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## Recent Trends in Incidence of Different Permanent Female Sterilization Methods [150]

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INTRODUCTION: Recent evidence suggests that salpingectomy compared to occlusion sterilization procedures may increase ovarian cancer protection without increasing surgical complications. We started educating providers in our department about this information in late 2013 followed in February 2014 by standardized patient counseling forms that included procedure descriptions, efficacy, complications and potential impact on ovarian cancer incidence. We evaluated trends in sterilization procedures at our institution resulting from these changes.

**METHODS:** We identified all women who underwent laparoscopic or transcervical sterilizations at our institution for the academic years from July 1, 2011 and June 30, 2015. We excluded women who had more than one sterilization method performed. Pearson's correlation coefficient  $(R^2)$  was calculated for each method over time.

**RESULTS:** Two-hundred sterilizations were performed including 67 occlusion, 81 salpingectomy, and 51 transcervical procedures and one excluded mixed procedure. Of the 56 sterilizations in Year 1, occlusion, salpingectomy and transcervical comprised 44.6%, 10.7%, and 44.6% of procedures, respectively. Salpingectomy became the preferred procedure by year 3, comprising 51.1% of sterilizations in Year 3 and 85.3% in Year 4. Of the 41 sterilizations in Year 4, occlusion and transcervical methods each comprised 7.3% of procedures. Method frequency changed linearly over the four-year period for salpingectomy ( $R^2$ =0.99), occlusion ( $R^2$ =-0.90) and transcervical ( $R^2$ =-0.97) procedures.

**CONCLUSION:** Over time, with changes in clinician education and standardization of patient counseling forms, salpingectomy has become the preferred female sterilization method at our institution. Understanding the relative importance of ovarian cancer protection and efficacy differences on patient choices will be important for directing future policy recommendations.

Financial Disclosure: The authors did not report any potential conflicts of interest.

# Continuation of Progesterone Implants: Effects of Age, Race, Parity, BMI, and Use of Hormones for Irregular Bleeding [16O]

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**INTRODUCTION:** 1) Analyze the discontinuation rates of progesterone implants (PIs), 2) assess the effect of age, race, parity, and BMI on continuation, and 3) assess the use of hormone therapy for PI-associated irregular bleeding.

**METHODS:** This was a single center retrospective chart review of adolescents (10–19 years) and women aged 20–45 years who had PIs inserted for contraception from 2010 to 2014.

RESULTS: Five hundred charts were reviewed, and 303 patients were included in our analysis. The mean discontinuation rate at 1 year was 31.5% for adolescents, 32.7% for 20–24 year olds and 30.5% for 25–45 year olds. The mean discontinuation time for adolescents was 17.6 months (SD 11.7), 12.6 months (SD 9.95) for 20–24 year olds and 13.3 months (SD 11.8) for 25–45 year olds. There were no significant differences in continuation rates based on age, race, parity, or BMI (ANOVA). The most commonly reported cause of discontinuation was irregular bleeding (46.8%) followed by weight gain and mood swings. Amongst patients with irregular bleeding, hormone therapy (low dose estrogen or OCPs) was offered to 47% of adolescents and 25.9% of adults. Of those treated, 45% reported an overall improvement in symptoms. OB/GYN residents were less likely to initiate medical therapy compared to non-resident physicians.

**CONCLUSION:** Due to irregular bleeding, PIs have a high discontinuation rate in both adolescents and adults. Implant continuation is

not effected by age, race, parity or BMI. However, hormonal therapy can provide effective relief of irregular bleeding in some patients.

Financial Disclosure: The authors did not report any potential conflicts of interest

# Choosing a Contraceptive Method: What Matters to Women With Medical Conditions [170]

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**INTRODUCTION:** Factors that influence contraceptive initiation among women with complex medical conditions are unknown.

**METHODS:** We conducted a cross-sectional study of women 18–45 years old with complex medical conditions who received contraception consultation from family planning specialists at 5 University of California Medical Centers. We asked patients about factors important in initiating a method.

RESULTS: Among 97 recruited participants, medical conditions fell into these categories: neurologic (37%), endocrine (37%), cardiovascular (21%), rheumatologic (12%), oncologic (6%), and other (29%), and 10% had a history of a solid organ transplant, 7% bariatric surgery, and 6% venous thromboembolism. A majority of participants initiated long-acting, reversible contraceptive (LARC) methods including a progestin intrauterine device (IUD, 40.0%), the copper IUD (14.7%) and the contraceptive implant (17.9%). The most common reason for initiating contraception was to avoid pregnancy in the immediate future for personal reasons (45.3%). The most common reason for initiating a particular contraceptive method was safety given their medical condition (20.2%). Women commonly reported that the person with the most influence on their contraceptive method choice was the family planning specialist (37.2%) and medical condition specialist (22.3%), and less commonly the primary care provider (9.6%) and a family member or friend (12.8%).

**CONCLUSION:** This study provides insight into contraceptive decision-making among women with medical conditions. When these women are given specialized contraceptive counseling they often choose highly effective methods.

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#### Motives Behind Early Discontinuation of Long-Acting Reversible Contraception [18O]

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**INTRODUCTION:** Long-acting reversible contraception (LARC) has been shown to reduce rates of unintended pregnancy and abortion, but is often discontinued prematurely due to side effects. The objective of this study is to investigate reasons for discontinuation of different LARC methods.

**METHODS:** Retrospective review of electronic medical records documenting IUD and implant insertions for 278 women from March 2011–June 2014 was performed. Time to removal (TTR) and reason for removal was determined. Statistical analysis was performed using Kaplan-Meier survival analysis, log-rank tests, and Kruskal Wallis test.

**RESULTS:** Levonorgestrel IUD had a median TTR of 2.6 years compared to copper IUD (1.5 years) and progestin implant (1.4 years), though statistical significance was not reached. Most common reason for method removal was device malposition or expulsion (30%) followed by complaints of pain (dysmenorrhea, pelvic pain, or dyspareunia; 26%) and irregular or heavy bleeding (18%). The copper IUD is associated with the highest rates of removal for all reasons pain, bleeding, or malposition/expulsion compared to other LARC methods (P=.02). Those with removal due to malposition/expulsion had the lowest mean age (23.1 years; P=.01) and shortest median TTR (0.31 years; P=.003) compared to the other removal groups. Those

