who are blessed with children after going through the procedure of recanalization, which has proved a boon to couples, who have no progeny.

Book Review

Practical Pharmacology and Viva: by Dr. Chaudhry, Sunil and Dr. Moghe Vijay; A Vora Medical Publication, Bombay 1991. Pages 365. Price Rs.100/-.

Pharmacology is an integral part of the nursing syllabus, and the authors have very concisely put the broad aspects of practical pharmacology and viva, in this book.

The first chapter deals with the historical background of therapeutics and pharmacology. In the subsequent one, the method of classification of drugs is done in a manner that it is easy for quick reference. In Chapter III, the subjective and objective effects are clearly specified, besides enumerating general principles of pharmacology, common instruments used are also described.

From the nursing point of view, the text in clinical pharmacology, which explains drug interactions, bioavailability and clinical traits is very useful for ready reference.

The final chapter of viva voce is useful for the practical examination in medical-surgical and other specialties of nursing. This book must be used along with the text book, and could be useful for nurses, and health workers in the clinical field.

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Promote the use
of
Oral Rehydration
solution