

## **Menstrual Suppression Options - General**

### **RECOMMENDATION STATEMENT**

Gynecologists should be familiar with the use of hormonal therapy for menstrual suppression (including combined oral contraceptive pills, combined hormonal patches, vaginal rings, progestin-only pills, depot medroxyprogesterone acetate, the levonorgestrel-releasing intrauterine device, and etonogestrel implant). The choice of method should be individualized based on patient preferences, goals, average treatment effectiveness, contraindications, or risk factors for adverse events. Because complete amenorrhea may be difficult to achieve, gynecologists should counsel patients about realistic expectations.

### **SUPPORTING EVIDENCE**

See supporting evidence for individual methods in below sections.

## Combined Methods – Combined Oral Contraceptive Pills

### RECOMMENDATION STATEMENTS

Information on individual methods discussed in the text.

### SUPPORTING EVIDENCE

#### Category I

##### *Systematic Reviews*

[Curtis 2006a](#): Evidence from these studies suggested that taking hormonally active pills for 7 consecutive days prevents normal ovulation and that initiating combined oral contraceptives through Day 5 of the menstrual cycle suppresses follicular activity. Studies on the effects of missed combined oral contraceptives generally showed that the risk of ovulation is greatest when the pill-free interval lasts >7 days.

[Edelman 2014](#): Evidence from existing randomized control trials comparing combined oral contraceptives given continuously (greater than 28 days of active pills) to traditional monthly cyclic dosing (21 days of active pills and 7 days of placebo) is of good quality. However, the variations in type of pill and time length for continuous dosing make direct comparisons between regimens impossible.

[Hitchcock 2004](#): Women on long oral contraceptive (OC) schedules had fewer days of scheduled bleeding during days without pills but more days of unscheduled bleeding and spotting than those on standard OC. These problems were worse for women new to OC and diminished over time. Women on long OC were more likely to discontinue due to poor control of bleeding; women on standard OC were more likely to stop because of problems with headaches

##### *Randomized Controlled Trials:*

[Hadji 2020](#): The mean total number of bleeding days per year was significantly lower in the extended-cycle vs. the conventional-cycle regimen. Analyses of bleeding patterns

#### Category II

#### Category III

##### *Narrative Reviews*

[Hillard 2014](#): Menstrual suppression to provide relief of menstrual-related symptoms or to manage medical conditions associated with menstrual morbidity or menstrual exacerbation has been used clinically since the development of steroid hormonal therapies. Options range from the extended or continuous use of combined hormonal oral contraceptives, to the use of combined hormonal patches and rings, progestins given in a variety of formulations from intramuscular injection to oral therapies to intrauterine devices, and other agents such as gonadotropin-releasing hormone antagonists.

[Nelson 2005](#): Extended use of oral contraceptive pills can successfully suppress endometrial activity and prevent menstruation for several months. Given that missed menses in women not using hormonal contraception may be of medical concern, understanding how hormonal contraceptives eliminate these concerns is important for both patient and healthcare provider acceptance

[Nelson 2010](#): The newest extended-cycle oral contraceptive formulation with 84 active pills, each containing 20 micrograms ethinyl estradiol and 100 micrograms levonorgestrel, represents an important evolution in birth control that incorporates lower doses of estrogen (to reduce side effects and possibly reduce risk of thrombosis), fewer scheduled bleeding episodes (to meet women's desires for fewer and shorter menses) and the use of low-dose estrogen in place of placebo pills (to reduce the number of days of unscheduled spotting and bleeding).

showed a reduced total number of bleeding/spotting days per year in the extended-cycle vs. the conventional-cycle regimen. Cycle-associated complaints and adverse events were comparable in both groups. Both regimens were very well accepted. The extended-cycle regimen of ethinyl estradiol and levonorgestrel was effective and well tolerated resulting in a lower number of bleeding days and a favorable bleeding pattern compared to the conventional-cycle regimen.

Miller 2003: With continuous use, 49%, 68%, and 88% of women reported no bleeding during cycles 2, 6, and 12, respectively. Amenorrhea or infrequent bleeding was present in 68% of continuous users during cycles 1–3 and increased to 88% during cycles 10–12. Spotting during cycle days 1–21 increased initially with continuous use but reduced over time, and by 9 months was less than the spotting reported by cyclic users. Adverse events, blood pressure, weight, and hemoglobin findings were similar between groups

Teichmann 2009: Continuous levonorgestrel 90 micrograms/ethinyl estradiol 20 micrograms was shown to be a safe and effective OC in this direct comparison to a cyclic oral contraceptive. Suppression of menses and the potential for no bleeding requiring sanitary protection may be provided by this continuous, low-dose oral contraceptive.

Steinauer 2007: In this article, the authors focus on extended cycle combined hormonal contraceptive regimens and summarize their acceptability, efficacy, and safety. They also argue that extended cycle combined hormonal contraceptive may have increased efficacy compared with traditional cyclic combined hormonal contraceptive

## Combined Methods – Contraceptive Patch

### RECOMMENDATION STATEMENTS

Information on individual methods discussed in the text.

### SUPPORTING EVIDENCE

#### Category I

##### *Randomized Controlled Trials*

Audet 2001: The incidence of breakthrough bleeding and/or spotting was significantly higher only in the first 2 cycles in the patch group, but the incidence of breakthrough bleeding alone was comparable between treatments in all cycles. Concluded that the contraceptive patch is comparable to a combination oral contraceptive in contraceptive efficacy and cycle control. Compliance was better with the weekly patch than with the oral contraceptive.

Stewart 2005: Compared with cyclic use, extended use of the norelgestromin/ethinyl E2 transdermal patch delayed menses and resulted in fewer bleeding days.

#### Category II

#### Category III

##### *Narrative Reviews*

Savasi 2009: We review the medical management options available for menstrual suppression with a focus on the needs and treatment of adolescents with developmental disabilities

## Combined Methods – Vaginal Ring

### RECOMMENDATION STATEMENTS

Information on individual methods discussed in the text.

### SUPPORTING EVIDENCE

#### Category I

##### *Randomized Controlled Trials*

Miller 2005: The combination vaginal contraceptive ring can be used for extended cycles to alter the bleeding schedule. Women willing to tolerate some spotting might choose the longer extensions to have fewer menstrual periods.

Sulak 2008: A reduction in bleeding occurred during continuous use with replacement of the transvaginal ring compared with baseline 21/7 use. Continuous vaginal ring use resulted in an acceptable bleeding profile in most patients, reduction in flow, reduction in pelvic pain, and a high continuation rate.

#### Category II

##### *Observational Studies*

Barreiros 2007: This study evaluated the bleeding patterns of women using a vaginal ring releasing 120 Ag of etonogestrel and 15 Ag of ethinyl estradiol daily. At the end of the study, 85.5% had adequate menstrual patterns (two to four bleeding episodes, none lasting 10 days or more, with a range of bleeding-free intervals not exceeding 17 days), 9.7% had infrequent bleeding, 1.6% reported prolonged bleeding episodes, 1.6% had frequent bleeding and 1.6% had irregular bleeding.

Guazzelli 2009: The aim of this study was to compare the bleeding patterns of women using extended regimens of the vaginal ring or oral contraceptives. The total number of scheduled bleeding and spotting days decreased significantly during the 1-year period of the study for both methods ( $p=.001$ ), and this decrease was significantly higher for oral contraceptive users.

#### Category III

##### *Narrative Reviews*

Pradhan 2019: Studies of extended-cycle vaginal ring users shows excellent efficacy and amenorrhea rates. Similar satisfaction has been noted with extended use of the transdermal contraceptive with placement of a new patch weekly.

## Progestin-only Methods – Progestin-only Pills

### RECOMMENDATION STATEMENTS

Information on individual methods discussed in the text.

### SUPPORTING EVIDENCE

#### Related Guidelines

Curtis 2016a: The Centers for Disease Control and Prevention, US Medical Eligibility Criteria for Contraceptive Use, 2016:

- Progestin-only methods may be of particular importance to individuals with contraindications to estrogen, including those with conditions such as cardiovascular disease, migraines with aura, hypertension, and hyper-coagulability.

ACOG Committee Opinion No. 785. Screening and Management of Bleeding Disorders in Adolescents with Heavy Menstrual Bleeding:

- In the absence of contraindications to estrogen, hormonal therapy for acute heavy menstrual bleeding can consist of intravenous conjugated estrogen every 4–6 hours; alternatively, monophasic combined oral contraceptive pills (in 30–50 microgram ethinyl estradiol formulation) can be used every 6–8 hours until cessation of bleeding.

#### Category I

##### *Systematic Reviews*

Grimes 2013: We found six trials for the initial review. We have not found any more studies since then. Some studies are several decades old and not very relevant to pills available today. A newer pill containing the progestin desogestrel may work better to prevent pregnancy than an older pill with levonorgestrel. The newer pill caused more bleeding problems. Pills with levonorgestrel may be more effective than pills with other progestins that are no longer used.

##### *Randomized Controlled Trials:*

Molsa 1986: Therapeutic amenorrhea was induced in 44 15–44 year-old moderately to severely mentally retarded women. Subjects received lynestrenol or norethindrone in an identical oral dose of 5 mg daily. After 24 months, total amenorrhea was found in 70% of the women in the lynestrenol group and in 76% of those in the norethindrone group

#### Category II

##### *Observational Studies*

Santos 2014: Our findings support use of norethindrone as an effective alternative among adolescents with contraindications to administration of estrogen and for whom control of acute heavy menstrual bleeding is desired.

#### Category III

## Progestin-only Methods – Depot Medroxyprogesterone Acetate

### RECOMMENDATION STATEMENTS

Information on individual methods discussed in the text.

### SUPPORTING EVIDENCE

#### Related Guidelines

ACOG Committee Opinion No. 602, Depot Medroxyprogesterone Acetate and Bone Effects:

- Depot medroxyprogesterone acetate (DMPA) is a highly effective injectable contraceptive that affords privacy (similar to an intrauterine system) and has a convenient dose schedule of four times per year, making it appealing to many users, especially adolescents.
- Although the use of DMPA is associated with loss of bone mineral density (BMD), evidence suggests that losses in BMD appear to be substantially or fully reversible.
- The potential health risks associated with the bone effects of DMPA must be balanced against a woman's likelihood of pregnancy using other methods or no method, and the known negative health and social consequences associated with unintended pregnancy, particularly among adolescents.
- Adolescents should be counseled about other contraceptive methods and offered the option of initiating or transitioning to long-acting reversible contraceptive methods that have no effect on BMD, such as intrauterine devices and contraceptive implants, as alternatives to long-term DMPA use.

#### Category I

##### *Systematic Reviews*

Curtis 2006b: In cross-sectional studies, the mean bone mineral density (BMD) in depot medroxyprogesterone acetate (DMPA) users was usually below that of nonusers, but within 1 SD. In longitudinal studies, BMD generally decreased more over time among DMPA users than among nonusers, but women gained BMD upon discontinuation of DMPA. Limited evidence suggested that use of progestogen-only contraceptives other than DMPA did not affect BMD.

Kaunitz 2008: Bone mineral density (BMD) consistently returned toward or to baseline values following DMPA discontinuation in women of all ages. This recovery in BMD was seen as early as 24 weeks after stopping therapy and persisted for as long as women were followed up; BMD in past depot medroxyprogesterone acetate users was similar to that in nonusers.

#### Category II

##### *Observational Studies*

Arias 2006: Each study showed decreased incidence of irregular bleeding and increased amenorrhea with continued use of depot medroxyprogesterone 104 mg/0.65 ml subcutaneous injection (DMPA-SC 104). Rates of amenorrhea at Month 12 (52 – 64% across studies) and Month 24 (71% in the 2-year trial) were comparable with those originally reported for depot medroxyprogesterone acetate intramuscular injection. Changes in bleeding patterns showed no consistent differences according to age or body mass index. The percentages of subjects shifting from bleeding and/or spotting to amenorrhea increased with each subsequent injection. Clinical data show that the incidence of amenorrhea increases over time with the use of DMPA-SC 104.

Bonny 2006: Over 18 months, depot medroxyprogesterone acetate use was associated with increasing rates of weight gain in obese subjects. The potential contribution to severe obesity in this population is concerning.

#### Category III

## Progestin-only Methods – Levonorgestrel-releasing Intrauterine System

### RECOMMENDATION STATEMENTS

Information on individual methods discussed in the text.

### SUPPORTING EVIDENCE

#### Category I

#### Category II

#### Category III

##### *Narrative Reviews*

[Attia 2013](#): The levonorgestrel-releasing intrauterine system is generally well tolerated. Menstrual abnormalities are common but well tolerated, and even become desirable (eg, amenorrhea, hypomenorrhea, and oligomenorrhea) with proper counseling of the patient during the choice of the method of contraception.

[Pradhan 2019](#): Levonorgestrel intrauterine device (IUD) users also achieve excellent rates of amenorrhea (50% amenorrhea at 1 year; 60% with continued use of the IUD at 5 years). In addition, although amenorrhea might not be achieved, another 25% of patients reported oligomenorrhea while using the levonorgestrel IUD with rates of unscheduled spotting in only 11% of users at 2 years. It should be noted that amenorrhea rates for the levonorgestrel IUD are highest when the 52-mg IUD approved for 5 years is used as opposed to other forms of the levonorgestrel IUD, which have overall lower daily dosage of hormone and also lower amenorrhea rates.



## Progestin-only Methods – Etonogestrel Implant

### RECOMMENDATION STATEMENTS

Information on individual methods discussed in the text.

### SUPPORTING EVIDENCE

#### Related Guidelines

Curtis 2016b: The Centers for Disease Control and Prevention, U.S. Selected Practice Recommendations for Contraceptive Use, 2016:

- The implant is inserted with local anesthesia in the office and can be continued for up to 5 years. Data show that approximately 22% of patients achieve amenorrhea with the progestin-only implant

#### Category I

##### *Randomized Controlled Trials*

Hou 2016: All women on combined oral contraceptives (COCs) and 75% of placebo users reported bleeding improvement at four weeks ( $p=0.09$ ), with 92% and 42%, respectively, reporting significant improvement ( $p=0.03$ ). The median number of days until bleeding stopped for at least four days in COC and placebo users was 1 day (range 1–9) and 4.5 days (range 1–28), respectively ( $p=0.63$ ). Eight (75%) COC and five (42%) placebo users opted to continue study treatment ( $p=0.41$ ). Despite bleeding improvement, women who desired implant removal at enrollment were more likely to re-request removal than those who initially considered other interventions (3 of 5 [60%] vs 1 of 17 [6%],  $p=0.03$ ).

#### Category II

##### *Observational Studies*

McNicholas 2017: Among implant users with serum etonogestrel results, the median etonogestrel level was 207.7 pg/mL (range 63.8–802.6 pg/mL) at the time of method expiration, 166.1 pg/mL (range 67.9–250.5 pg/mL) at the end of the fourth year, and 153.0 pg/mL (range 72.1–538.8 pg/mL) at the end of the fifth year. Median etonogestrel levels were compared by body mass index at each time point and a statistical difference was noted at the end of 4 years of use with overweight women having the highest serum etonogestrel (195.9; range 25.0–450.5 pg/mL) when compared to normal (178.9; range 87.0–463.7 pg/mL) and obese (137.9; range 66.0–470.5 pg/mL) women ( $P = .04$ ).

#### Category III

## General Principles of Counseling

### RECOMMENDATION STATEMENTS

- Counseling regarding the choice of hormonal medication for menstrual suppression should be approached with the utmost respect for patient autonomy and be free of coercion. Gynecologists should engage in shared decision-making with patients and evidence-based counseling should include menstrual management options and the benefits and limitations of the different methods, as well as realistic expectations about complete amenorrhea.
- When discussing options for menstrual suppression, a thorough history should be obtained, and the United States Medical Eligibility Criteria for Contraceptive Use criteria applied to determine safe use of the options based on the patient's individualized needs and preferences.

### SUPPORTING EVIDENCE

#### Related Guidelines

Curtis 2016a: The Centers for Disease Control and Prevention, US Medical Eligibility Criteria for Contraceptive Use, 2016:

- Voluntary informed choice of contraceptive methods is an essential guiding principle, and contraceptive counseling, when applicable, might be an important contributor to the successful use of contraceptive methods.

ACOG Committee Opinion No. 819, Informed Consent and Shared Decision Making in Obstetrics and Gynecology:

- Clinicians should engage in shared decision-making which is the patient-centered, individualized approach to the informed consent process and includes evidence-based counseling of available menstrual management options and their benefits and limitations in the context of a patient's values and priorities

ACOG Statement of Policy, Racism in Obstetrics and Gynecology:

- Racism, not race, drives health inequities and leads to adverse health outcomes.
- Race is a social category, not a biological or genetic condition that elevates risk for certain diagnoses and health disparities.
- Racial and ethnic inequities in obstetrics and gynecology cannot be reversed without addressing all aspects of racism and racial bias, including sociopolitical forces that perpetuate racism. The actualization of an equitable health care system which serves all people can only occur through acknowledgement of the historical context from which modern health inequities grew, including reproductive injustices

#### Category I

#### Category II

#### Category III

*Narrative Review:*

Kathawa 2020: The historical context of sterilization abuses and the implications of these on society's notions of fitness for parenthood are reviewed. We present contemporary examples of contraceptive coercion and discuss the impact of implicit bias from health care providers.

## Adolescent Patients

### RECOMMENDATION STATEMENTS

- Hormonal medications (estrogen and progestin methods) for the specific purpose of menstrual suppression should not be initiated prior to the onset of menarche.
- All hormonal therapy options for menstrual suppression are safe and effective in adolescents.

### SUPPORTING EVIDENCE

#### Related Guidelines

[ACOG Committee Opinion No. 651, Menstruation in Girls and Adolescents: Using the Menstrual Cycle as a Vital Sign:](#)

- Clinicians should educate girls and their caretakers (eg, parents or guardians) about what to expect of a first menstrual period and the range for normal cycle length of subsequent menses.
- Once girls begin menstruating, clinicians should ask at every preventive care or comprehensive visit for the patient's first day of her last menstrual period and the pattern of menses
- Identification of abnormal menstrual patterns in adolescence may improve early identification of potential health concerns for adulthood.
- It is important for clinicians to have an understanding of the menstrual patterns of adolescent girls, the ability to differentiate between normal and abnormal menstruation, and the skill to know how to evaluate the adolescent girl patient.

[ACOG Committee Opinion No. 735, Adolescents and Long-Acting Reversible Contraception: Implants and Intrauterine Devices:](#)

- Long-acting reversible contraceptives have higher efficacy, higher continuation rates, and higher satisfaction rates compared with short-acting contraceptives among adolescents who choose to use them.
- Complications of intrauterine devices and contraceptive implants are rare and differ little between adolescents and women, which makes these methods safe for adolescents.

#### Category I

*Systematic Reviews*

[Patseadou 2017](#): Usage of the levonorgestrel-releasing intrauterine system in teen populations appears to be safe and efficacious both in terms of contraception and menstrual management. However, more robust evidence is needed so as to provide firm confirmation on benefits and potential side effects

#### Category II

#### Category III

## Transgender and Gender Diverse Patients

### RECOMMENDATION STATEMENTS

- Transgender and gender diverse individuals may benefit from menstrual suppression to decrease gender dysphoria associated with menses.
- Gender-affirming hormone therapy with testosterone can be used to achieve amenorrhea. Gynecologists should counsel patients with reproductive potential who do not wish to become pregnant about the contraceptive efficacy of suppression options.

### SUPPORTING EVIDENCE

#### Related Guidelines

[ACOG Committee Opinion No. 823. Health Care for Transgender and Gender Diverse Individuals:](#)

- Patients should be counseled that menses likely will cease within a few months after initiating hormone therapy. If bleeding continues, the obstetrician–gynecologist may consider adding progesterone therapy to facilitate amenorrhea for patients who wish to avoid hysterectomy or endometrial ablation.
- Transmasculine individuals should be counseled that lack of menses does not mean they are unable to conceive.

#### Category I

#### Category II

#### Category III

##### *Observational Studies*

##### *Narrative Reviews*

[Chrisler 2016](#): Queer periods: attitudes toward and experiences with menstruation in the masculine of center and transgender community. Participants reported mixed attitudes toward menstruation, but generally positive attitudes toward menstrual suppression. Many participants said that they try to avoid public restrooms during menstruation because of practical and psychological concerns.

[Dodson 2019](#): Transgender teens have unique reproductive health care needs. Transgender boys may seek suppression of menses, and they will need to pay particular attention to pregnancy prevention if they decide to undergo masculinizing hormonal treatment

[Grimstad 2021](#): Breakthrough bleeding is relatively common (25%) on testosterone gender-affirming hormone therapy despite early amenorrhea. Most cases do not have an identifiable cause. Our data did not show superiority of any 1 method for managing breakthrough bleeding on testosterone gender-affirming hormone therapy.

[Mehring 2019](#): Although transgender youth on testosterone therapy often become amenorrhoeic, ovulation and pregnancy can still occur, and thus all youth on testosterone therapy should be counseled on the potential for pregnancy and have access to effective contraception. Many forms of hormonal contraceptives are both safe and efficacious when used by youth on testosterone therapy.

[Hewitt 2012](#): Hormone treatment for pubertal suppression and subsequent gender transition needs to be individualized within stringent protocols in multidisciplinary specialist units.

[Pradhan 2019](#): The purpose of this article is to review the options and medical considerations for menstrual suppression in patients undergoing chemotherapy who might be at risk of abnormal uterine bleeding, those with intellectual or physical disability, and transgender and gender nonbinary individuals.

[Kani 2019](#): Within a sample of transgender assigned-female-at-birth adolescents, half of whom were taking testosterone, a variety of contraceptives were used, including depot medroxyprogesterone, combined oral contraceptives, and levonorgestrel intrauterine device. Among those taking testosterone, many patients discontinued contraception once they stopped having menses.

## Patients with Physical or Cognitive Disabilities, or Both

### RECOMMENDATION STATEMENTS

- Menstrual suppression is a safe and viable option for patients with physical or cognitive disabilities, or both, who need or want to have fewer or no menses. While suppression should not be started until menarche, anticipatory guidance prior to menarche can be very useful and may lessen anxiety felt by patients and caregivers.
- Patients with a cognitive delay may have trouble comprehending menstruation or may face challenges maintaining personal hygiene during menstruation. In this setting, the approach to menstrual suppression should be comparable with a neurotypical (ie, without a defined neurologic difference) patient by starting with the lowest risk and reversible options.
- Gynecologists should educate patients as much as possible based on their cognitive abilities, maintain respect, maximize autonomy, avoid harm, and address patient and caregiver concerns.

### SUPPORTING EVIDENCE

#### Related Guidelines

##### FIGO 2011: Ethical Issues in the Management of Severely Disabled Women with Gynecologic Problems:

- It is essential that the general hygienic and other health needs of women with severe disabilities be managed without discrimination, by current standards of care and management applicable to all women.
- Healthcare providers should advocate policies that prohibit discrimination on the basis of physical and/or mental disability and that guarantee equal legal protection to all.
- If a woman has no capacity to decide on meeting her hygienic and other healthcare needs, decisions must be made in her best interests by her substitute decision-maker(s).
- Procedures that unavoidably result in permanent sterility or termination of pregnancy require special consideration to assure comprehension, capacity to choose, and consideration of the issues with severely disabled women's consent or, when their wishes cannot be determined, that of other appropriate decision-makers, including court-appointed guardians if needed.
- If a woman is too mentally disabled to comprehend menstruation, and evidence shows that, each month, the experience severely upsets her, or she is not able to maintain personal hygiene during menstruation, it is both ethically and medically prudent to recommend the least invasive and appropriate medical or surgical options.

##### AAP (Quint 2016a): Menstrual Management for Adolescents With Disabilities:

- Initiate anticipatory guidance before the start of menses
- Discuss concerns around sexual education and expression
- Help families with guidance on safety and abuse prevention
- Start menstrual management on the basis of issues related to interference with the teenager's activities, taking into consideration patient medical needs and mobility concerns
- Help families understand menstrual management options and the benefits and limitations of the different methods

Category I

Category II

Category III

### *Systematic Reviews*

Hopkins 2020: Results indicate that the most common medical modality used for menstrual suppression in girls with disabilities is the combined oral contraceptive pill, but depot medroxyprogesterone acetate and levonorgestrel-releasing intrauterine system have been recommended. Concerns related to menstrual suppression include expressed wishes of the girl and her caregivers, existing comorbid conditions, and risks associated with medical modalities used for suppression

### *Observational Studies*

Dizon 2005: A total of 72 charts were reviewed from clinic visits between 1998 to 2003. Ages range from 8 to 17 years with an unknown cause of their cognitive disability in 44% and medium to high support needs in the majority. Forty-three percent were still premenarcheal when first brought to the gynecology clinic by their families or caregivers. The main reason for consult was menstrual related in 90%, with concerns related to hygiene and problems coping

### *Narrative Reviews*

Quint 2016b: Adolescents with Special Needs: Clinical Challenges in Reproductive Health Care. The goal of treatment can be complete amenorrhea, alleviate pain or regulate and decrease menstrual flow. The unique risks and benefits of hormonal treatment for this special population are highlighted

## Patients with Challenges Affecting Hygiene and Privacy

### RECOMMENDATION STATEMENTS

N/A

### SUPPORTING EVIDENCE

#### Related Guidelines

[ACOG Committee Opinion No. 547, Health Care for Women in the Military and Women Veterans:](#)

- Military deployment to severe environments (eg, the war zone) can result in limited access to acceptable medical services and sanitary equipment and increase the inconvenience and logistic difficulty of hygienic management of menstruation

#### Category I

#### Category II

#### Category III

##### *Observational Studies*

Doherty 2012: Women's health and hygiene experiences during deployment to the Iraq and Afghanistan wars, 2003 through 2010. One of the 7 themes was about menstruation: to suppress or not to suppress.

Gruer 2021: Key themes that emerged included: (1) insufficient and inconsistent access to menstrual products; (2) systemic challenges to providing menstrual products; and (3) creative solutions to promote access to menstrual products. Both shelter- and street-living individuals reported significant barriers to accessing menstrual products. While both populations struggle, those in shelters were more likely to be able to purchase menstrual products or access free products at their shelter, while those living on the streets were more likely to have to resort to panhandling, theft, or using makeshift materials in place of menstrual products. Across both populations, individuals described barriers to accessing free products at shelters and service providers, primarily due to distribution systems that rely on gatekeepers to provide a few pads or tampons at a time, sometimes of inadequate quality and only upon request. Shelters and service providers also described challenges providing these products, including inconsistent supply.

Knittel 2017: This brief specifically addresses women's incarceration in the USA, but the recommendations are grounded in a human rights framework with global relevance. Findings Women who are incarcerated have health needs that are distinct from those of men, and there is a clear need for gender-responsive reproductive healthcare within the criminal justice system. This brief identifies five core domains of

reproductive healthcare: routine screening, menstruation-related concerns, prenatal and postpartum care, contraception and abortion, and sexually transmitted infections

Manski 2014: Participants identified a range of barriers to accessing medical care in deployment settings, including confidentiality concerns, lack of female providers, and health-seeking stigma, which were reported to disproportionately impact reproductive health access. Some participants experienced challenges obtaining contraceptive refills and specific contraceptive methods during deployment, and only a few participants received pre-deployment counseling on contraception, despite interest in both menstruation suppression and pregnancy prevention.

Maroko 2021: Qualitative findings suggest cleanliness, access to restrooms, and availability of resources are critical issues for the participants or prospective users. Quantitative analyses revealed insufficiently provided, maintained, and resourced public toilets for managing menstruation in high-needs areas. Findings also suggest that toilets with more menstrual hygiene management-related resource availability, such as menstrual products and toilet stall disposal bins, were more difficult to access.

Trego 2007: Menstruation is problematic during deployment and participants expressed interest in menstrual suppression. However, concerns about the side effects and safety of continuous oral contraceptives limited participants' use of this therapy. Education on menstrual hygiene and methods of menstrual cycle control should be provided prior to deployment to prepare women for the experience.



## Drug Interactions

### RECOMMENDATION STATEMENTS

- Gynecologists should conduct a thorough review of a patient's use of over-the counter and prescribed medications in order to address any potential drug interactions with hormonal medications for menstrual suppression.

### SUPPORTING EVIDENCE

#### Related Guidelines

Curtis 2016a: The Centers for Disease Control and Prevention, US Medical Eligibility Criteria for Contraceptive Use, 2016:

- Progestin-only methods may be of particular importance to individuals with contraindications to estrogen, including those with conditions such as cardiovascular disease, migraines with aura, hypertension, and hyper-coagulability.

**Category I**

**Category II**

**Category III**

## Breakthrough Bleeding

### RECOMMENDATION STATEMENTS

N/A

### SUPPORTING EVIDENCE

#### Related Guidelines

Curtis 2016b: The Centers for Disease Control and Prevention, U.S. Selected Practice Recommendations for Contraceptive Use, 2016:

- Before levonorgestrel-releasing intrauterine device (LNG-IUD) insertion, provide counseling about potential changes in bleeding patterns during LNG-IUD use. Unscheduled spotting or light bleeding is expected during the first 3–6 months of LNG-IUD use, is generally not harmful, and decreases with continued LNG-IUD use. Over time, bleeding generally decreases with LNG-IUD use, and many women experience only light menstrual bleeding or amenorrhea. Heavy or prolonged bleeding, either unscheduled or menstrual, is uncommon during LNG-IUD use.
- Before implant insertion, provide counseling about potential changes in bleeding patterns during implant use. Unscheduled spotting or light bleeding is common with implant use, and some women experience amenorrhea. These bleeding changes are generally not harmful and might or might not decrease with continued implant use. Heavy or prolonged bleeding, unscheduled or menstrual, is uncommon during implant use.
- Before depo-medroxyprogesterone acetate (DMPA) initiation, provide counseling about potential changes in bleeding patterns during DMPA use. Amenorrhea and unscheduled spotting or light bleeding is common with DMPA use, and heavy or prolonged bleeding can occur with DMPA use. These bleeding irregularities are generally not harmful and might decrease with continued DMPA use.

#### Category I

*Randomized Controlled Trials*

Anderson 2003: When taken daily for 84 days followed by 7 days of placebo, the extended cycle regimen was effective in preventing pregnancy and had a safety profile that was comparable to that observed with the 28-day oral contraceptive regimen that served as the control. While unscheduled (breakthrough) bleeding was reported among patients treated with the extended cycle regimen, it decreased with each successive cycle of therapy and was comparable to that reported by patients who received the conventional oral contraceptive regimen by the fourth extended cycle.

#### Category II

*Observational Studies*

Kirkham 2013: Since identification of decreased bone mineral density with depot medroxyprogesterone acetate and emergence of new contraceptive options, use of extended oral contraceptive pill or patch has surpassed depot medroxyprogesterone acetate for menstrual suppression in our patient population. Levonorgestrel intrauterine system is an accepted, successful second-line option in adolescents with developmental disabilities.

#### Category III

## REFERENCES

Adolescents and long-acting reversible contraception: implants and intrauterine devices. ACOG Committee Opinion No. 735. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2018; 131:e130–9.

Informed consent and shared decision making in obstetrics and gynecology. ACOG Committee Opinion No. 819. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2021;137:e34-41. doi: 10.1097/AOG.0000000000004247us

Health care for transgender and gender diverse individuals. ACOG Committee Opinion No. 823. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2021;137:e75-88. doi: 10.1097/AOG.0000000000004294

Screening and management of bleeding disorders in adolescents with heavy menstrual bleeding. ACOG Committee Opinion No. 785. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2019;134:e71-83. doi: 10.1097/AOG.0000000000003411

Menstruation in girls and adolescents: using the menstrual cycle as a vital sign. Committee Opinion No. 651. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2015;126:e143-6. doi: 10.1097/AOG.0000000000001215

Depot medroxyprogesterone acetate and bone effects. Committee Opinion No. 602. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2014;123:1398-402. doi: 10.1097/01.AOG.0000450758.95422.c8

Health care for women in the military and women veterans. Committee Opinion No. 547. American College of Obstetricians and Gynecologists. *Obstet Gynecol* 2012;120:1538-42. doi: 10.1097/01.AOG.0000423821.70036.5a

Ethical issues in the management of severely disabled women with gynecologic problems. FIGO Committee for Ethical Aspects of Human Reproduction and Women's Health. *Int J Gynaecol Obstet* 2011;115:86-7. doi: 10.1016/j.ijgo.2011.07.0

American College of Obstetricians and Gynecologists. Racism in obstetrics and gynecology. Statement of Policy 03. ACOG; 2022. Accessed March 9, 2022. <https://www.acog.org/clinical-information/policy-and-position-statements/statements-of-policy/2022/racism-in-obstetrics-gynecology>

Anderson FD, Hait H. A multicenter, randomized study of an extended cycle oral contraceptive [published erratum appears in *Contraception* 2004;69:175]. *Contraception* 2003;68:89-96. doi: 10.1016/s0010-7824(03)00141-0

Arias RD, Jain JK, Brucker C, Ross D, Ray A. Changes in bleeding patterns with depot medroxyprogesterone acetate subcutaneous injection 104 mg. *Contraception* 2006;74:234-8. doi: 10.1016/j.contraception.2006.03.008

Attia AM, Ibrahim MM, Abou-Setta AM. Role of the levonorgestrel intrauterine system in effective contraception. *Patient Prefer Adherence* 2013;7:777-85. doi: 10.2147/PPA.S36948

Audet MC, Moreau M, Koltun WD, Waldbaum AS, Shangold G, Fisher AC, et al. Evaluation of contraceptive efficacy and cycle control of a transdermal contraceptive patch vs an oral contraceptive: a randomized controlled trial. ORTHO EVRA/EVRA 004 Study Group. *JAMA* 2001;285:2347-54. doi: 10.1001/jama.285.18.2347

Bonny AE, Ziegler J, Harvey R, Debanne SM, Secic M, Cromer BA. Weight gain in obese and nonobese adolescent girls initiating depot medroxyprogesterone, oral contraceptive pills, or no hormonal contraceptive method. *Arch Pediatr Adolesc Med* 2006;160:40-5. doi: 10.1001/archpedi.160.1.40

- Chrisler JC, Gorman JA, Manion J, Murgo M, Barney A, Adams-Clark A, et al. Queer periods: attitudes toward and experiences with menstruation in the masculine of centre and transgender community. *Cult Health Sex* 2016;18:1238-50. doi: 10.1080/13691058.2016.1182645
- Curtis KM, Jatlaoui TC, Tepper NK, Zapata LB, Horton LG, Jamieson DJ, et al. U.S. selected practice recommendations for contraceptive use, 2016. *MMWR Recomm Rep* 2016b;65(RR-4):1-66. doi: 10.15585/mmwr.rr6504a1
- Curtis KM, Tepper NK, Jatlaoui TC, Berry-Bibee E, Horton LG, Zapata LB, et al. U.S. medical eligibility criteria for contraceptive use, 2016. *MMWR Recomm Rep* 2016a;65(RR-3):1-104. doi: 10.15585/mmwr.rr6503a1 [doi]
- Curtis KM, Chrisman CE, Mohllajee AP, Peterson HB. Effective use of hormonal contraceptives: Part I: combined oral contraceptive pills. *Contraception* 2006a;73:115-24. doi: 10.1016/j.contraception.2005.08.003
- Curtis KM, Martins SL. Progestogen-only contraception and bone mineral density: a systematic review. *Contraception* 2006b;73:470-87. doi: 10.1016/j.contraception.2005.12.010
- Dizon CD, Allen LM, Ornstein MP. Menstrual and contraceptive issues among young women with developmental delay: a retrospective review of cases at the Hospital for Sick Children, Toronto. *J Pediatr Adolesc Gynecol* 2005;18:157-62. doi: 10.1016/j.jpag.2005.03.002
- Dodson NA, Langer M. The reproductive health care of transgender young people: a guide for primary care providers. *Pediatr Ann* 2019;48:e64-70. doi: 10.3928/19382359-20190116-04
- Doherty ME, Scannell-Desch E. Women's health and hygiene experiences during deployment to the Iraq and Afghanistan wars, 2003 through 2010. *J Midwifery Womens Health* 2012;57:172-7. doi: 10.1111/j.1542-2011.2011.00115.x
- Edelman A, Micks E, Gallo MF, Jensen JT, Grimes DA. Continuous or extended cycle vs. cyclic use of combined hormonal contraceptives for contraception. *Cochrane Database of Systematic Reviews* 2014, Issue 7. Art. No.: CD004695. doi: 10.1002/14651858.CD004695.pub3
- Grimes DA, Lopez LM, O'Brien PA, Raymond EG. Progestin-only pills for contraception. *Cochrane Database of Systematic Reviews* 2013, Issue 11. Art. No.: CD007541. doi: 10.1002/14651858.CD007541.pub3
- Grimstad F, Kremen J, Shim J, Charlton BM, Boskey ER. Breakthrough Bleeding in Transgender and Gender Diverse Adolescents and Young Adults on Long-Term Testosterone. *J Pediatr Adolesc Gynecol*. 2021 Oct;34(5):706-716. doi: 10.1016/j.jpag.2021.04.004. Epub 2021 Apr 25. PMID: 33910088.
- Gruer C, Hopper K, Smith RC, Kelly E, Maroko A, Sommer M. Seeking menstrual products: a qualitative exploration of the unmet menstrual needs of individuals experiencing homelessness in New York City. *Reprod Health* 2021;18:77-8. doi: 10.1186/s12978-021-01133-8
- Guazzelli CA, Barreiros FA, Barbosa R, de Araújo FF, Moron AF. Extended regimens of the vaginal contraceptive ring: cycle control. *Contraception* 2009;80:430-5. doi: 10.1016/j.contraception.2009.05.004
- Hadji P, Neulen J, Schaudig K, Schwenkhagen A, Grimmbacher S, Wiegratz I. Extended-cycle versus conventional treatment with a combined oral contraceptive containing ethinylestradiol (30 µg) and levonorgestrel (150 µg) in a randomized controlled trial. *Gynecol Endocrinol* 2020;36:513-20. doi: 10.1080/09513590.2020.1725963

- Hewitt JK, Paul C, Kasiannan P, Grover SR, Newman LK, Warne GL. Hormone treatment of gender identity disorder in a cohort of children and adolescents. *Med J Aust* 2012;196:578-81. doi: 10.5694/mja12.10222
- Hillard PA. Menstrual suppression: current perspectives. *Int J Womens Health* 2014;6:631-7. doi: 10.2147/IJWH.S46680
- Hitchcock CL, Prior JC. Evidence about extending the duration of oral contraceptive use to suppress menstruation. *Womens Health Issues* 2004;14:201-11. doi: 10.1016/j.whi.2004.08.005
- Hopkins CS, Fasolino T. Menstrual suppression in girls with disabilities. *J Am Assoc Nurse Pract* 2021; 33:785-90. doi: 10.1097/JXX.0000000000000468
- Hou MY, McNicholas C, Creinin MD. Combined oral contraceptive treatment for bleeding complaints with the etonogestrel contraceptive implant: a randomised controlled trial. *Eur J Contracept Reprod Health Care* 2016;21:361-6. doi: 10.1080/13625187.2016.1210122
- Kanj RV, Conard LA, Corathers SD, Trotman GE. Hormonal contraceptive choices in a clinic-based series of transgender adolescents and young adults. *Int J Transgend* 2019;20:413-20. doi: 10.1080/15532739.2019.1631929
- Kathawa CA, Arora KS. Implicit bias in counseling for permanent contraception: historical context and recommendations for counseling. *Health Equity* 2020;4:326-9. doi: 10.1089/heq.2020.0025
- Kaunitz AM, Arias R, McClung M. Bone density recovery after depot medroxyprogesterone acetate injectable contraception use. *Contraception* 2008;77:67-76. doi: 10.1016/j.contraception.2007.10.005
- Kirkham YA, Allen L, Kives S, Caccia N, Spitzer RF, Ornstein MP. Trends in menstrual concerns and suppression in adolescents with developmental disabilities. *J Adolesc Health* 2013;53:407-12. doi: 10.1016/j.jadohealth.2013.04.014
- Knittel A, Ti A, Schear S, Comfort M. Evidence-based recommendations to improve reproductive healthcare for incarcerated women. *Int J Prison Health* 2017;13:200-6. doi: 10.1108/IJPH-07-2016-0031
- Manski R, Grindlay K, Burns B, Holt K, Grossman D. Reproductive health access among deployed U.S. servicewomen: a qualitative study. *Mil Med* 2014;179:645-52. doi: 10.7205/MILMED-D-13-00302
- Maroko AR, Hopper K, Gruer C, Jaffe M, Zhen E, Sommer M. Public restrooms, periods, and people experiencing homelessness: an assessment of public toilets in high needs areas of Manhattan, New York. *PLoS One* 2021;16:e0252946. doi: 10.1371/journal.pone.0252946
- McNicholas C, Swor E, Wan L, Peipert JF. Prolonged use of the etonogestrel implant and levonorgestrel intrauterine device: 2 years beyond Food and Drug Administration-approved duration. *Am J Obstet Gynecol* 2017;216:586.e1-6. doi: 10.1016/j.ajog.2017.01.036
- Mehring J, Dowshen NL. Sexual and reproductive health considerations among transgender and gender-expansive youth. *Curr Probl Pediatr Adolesc Health Care* 2019;49:100684. doi: 10.1016/j.cppeds.2019.100684
- Miller L, Verhoeven CH, Hout J. Extended regimens of the contraceptive vaginal ring: a randomized trial. *Obstet Gynecol* 2005;106:473-82. doi: 10.1097/01.AOG.0000175144.08035.74
- Miller L, Hughes JP. Continuous combination oral contraceptive pills to eliminate withdrawal bleeding: a randomized trial. *Obstet Gynecol* 2003;101:653-61. doi: 10.1016/s0029-7844(03)00014-0

- Mölsä PK. Inducement of therapeutic amenorrhea in mentally retarded women: two-year follow-up study. *Am J Ment Defic* 1986;90:591-3.
- Nelson A. New low-dose, extended-cycle pills with levonorgestrel and ethinyl estradiol: an evolutionary step in birth control. *Int J Womens Health* 2010;2:99-106. doi: 10.2147/ijwh.s4886
- Nelson AL. Extended-cycle oral contraception: a new option for routine use. *Treat Endocrinol* 2005;4:139-45. doi: 10.2165/00024677-200504030-00002
- Patseadou M, Michala L. Usage of the levonorgestrel-releasing intrauterine system (LNG-IUS) in adolescence: what is the evidence so far? *Arch Gynecol Obstet* 2017;295:529-41. doi: 10.1007/s00404-016-4261-0
- Pradhan S, Gomez-Lobo V. Hormonal contraceptives, intrauterine devices, gonadotropin-releasing hormone analogues and testosterone: menstrual suppression in special adolescent populations. *J Pediatr Adolesc Gynecol* 2019;32:S23-9. doi: 10.1016/j.jpag.2019.04.007
- Quint EH. Adolescents with special needs: clinical challenges in reproductive health care. *J Pediatr Adolesc Gynecol* 2016b;29:2-6. doi: 10.1016/j.jpag.2015.05.003
- Quint EH, O'Brien RF. Menstrual management for adolescents with disabilities. Committee on Adolescence, North American Society for Pediatric and Adolescent Gynecology. *Pediatrics* 2016a;138:e20160295. doi: 10.1542/peds.2016-0295
- Santos M, Hendry D, Sangi-Haghpeykar H, Dietrich JE. Retrospective review of norethindrone use in adolescents. *J Pediatr Adolesc Gynecol* 2014;27:41-4. doi: 10.1016/j.jpag.2013.09.002
- Savasi I, Spitzer RF, Allen LM, Ornstein MP. Menstrual suppression for adolescents with developmental disabilities. *J Pediatr Adolesc Gynecol* 2009;22:143-9. doi: 10.1016/j.jpag.2007.10.008
- Steinauer J, Autry AM. Extended cycle combined hormonal contraception. *Obstet Gynecol Clin North Am* 2007;34:43-55, viii. doi: 10.1016/j.ogc.2007.01.001
- Stewart FH, Kaunitz AM, Laguardia KD, Karvois DL, Fisher AC, Friedman AJ. Extended use of transdermal norelgestromin/ethinyl estradiol: a randomized trial. *Obstet Gynecol* 2005;105:1389-96. doi: 10.1097/01.AOG.0000160430.61799.f6
- Sulak PJ, Smith V, Coffee A, Witt I, Kuehl AL, Kuehl TJ. Frequency and management of breakthrough bleeding with continuous use of the transvaginal contraceptive ring: a randomized controlled trial. *Obstet Gynecol* 2008;112:563-71. doi: 10.1097/AOG.0b013e3181842071
- Teichmann A, Apter D, Emerich J, Greven K, Klasa-Mazurkiewicz D, Melis GB, et al. Continuous, daily levonorgestrel/ethinyl estradiol vs. 21-day, cyclic levonorgestrel/ethinyl estradiol: efficacy, safety and bleeding in a randomized, open-label trial. *Contraception* 2009;80:504-11. doi: 10.1016/j.contraception.2009.05.128
- Trego LL. Military women's menstrual experiences and interest in menstrual suppression during deployment. *J Obstet Gynecol Neonatal Nurs* 2007;36:342-7. doi: 10.1111/j.1552-6909.2007.00166.x