

Sterilization

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Overview

- Second most common form of birth control after pills
- Should never be considered reversible
 - Mirena IUD and Nexplanon implant are both reversible and are as effective or even more effective than sterilization
- No method is 100% reliable
 - Pregnancy after sterilization is associated with a 30% risk of ectopic (tubal) pregnancy
- Two basic approaches
 - Surgical (tubal ligation or removal)
 - Hysteroscopic insert
- Each approach has both advantages & disadvantages

Surgical Sterilization

- Typically done as outpatient surgery using a laparoscope
 - Involves two ¼ inch incisions in abdomen
- May also be done at the time of C-section or the day after delivery through a small umbilical (belly button) incision
- Involves placing bands or clips around the tubes or tying the tubes with suture plus removing part or all of each tube
- Requires general or spinal anesthesia
- Associated with some postop pain

- Immediately effective
- Does not require any preoperative hormonal treatment
- Ten year failure rate per 1000 women
 - 17 – 36 pregnancies if done with laparoscope
 - 17 with Falope ring
 - 20 with removal of part of fallopian tube
 - 36 with clip
 - 7 pregnancies if done at C-section or day after delivery
- May be surgically reversed
 - Expensive and not covered by insurance
 - Successful in 70% of women
- Growing evidence that removal of the fallopian tubes will decrease the risk of developing the more aggressive forms of ovarian cancer

Hysteroscopic Sterilization

- A hysteroscope is a long, thin instrument used for visualizing the uterine cavity
 - Placed through the vagina and cervix into the uterine cavity
 - Used to insert a small device (Essure) into the entry of each tube
- Does not require an incision so very little pain afterwards
- The Essure device is a coiled stainless steel spring coated with polyethylene fibers held within an outer coil of a nickel alloy
- The device is placed, using the hysteroscope, and released allowing the spring to relax and expand into the inner wall of the fallopian tube

- The polyethylene fibers stimulate growth of tissue into the device and the tube lumen creating a permanent occlusion
- Requires a minimum of 3 months until occlusion
 - up to 6 months in 5% of women
- Requires x-ray study to prove occlusion
- Must have reliable birth control for one month before procedure and until occlusion is proven
 - Depo-provera injection most commonly used
 - May also use pills or Mirena IUD
- Requires hormone preparation of uterine lining before the procedure
 - Depo-provera, pills or Mirena IUD
- May be done in office without anesthesia
 - Much cheaper (office copay vs hospital deductible)
 - Less recovery time
- May be done with an IUD in place
 - Removed after occlusion is proven
- 10 year failures per 1000 women with proven occlusion
 - 2.5
- Cannot be reversed
- Has high rate of patient satisfaction
- Should avoid in women with nickel allergy
- Risks of Essure method

- Perforation of tube or of uterus- 1-3%
- Expulsion of device- less than 1%
- Pelvic pain &/or painful menses- may occur but rare
- Infection- associated with women having Essure and ablation at same time

Risk of Regret after Sterilization

- Greater risk with younger age
 - 4% if sterilized when under 24 years old
 - 2% in older women
- Women who remarry are more likely to have regret

Should have Preoperative Discussion

- Review risks and benefits of procedure
- Review reversible methods of birth control
- Screen for risk of regret
- Reason for choosing sterilization
- Discuss permanence of procedure & success of reversal
- Causes and risk of failure
- Potential for sterilization to reduce risk of both ovarian cancer and pelvic inflammatory disease
- Does not protect against STDs
- Does not change menstrual cycles

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