Choosing the Right Oral Contraceptive Pill for Teens

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KEYWORDS

- Oral contraceptive pill (OCP) • Combined oral contraceptive (COC)
- Progestin-only contraceptive (POP) • Venous thromboembolism (VTE)
- US medical eligibility criteria (US MEC)

KEY POINTS

- Oral contraceptive pills provide effective and safe contraception for adolescents when taken correctly.
- Oral contraceptive pills include 2 broad categories: progestin-only pills (POPs) and combined oral contraceptives (COCs).
- COCs lead to an increased risk of venous thromboembolism (VTE), so clinicians should perform a thorough assessment of any contraindications to estrogen before prescribing.
- COCs provide many noncontraceptive health benefits, including treatment of dysmenorrhea, excessive uterine bleeding, acne, and polycystic ovary syndrome.

INTRODUCTION

In 1960, the first oral contraceptive pill (OCP), Enovid, was approved by the US Food and Drug Administration.[1] Since that time, OCPs available to US women have changed dramatically, with decreased hormone concentrations and increased variety in formulations. As detailed in other articles in this publication, the American Academy of Pediatrics and American College of Obstetricians and Gynecologists advocate that long-acting reversible contraceptives (LARCs) be recommended as first-line contraceptive options for sexually active adolescents[2] (See Suzanne Allen and Erin Barlow's article, "LARC Methods," in this issue). Although trends are shifting in terms of increasing LARC use, OCPs continue to be the most common form of prescription contraception accessed by US adolescents.[3]

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TYPES OF ORAL CONTRACEPTIVE PILLS, MECHANISM OF ACTION, AND EFFICACY

There are 2 broad categories of OCPs: progestin-only pills (POPs) and combined oral contraceptives (COCs). POPs function primarily through thickening the cervical mucus and thereby preventing sperm penetration. In addition, POPs inhibit ovulation to variable degrees, reduce cilia activity in the fallopian tubes, and alter the endometrium.[1] COCs, which contain both estrogen and progesterone, function primarily though inhibiting ovulation via feedback in the hypothalamic-pituitary-ovarian axis and thickening cervical mucus. When discussing efficacy of OCPs, it is crucial to distinguish perfect use from typical use. There is a significant discrepancy between these rates due to challenges with patient adherence to daily dosing. With *perfect* use, oral contraceptives have a 0.3% failure rate in the first year of use[4]; however, with *typical* use, oral contraceptives have a failure rate of 8% in the first year of use.[4] Although OCPs offer excellent pregnancy protection with proper use, they do not offer protection from sexually transmitted infections (STIs). As such, all patients using OCPs for contraception should also be counseled to use condoms consistently for STI protection (See Zoon Wangu and Gale R. Burstein's article, "Adolescent Sexuality: Updates to the Sexually Transmitted Infection Guidelines," in this issue).

Both POPs and COCs require daily dosing; however, POPs require more exact dosing to maintain contraceptive efficacy. For adolescents, daily dosing in general can be problematic. When counseling an adolescent about OCPs for birth control, it is important for clinicians to speak openly with patients about the challenges of daily dosing and explore whether the adolescent feels that she is capable of adherence. Many adolescents find using an alarm in their cell phones to be a useful tool in helping them remember to take their pills. Because POPs require exact dosing in terms of the hour taken each day, most clinicians try to avoid this method as a primary form of birth control in adolescents. However, POPs may be the only option available for certain patients. With such patients, counseling must be very direct about the necessity of exact dosing, as well as the strong recommendation for consistent condom use, as both STI protection and back-up contraception.

ADDRESSING COMMON CULTURAL MYTHS ABOUT ORAL CONTRACEPTIVE PILLS

Many patients have preconceived notions about the efficacy, safety, and side effects of OCPs. It is very useful to explore a patient's current understanding and knowledge of OCPs before prescribing so that common cultural "myths" can be dispelled. A common myth is that taking OCPs will impair a patient's future fertility. Generally, OCPs do not adversely affect fertility. For most patients, menstrual cycles return promptly to the same pattern that existed before starting OCPs.[1] Some women may experience some delay before menstrual cycles resume, but most do not.

Some patients may be concerned because menstrual flow is lighter than usual than what they experienced before starting OCPs. Some patients think that menstrual blood is "backing up" in their bodies. It is helpful to educate such patients about how OCPs prevent excessive build-up of the uterine lining, so infrequent menses, or light menses, while on OCPs does not pose a health risk.

Many patients believe that OCPs lead to significant weight gain. For some patients, this is a major reason to avoid OCPs, so it is important to address this concern in the early stages of contraceptive counseling. Patients will be reassured to know that multiple double-blind studies have shown no association between low-dose COC use and weight gain.[5]