

OUT COME OF LAPAROSCOPIC RE CANALIZATION AFTER PERVIOUS STERILIZATION SURGERY

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Abstract:

however the fallopian tube discontinuity is the commonest type of sterilization in developing country and has been considered as irreversible method of sterilization . many women undergo reversal of sterilization. the laparoscopic reanastomosis has revealed high pregnancy rate as compared with laparotomy the advantage less complication and short recovery time, the more dynamic approach overcomes the limitation of open surgery making the laparoscope the last for tubal surgery. the pregnancy rate for laparoscopic tubal anastomosis 76 percent with this technique now employed as a complete solution for all tubal surgery .the outcome affecting by age of patient length of remaining tube for re canalization and method of previous ligation and the time interval between sterilization and recanalisation so laparoscopic recanalisation were good and the results depend on the patient selection , operative technique [6].

Key word :

laparoscope, recanalisation, previous sterilization

Introduction :

Laparoscopic tubal reanastomosis is one of the newest procedures. Tubal sterilization is the most common operation in women anywhere, in which there is block of pathway between egg and sperm and it is effective method of contraception , and it causes least tissue destruction like Pomeroy , clips and rings so these methods amenable for tubal reversal , the tubal ligation considered an important constituent of national family planning and its performed in a young women of low parity however some of them demand reversal for social and psychological causes , many of them have the operation electively . the fallopian tube are symmetrical paired tubular organ that connect the peritoneal cavity to endometrium in the uterine cavity and its attached to lateral wall of uterus just above the round ligament following fertilization the embryo continue traveling through fallopian tube and the fallopian tube gives the environment and condition for conception , fallopian tube divide into four parts the intra mural ,the isthmus ,the ampulla and infundibulum and fimbriae ,average length of the tube is 10 cm and the width from 0.1 to 1cm from uterine attachment till the fimbriae the fallopian tube receive blood supply from tubal branches of uterine artery and small branches from ovarian artery and receive sensory and autonomic and vasomotor nerve fibers from inferior hypogastric plexus. reversal of sterilization is micro surgical procedure and has very high success rate specially if it is done by highly trained and experienced surgical sub specialist, women who have previously undergone tubal ligation , cauterization , tubal clip application are excellent candidate for micro surgical tubal reversal. laparoscopic tubal anastomosis has become the standard care in tubal reposition and it is an outpatient surgery so its cost effective the common site of sterilization is mid segment of the tube . age of the women also one of the factors affecting the result ,they observed that the younger women have longer tubes and became pregnant earlier than the old. laparoscopic surgery for tubes relatively new and gradually considered an alternative to open laparotomy. the first laparoscopic tubal surgery was carried out 1992 over all cumulative pregnancy rate 60 to 70 percent and outcome influenced by length of healthy fallopian tube which is the left tube for repairing . success rate very acceptable when the length 4 to 6cm and those with best prognosis who have clip or ring or post partum ligation

Aims the aims of this study is evaluating the efficacy safety and outcome of laparoscopy surgery for tubal recanalization after sterilization also determine the factors affecting the reversal and influence the outcome.

The following parameters were evaluated the outcome :

1. operating time
2. operating technique

3. operative complication
4. pregnancy rate
5. hospital stay
6. cost
7. quality of life analysis

Material and method :

Literature search was performed using search engine Google ,high wire press .Springer link and library facility available at laparoscopic hospital .following search terms used laparoscopy, recanalisation .tubal sterilisation

Criteria of selection of papers were upon statically analysis .institute if they were specialized for laparoscopy . the way of management and operative technique.

MANGMENT initial history, physical examination and laboratory evaluation should focus on risk factors age is important the menstrual history is essential to evaluate the ovulatory function so for women above 35 year hormonal assay like fsh ,lh, estadiol is reflect the age factor ,also sperm count for the partner to make sure no any un expected problem , history of pelvic surgery and type of the sterilization, the time interval between sterilization and reversal, length of remaining healthy tube . , combined use of the hysterosalpingiogram 16and laparoscopy with dye use in diagnosis of the site of previous tubal sterilization some time it may give rise to false diagnosis because of tubal spasm . some of authors have suggested use of muscle relaxant such as terbutalin during the examination{ 11}. in addition to this, routine check of patient like blood test and x-ray and ultra sound and semen analysis. patient with tubal sterilization need meticulous investigation to avoid the the patient high morbidity associated with missed ectopic pregnancy 12 tubal re canalization procedure were carried out after menstrual cycle. the tubal reanastmosis is rejoining of fallopian tubes, in corneal reanastmosis temporary splinting of cut end was done by rompsonn vensection canula or epidural catheter and under 4 magnification power end to end anastmosis was done (muscular-muscular and sero-muscular){19}. with use of 8-0 suturing, some use three stitches technique with tubal canulation . they were use hydro cortisone irrigation during surgery with post operative antibiotic

procedure :

The surgery done under spinal or general anesthesia, the patient in lithotomic position in dwelling folly cathter,attach uterine manipulator with chromo perturbation operation start as diagnostic laparoscopy through single supra pubic trocar and if surgery established two additional 5mm trocar in right hypochondria and other in left upper quadrant the order of operation same as in open microsurgical operation start with transaction of tubal stump then remove scar tissue , approximate the meso salpenx , anastmose muscle and mucosa then approximate the serosal layer ,dilute vaso perrsin 1 in 50 injected for hamostasis and hydro dissection the proximal part grasped with fine forceps a and cut transversally with fine scissor the patency of tube determined leavage of indico carmine dye infused through uterine manipulation the occluded segment of thethe distal stump is raised with forceps and tube resects peperndiculy at most proximal edge creating lumen of appropriate diameter resection of scar tissue is prefer with micro needle or micro scissor the meso salpenx sutured with 6 0 pds by using 5mm micro needle holder each suture is tide intra corporally with three throws the muscle layer sutured by 7 pds 0 , then the tubal patency checked by identifying the flow of indico carmine dye through fimberia , warm lactated ringer to suture site for irrigation the operating field , serosal layer approximated with 6 0 pds interputed suture the tissue planes alignmentby using a traumatic technique by prolene 8-0 four suture at 12 ,6 ,3 and 9 clock were taken in the muscularis layer and serosa avoid mucosa and the knots faced serosa then heprinazed with normal saline 5000u/l as a constant irrigation .the patency was assured intra operatively by methyl in blue injection the new technique of microscopical tubal reanastmosis is highly successful surgical procedure there're multiple factor affecting the out come of procedure like length of tube left to be repaired the acceptable length 4 to 6 cm during operation we can give the patient prophylactic intravenous anti biotic and sedation as single dose to decrease post operative complication .highly advance technique da vanici in which re attach the fallopian tube and the women became pregnant after 1 to 8 cycle it is perfect tool for re joining the fallopian tube it is eliminate the potential proplems which inhernt by open surgery it can do it as out patint procdure in this procdure the pomero y method ther is cut and tie and it occur during casarean section or after vaginal delivery in this case use look for 1 to 2 inscion getting below the navel portion of tube in this method we they cut 0.5 to 1 cm from center of fallopian tube and tying of f the cut end the advantage of this method that the tube was good physiological health the dis advantage that the surgeon might cut big segment a nd lower success rate Other method of tubal sterilization reversal by da vanci is to tube sterilized by electr cautery in this method they ins ert small telescope below navel tube grasped in midl dle portion until become white and the heat of cautery spread up and down and some time dysteroying the majority of tube In clming and ring method of ligation

there were high success rate so success rate in da vinci about 60 to 70 percent and risk of tubal pregnancy 10 percent {16.}the one stitch technique give good approximation with short period of time { 13}

The surgical approach to fallopian tube reconstruction in three parts the intramural interstitial obstruction this treated by tubal re implantation and . the isthmic portion occlusion by repairing isthmo isthmic reanastmosis and the mid portion which is frequent for tubal sterility the procedure is by take the occluded part and repeatedly resected the first the proximal then distal until the tubal lumen is identified the patency of tube confirmed by retrograde chromotubation (proximal stump) and threading a piece of thin suture from the fimbrial end toward area of anastmosis

Conclusion. with the increase the number of sterilization over the world so the need for their reversal is also growing. The Laparoscopic approach has several advantage over laprotomy but it require specific skills such as hand eye coordination while viewing procedure on video monitor and handling delicate instrument in restricted area The site of tubectomy hence the site of recanalization it is important factor in tubectomy reversal, the isthmus of fallopian tube is ideal site of sterilization reversal so high percent of pregnancy after isthmo -isthmic recanalization the surgical outcome of laparoscopic was benefit in terms of life quality and it were achieved through better laparoscopic technique and careful screening for surgical anastmosis regarding pregnancy outcome there were good result over all . the laparoscopic tubal surgery providing continuous magnification and closed environments making laparoscopy complete surgical tool 4} also laparoscopic technique has advantage of less post operative discomfort and fewer complication no incisional scar and shorter recovery of times about the cause of reversal it were found that loss of the children was the main cause, they found that recanalisation at the site of sterilisation is one of the causes of failure the underlying cause could be a pre existing proliferative disease of tube and might cause tubal pregnancy{7} the the good result found in age 20-40 year women age. in all studies 2the short sterilization reanastmosis interval high result and with length of tube 8cm and above also good outcome.

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