

FEMALE STERILIZATION

Tubal sterilization must be considered in the overall issue of contraception. A variety of methods are available for contraception including abstinence, pills (both progesterone-only and estrogen/progesterone pills), injections (Depo-Provera), Implanon (implantable progesterone contraceptive), intrauterine device (copper and progesterone-impregnated IUD), sterilization, and hysterectomy. The relative merits of each modality are discussed and outlined.

The CREST data from Petersen, et al, published in 1996, demonstrates that Copper IUD is as effective as tubal sterilization for preventing pregnancy. The risk of pregnancy with either Copper IUD or sterilization is in the order of 13 – 14/1000 procedures. The IUD in general also affords the opportunity to rethink the decision for permanent sterilization, either during the 5 to 7 year effectiveness range of the IUD or at the time of changing the IUD for a new product at the end of its useful lifespan.

According to ACOG Practice Bulletin #46 from September, 2003, several components must be included in pre-operative counseling for patients considering definitive sterilization procedures: 1.) Permanent nature of procedure; 2.) Alternative methods available; 3.) Reasons for choosing sterilization; 4.) Screening risk indicators of regret; 5.) Details of procedure(s); 6.) Possibility of failure; 7.) Condoms for STD prevention; 8.) Completion of informed consent; 9.) Local regulations regarding interval from consent to procedure; and, 10.) Reasons for remorse following sterilization are discussed. Death of a child and new partner are the two leading causes of remorse following definitive tubal sterilization. It is crucial that your decision for permanent sterilization be certain prior to moving ahead.

The likelihood of death from low-dose oral contraceptives is described in the order of 1:60,000 users. The likelihood of death from laparoscopic tubal sterilization in general is described as 1 – 4 / 100,000 procedures. Recorded cases of death from tubal sterilization are most commonly related to unstable patients with chronic disease prior to the sterilization. The likelihood of death is very small in healthy women with no pre-existing medical problems.

The likelihood of death from pregnancies compared with this number; the maternal mortality rate in this country is still approximately 1:10,000 pregnant women. This is in fact higher than the likelihood of death from using birth control pills or from laparoscopic tubal sterilization.

Disability from tubal sterilization is most commonly between three and seven days with a few patients requiring an even longer convalescence. Downsides of tubal sterilization include the potential for injury to other intra-abdominal viscera including bowel, urinary tract, omentum, and other organs. This operator's experience with regards to those issues is discussed and the likelihood of those complications is discussed in terms of the available literature.

Different sterilization techniques are divided into open and closed, laparoscopic techniques. Open techniques involve a mini-laparotomy incision most commonly at the inferior aspect of the umbilicus. These include Pomeroy, Parkland, Uchida, Filshie Clip, or Salpingectomy. Hysterectomy requires a full laparotomy, vaginal approach or laparoscopic approach. Mini-laparotomy techniques are often performed post partum. Laparoscopic techniques involve monopolar cautery, bipolar cautery, Falope Rings, Filshie Clips, Salpingectomy or Hysterectomy.

Another variant is transcervical sterilization using hysteroscopic application of the Essure device.

Data on the varying laparoscopic methods has been compared. Failure rates in ascending order per one thousand procedures are as follows: Filshie Clips – 2.2, Monopolar cautery – 2.4, Essure – 2.6, Salpingectomy – 6.3, Falope Rings – 10.0, and Bipolar cautery – 16.5.

Reversal of sterilization is not invariably successful. In the best hands reversal of a Pomeroy, mid-segment, resection is 50% of reversed patients achieving pregnancy. Most insurances that pay for sterilization do not cover microsurgical tubal re-anastomosis with costs of \$10,000 to \$30,000.00 per procedure. In Vitro Fertilization is also not covered by the vast majority of plans providing it as a benefit if the patient had undergone an elective sterilization. Hence, tubal sterilization must never be viewed as a temporary or reversible method for birth control.

Ectopic pregnancy following sterilization is a possibility. The likelihood of ectopic per 1000 procedures is as follows: Filshie Clips – 0, Pomeroy – 1.5, and Bipolar Cautery – 17.1. Ectopic precautions are necessary following sterilization and you need to be vigilant following any missed period. If you miss a period following sterilization and have a positive pregnancy test you need to contact your physician immediately because the pregnancy must be viewed as an ectopic until proven otherwise.

DWC physicians often perform the Filshie Clip Sterilization procedure. A video of this procedure can be found at www.YouTube.com, channel Elite Laparoscopic.