



ISSN Print: 2394-7500  
ISSN Online: 2394-5869  
Impact Factor: 5.2  
IJAR 2018; 4(3): 455-457  
www.allresearchjournal.com  
Received: 11-01-2018  
Accepted: 13-02-2018

**Dr. Dayalan Velayudam**  
Retired Civil Asst. Surgeon,  
Chittoor, Andhra Pradesh,  
India

**Dr. Tirupati Seshasai**  
Professor, HOD Obs & gyn,  
The Apollo Medical College,  
Chittoor, Andhra Pradesh,  
India

## Dayalan tubectomy: A simplified technique

**Dr. Dayalan Velayudam and Dr. Tirupati Seshasai**

### Abstract

9000 tubectomies done in 25 year period and observed for failure. To the best of knowledge of the author two cases of pregnancy reported. These two were post operative adhesions and one tube tubal ligation done and another side the tube is adherent to anterior abdomen and unable to do tubal ligation and informed to the patient early. All tubectomies done in primary health centre and under local anaesthesia of plain 2% xylocaine 10 ml at the fundus level infiltrated. With a scissor the skin is cut and expanded, step wise peritoneum opened. Xylocain infiltrated on the viscera and with a led torch light in head low in trendelberg position and surgeon on left side of patient observed the uterus and tubes and with bob cocks the tube is grasped and tubectomy done. Post operative period one day observed one week anti-biotic given. Patient is sent to home. On 7<sup>th</sup> day review and suture removed. A complication in post tubectomy operation in our study was wound sepsis, stitch abscess, 2 ectopic pregnancy. 5 cases of menorrhagia after 5 years and underwent hysterectomy. Carcinoma ovary not seen. Carcinoma cervix is seen 3 cases as they are never came for check ups and no premalignant screening is done in India as a routine.

**Keywords:** abdominal, vaginal, tubectomy, post partum, interval tubectomy

### 1. Introduction

**Review:** Types of tubal ligation

**Bipolar Coagulation:** In India some of the private hospitals are following the bipolar coagulation with electric cautery while doing laparoscopic tubal ligation. Tube is excised after this cautery. Fimbriectomy By removing a portion of the fallopian tube closest to the ovary, fimbriectomy absece of fimbria to grasp the ovum is stopped.

Irving's procedure This procedure calls for placing two ligatures (sutures) around the fallopian tube and removing the segment of tubing between the ligatures <sup>[1]</sup>. Then to complete the procedure, the ends of the fallopian tubes are connected to the back of the uterus and the connective tissue respectively. This method was pioneered by the American Obstetrician-Surgeon, Frederick Carpenter Irving (1883–1957) in 1924.

Tubal clip the tubal clip (Filshie clip or Hulka clip) technique involves the application of a permanent clip onto the fallopian tube <sup>[2]</sup>. Once applied and fastened, the clip disallows movement of eggs from the ovary to the uterus.

Tubal ring the silastic band or tubal ring method involves a doubling over of the fallopian tubes and application of a silastic band to the tube. when ever eligible couple with the 2 children, 2 months after delivery, 2 incisions, 2 ports, 2 litters of Co2, 2tubes 2 rings each side, 2minutes procedure and 2 hours rest.

Pomeroy tubal ligation in this method of tubal ligation, a loop of tube is “strangled” with a suture <sup>[3]</sup>. Usually, the loop is cut and the ends cauterized or “burned“. This type of tubal ligation is often referred to as cut, tied, and burned. This method was develop by the American Gynecologist and Surgeon, Ralph Hayward Pomeroy.

Essure tubal ligation in this method of tubal ligation, two small metal and fiber coils are placed in the fallopian tubes. After insertion, scar tissue forms around the coils, blocking off the fallopian tubes and preventing sperm from reaching the egg. Adiana tubal ligation In this method of tubal ligation, two small silicone pieces were placed in the fallopian tubes. During the procedure, the health care provider heated a small portion of each fallopian tube and then inserted a tiny piece of silicone into each tube. After the procedure, scar tissue formed around the silicone inserts, blocking off the fallopian tubes and preventing sperm from reaching the egg.

### Correspondence

**Dr. Tirupati Seshasai**  
Professor, HOD Obs & gyn,  
The Apollo Medical College,  
Chittoor, Andhra Pradesh,  
India

The procedure can no longer be performed due to a Law suit and judgment brought by the company responsible for Essure. Vaginal tubectomy is reported by Altaf Bashir et al; in 5214 cases in 5 years period and minimal complications occurred [4].

## Methodology

### Timing of the surgical procedure

- A. Interval Sterilization should be performed within 7 days of the menstrual period (in the follicular phase of the menstrual cycle).
- B. Post-partum Sterilization should be done after 48 hours up to 7 days of delivery. c. Sterilization with medical termination of pregnancy (MTP) can be performed concurrently. d. Sterilization following spontaneous abortion can be performed provided client fulfils the medical eligibility criteria.

### Laparoscopic tubal ligation should not be done concurrently with second trimester abortion and in the post-partum period [5]

We propose to evaluate to safe and simple procedure for surgery, access to the fallopian tube any time after 48 hours of post partum [6]. No scalpel no external stitch, reduce complication of surgery. Positioning of the client is important and placed in Trendelenburg position\_on tilting Operation table.

### Enter the abdominal wall following the local anesthetic infiltration

1. Incise the skin. On the abdominal wall to make an incision transversely approximately 1-2 cm long cantered the appropriate place using Scissors or scalpel blade. Open an incision only through the epidermis. Apply Allis forceps to one cut edge of skin centrally and assistant will hold the Allis forceps. Other end of the cut edge of skin will be hold by surgeon with toothed forceps with left hand. Lift the skin slightly up wards and separate the subcutaneous tissue with curved artery forceps until the anterior rectus fascia is visualized and exposed.
2. Incise the Rectus fascia and separate mussel fiber; After visualizing the rectus fascia grasp with Allis forceps in the midline of the incision just lateral to the midline on left side and pull up slightly and apply the second Allis' forceps on right side of the fascia and slightly pull up. Grasp fascia on both sides in such a manner muscle fibers should not be covered. Gently incise the rectus fascia in the middle with Scissors 1cm deep. s
3. Opening of peritoneum. To avoid grasping the bowels along with the peritoneum ask the client to take a deep breath before grasp the peritoneum. This results in the bowel being moved out of the surgical area. Lift the peritoneum with Modified Moorthy forceps to outside of the abdominal cavity and apply the artery forceps on both sides of the peritoneum. Once the peritoneum is elevated to protect the underlying viscera and structures from injury check that bowels or Omentum have not been grasped inadvertently after applying the forceps to the peritoneum once again check for any internal organs by feeling and seeing the peritoneum is thin and transparent. Incise the peritoneum with scissors with caution by avoiding the larger veins. Once the peritoneum is opened and entry into the abdominal

cavity is confirmed and applies the artery forceps on four sides of peritoneum and Evert the peritoneum. Remove the Allis forceps.

4. Elevation of fallopian tube. Once the peritoneum is open and entry in to the abdominal cavity is confirmed insert the Langen Beck abdominal retractor in to the abdominal cavity and lifts the abdominal wall gently up wards and laterally to visualize the fallopian tubes by focusing the light from light assistance. Once the tube has been visualized grasp the fallopian tube with Modified Moorthy forceps. Confirm the identity of the tube by following it to the fimbria end by pulling tube out of abdomen gently until the fimbria can be seen. The light assistance illuminates the light from left side of the client, in to the abdominal cavity for right tube and from right side of the client for left tube; normally we can visualize the tubes along with the uterus. 5) Grasp the tube asking the client to take a deep breath and hold for a few seconds. Identify the fallopian tube and grasp it with Modified
5. Moorthy forceps and gently elevate the tube. The surgical assistance will assistance by applying 2<sup>nd</sup> Modified Moorthy forceps in the distal end of the tube and elevates gently further. Surgeon removes the Modified Moorthy forceps at first point and applies to the distal end of the tube away from 2<sup>nd</sup> Modified Moorthy forceps by this method the right tube is elevated to outside of the abdominal cavity. Once the fallopian tube is elevated to outside of abdomen remove the abdominal retractor from abdominal cavity. The surgeon holds the tube between with non-toothed forceps and Modified Moorthy forceps. After holding the tube apply the baby Babcock forceps to the tube and elevate at least 2 cm loop of fallopian tube at it mid section at an avascular position of the Mesosalpinx. Repeat the same procedure for other fallopian tube by inserting the abdominal retractor on other side of the abdomen from incision site.
6. Modified Pomeroy Technique for occluding the fallopian tube: With a baby Babcock forceps grasp and elevate at least 2cm loop of fallopian tube at its mid section approximately 3cm from the uterine cornu in the isthmal portion. Position the Babcock forceps over an avascular portion of Mesosalpinx, keeping the forceps in vertical position. Hold the tube by its distal side and pass a needle with absorbable suture through the avascular section of the Mesosalpinx, taking care to avoid blood vessels. Place an anchor tie around the proximal side of the loop of fallopian tube Tie the same suture on the other side of the looped tube, using a square knot. After tying the loop of the fallopian tube, hold the suture knot. While holding the knot, cut off the fallopian tube above the knot using the haemostat with scissors. Examine stump for bleeding. After examining the cut tubal stump to ensure that homeostasis has been achieved. Cut the suture above the knot and allow the tube to return in to the abdomen. Closing the peritoneum is not necessary. Closing the rectus fascia. While grasping both sides of fascia with Allis forceps starting with one end of the incision close the fascia using a continuous suture with absorbable suture material. Closing of the skin. Close the skin with approximating the end using absorbable suture. Or

approximating with butterfly closure plaster or Steristrip. Finally dress the closed incision

## 2. Discussion

Tubectomy is described as cutting a part of tube and planned to avoid pregnancy in many models of surgery<sup>[7]</sup>. Till to day no method is described as the best and with out failure. In bipolar coagulation the cautery applied on tube and cut is done<sup>[8]</sup>. Laparoscope is required to do it. In our study as there is electricity failure and in many places no day time power supply, In Irving procedure tubes are are cut and near uterus with connective tissue. Vaginal tubectomy is reported by Altaf Bashir *et al.* in 5214 cases in 5 years period and minimal complications occurred<sup>[4]</sup>. But our study abdominal at rural set up as though electricy, anaesthetise and staff are inadequate we did above 9000 cases with less complications, we observed wound gap, stitch abscess and rarely in 2 cases. In multipara, in delay in decision making we can council the clients and family members along the family planning seeker groups to convince them for permanent tubectomy at primary health centres. This is near to their homes and they can do their works and can stay at homes with their family members, pomeroy's method is though is easy and can be done the failure rate is not clearly recorded in India due to legal disputes and other litigations<sup>[8]</sup>. In our study 2 cases of ectopic pregnancy seen. 5% cases of post tubectomy ectopics pregnencies is recorded<sup>[9]</sup>. They had pain abdomen and loss of blood less compare to primary ectopic pregnancy where vascular tubes can bleed more sever and more loss of blood and more mortality<sup>[10]</sup>. 4 cases of Pelvic inflammatory disease not responded for antibiotics under gone total abdominal tubectomy<sup>[6]</sup>.

Conclusion: the family welfare is the prime importance for the better prospect of the family. We must be able to do tubectomies at primary health centres we are able to do 9000 tubectomies in 25 years period.

## 3. Reference

1. Tubes F. Sterilization by the Modified Irving Technique. 2018, 12-3.
2. Tubes F. Hulka Clip Sterilization via Laparoscopy, 2018, 11-2.
3. Tubes F. Sterilization by the Pomeroy Operation. 2018, 2-3.
4. Bashir A. Day Case Vaginal Pomeroy Tubectomy ; A Simplified Technique. 1982.
5. Practice GC. Female Sterilization 1: (1-13).
6. Is W, Sterilization F, Effective H. Female Sterilization, 165-82.
7. Here C, Ap S, Smart P, Towards W, Andhra S, Ap P *et al.* APOnline - Organisation Info Commissionerate Of Family Welfare APOnline - Organisation Info. 2017, 1-8.
8. Biothesiometer D. Tubectomy / Tubal Sterilization / Female Sterilization Sundaram <sup>TM</sup> Insurance. 2018, 1-16.
9. Sometimes R. Tubal ligation. 2018; 1-5.
10. January P. Sterilisation for women and men : what you need to know. 2014, 1-13.