NAMS Practice Pearl

Contraception for Midlife Women

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Despite a decline in fertility, women of older reproductive age who do not desire pregnancy should use contraception until menopause. Unintended pregnancy can be disruptive at any age, but in older women, pregnancy is associated with higher rates of adverse health outcomes for the mother and the fetus because of advanced age and comorbid medical conditions (eg, hypertension or diabetes). Therefore, providing appropriate contraceptive care to women of older reproductive age is critical.

Although no contraceptive methods are contraindicated on the basis of age alone, some medical conditions common in older women may make certain methods inappropriate. In this setting, balancing risks and benefits requires clinical judgment and shared decision making. Because age is an independent risk factor for cardiovascular disease and venous thromboembolism (VTE), estrogen-containing methods should be used with caution in women with risk factors such as smoking, obesity, diabetes, hypertension, or migraine headaches.[1] Progestin-only and intrauterine contraceptives (IUCs) are preferred for older women with these risk factors. Given recent evidence of safety and benefits as well as the burgeoning prevalence of obesity and associated cardiovascular risks, we suggest considering these options before oral contraceptives.

***Intrauterine contraception*.** Intrauterine contraceptives offer safe, highly effective, convenient, and long-term contraception. Two 52-mg levonorgestrel-releasing intrauterine systems (LNG-IUS) are approved in the United States for up to 5 (Mirena) and 3 (Liletta) years of use. There is growing evidence that this device is effective for up to 7 years[2]; therefore, especially in perimenopausal women with decreased fertility, the 52-mg LNG-IUS may not need to be replaced every 5 years.[3] For perimenopausal women with heavy menstrual bleeding, the high endometrial progestin levels associated with the 52-mg LNG-IUS reduce menstrual blood loss as effectively as endometrial ablation, allowing many women to avoid surgery.[4] Another noncontraceptive use of the LNG-IUS is to prevent endometrial hyperplasia in menopausal women using estrogen therapy (an off-label use in the United States and Canada).

A smaller, 13.5-mg LNG-IUS (Skyla) is approved in the United States for up to 3 years of use. Because of its smaller dimensions, Skyla may be an appropriate choice for nulliparous or perimenopausal women desiring intrauterine contraception.[5] Because of its lower dose of levonorgestrel, use of Skyla is associated with a lower rate of amenorrhea compared with the 52-mg LNG-IUS.

The copper IUC (Cu-IUC; ParaGard T 380A) is approved in the United States for up to 10 years of contraception but remains highly effective for at least 12 years.[6] Canada has two Cu-IUCs, Nova-T and Flexi-T 300, each providing up to 5 years of contraception. Copper IUDs can cause increased menstrual flow. Accordingly, the Cu-IUC may not be an optimal choice for women with heavy menstrual bleeding at baseline. Copper IUDs should be removed in women who are menopausal.

***Progestin-only contraceptives*.** Progestin-only contraceptives can be used by most perimenopausal women for whom contraceptive doses of estrogen are contraindicated. The principal contraindication to the use of progestin-only contraceptives is a history of breast cancer. Progestin-only contraceptives are recommended for women of older reproductive age who smoke, are obese, or have migraines, diabetes, hypertension, or a history of VTE.[1] Irregular bleeding, spotting, or amenorrhea commonly occurs with use of these methods. Progestin-only contraceptives do not cause depressed mood or weight gain for most women.

The etonogestrel contraceptive implant (Nexplanon) consists of one toothpick-sized polymer capsule implanted subdermally medial to the biceps by a healthcare provider and offers highly effective contraception for up to 3 years. In contrast to IUCs, the implant reliably suppresses ovulation.

Intramuscular depot medroxyprogesterone acetate (150 mg; DMPA) provides highly effective contraception for 3 months and is available in the United States and Canada (Depo-Provera and generic). Depo-subQ Provera contains 104 mg of MPA, is injected subcutaneously every 3 months, and also is approved in the United States for the treatment of endometriosis-related pain. Labeling contains a black box warning regarding the reversible loss of bone mineral density. Although earlier reports suggested that women using DMPA experienced an elevated risk for bone fracture, a retrospective cohort analysis found DMPA users to have had an elevated fracture risk at baseline rather than as a result of DMPA use.[7]

A continuously administered progestin-only pill with 0.35 mg norethindrone provides effective contraception for perimenopausal women. The progestin-only pill needs to be taken at the same time every day for maximum efficacy.[8]

***Combination (estrogen-progestin) contraceptives*.** In addition to contraception, these agents also provide perimenopausal symptom relief and additional health benefits (Table 1).[3] Cardiovascular events (VTE, myocardial infarction, stroke) are rare in combination oral contraceptive (COC) users who are appropriate candidates for this method of contraception, and long-term use does not appear to affect the risk of breast cancer, although most data reflect use in younger rather than perimenopausal women. Of note, 5 µg of ethinyl estradiol (EE) is roughly equivalent to 0.625 mg of conjugated estrogens; therefore, a 20-µg COC delivers about 4-fold more estrogen than standard-dose menopausal hormone therapy (HT). A COC containing 10 µg of EE and 1 mg norethindrone (Lo Loestrin Fe) is available in the United States (but not in Canada). In addition, an oral contraceptive formulation with estradiol valerate (most pills contain 2 mg) and the progestin dienogest is available in the United States and Canada (Natazia). The estrogen dose of these COC formulations is in the range of use in menopausal HT. Approved nonoral combination contraceptives include a monthly vaginal ring (NuvaRing, available in the United States and Canada) and a weekly patch (Xulane, generic in the United States; Evra in Canada), both worn for 3 of 4 weeks.

Table 1. Noncontraceptive Benefits of Hormonal Contraceptives

- Restoration of regular menses
- Decreased dysmenorrhea
- Reduced heavy menstrual bleeding
- Reduced pain associated with endometriosis
- Suppression of vasomotor symptoms
- Enhanced bone mineral density and possible prevention of osteoporotic fractures
- Reduced risk of epithelial ovarian and endometrial malignancies
- Improvements in adult-onset acne

From Allen RH, et al.[3]

Labeling indicates that women using the patch are exposed to about 60% more estrogen than with a typical COC containing 35 µg of EE and contains a warning that its risk of VTE may be higher than with other combination contraceptives. Because age is an independent risk factor for VTE, some experts believe that the ring and COCs are more appropriate contraceptive choices for perimenopausal women than the patch. In contrast, with menopausal HT, the transdermal route is associated with a lower risk of VTE compared with the oral route. This is because menopausal transdermal estrogen therapy releases relatively low doses of estradiol rather than EE, a synthetic estrogen with potent hepatic effects.[9]

Emergency contraception (EC). Risks of pregnancy are considered greater than risks of EC at any age and medical condition.[1] The most effective form of EC is the Cu-IUC, with greater than 99% effectiveness when inserted within 120 hours of unprotected intercourse.[8] Oral ECs include ulipristal acetate (Ella, available in the United States) and levonorgestrel (Plan B One-Step and generics in the United States; NorLevo in Canada). Ulipristal acetate, available by prescription only and labeled for use up to 120 hours after unprotected intercourse, is more effective than levonorgestrel.[10] Levonorgestrel EC is labeled for use up to 72 hours after unprotected intercourse. Plan B One-Step can be purchased without a prescription in the United States. In Canada, Plan B and NorLevo are available without a prescription, except in Quebec.

Transition to hormone therapy. A clinical challenge is determining when to transition women from hormone contraception to menopausal HT. Guidelines recommend contraceptive use for a woman until she has reached an age at which she is statistically likely to be postmenopausal.[3] About 90% of women will have reached menopause by age 55; therefore, women who are appropriate candidates may continue contraception until they are in their mid-50s and then switch, if desired, to menopausal HT. Monitoring gonadotropin or estradiol levels is not useful in this setting.

Guidelines for contraceptive use. The Centers for Disease Control and Prevention have issued evidence-based guidelines, the US Selected Practice Recommendations for Contraceptive Use (SPR)[8] and the US Medical Eligibility Criteria for Contraceptive Use (MEC),[1] making contraceptive provision and clinical decision making easier. The SPR explains how to safely initiate, change, and stop contraceptive methods. The MEC categorizes contraceptive methods according to their safety when used in women with a variety of reproductive and medical conditions, including age. Both resources are available online, and the MEC has an iPhone and iPad app.

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