

When the Patient Asks

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Q: What types of birth control are available?

Over the past several years, the hormonal contraceptive market has become quite diverse. The oral contraceptive pill (OCP) was introduced in 1960, and today the market has expanded to include injections, vaginal rings, transdermal patches, drug-eluting intrauterine devices (IUDs), and subdermal implants.¹

ORAL CONTRACEPTIVE PILL

“The Pill” remains the most popular method of contraception for women in the United States. Currently, more than 40 different forms of oral contraceptives are available.¹

Combination pills Combination OCPs contain estrogen and progestin and are available in monophasic, biphasic, and triphasic cycles. Biphasic and triphasic cycles imitate natural hormonal fluctuations, thereby minimizing the side effects of progestin.²

Progestin-only pills The advantage of using norethindrone, 0.35 mg, is that the side effects of estrogen are avoided.³ Progestin-only pills are often used by women who are breast-feeding, are older than 35 years, smoke cigarettes, or have a history of blood clots. This type of OCP must be taken at the same time each day. If the norethindrone dose is delayed by more than 3 hours, an alternative form of contraception must be used for the remainder of the cycle.³

28-day regimens OCPs are administered as one pill daily in regimens that create a 28-day cycle. A traditional regimen is the 21/7 regimen—21 active tablets and 7 inactive tablets. Drospirenone/ethinyl estradiol, 3 mg/0.02 mg (Yaz), and norethindrone acetate/ethinyl estradiol ferrous fumarate (Loestrin 24 FE), are OCPs available as 24/4 regimens.¹

Continuous-use regimens Women following these regimens will experience only 4 bleeding episodes per year.

Levonorgestrel/ethinyl estradiol, 0.15 mg/0.03 mg (Seasonale, Seasonique), is administered as one tablet daily for 13 weeks. A third regimen, levonorgestrel/ethinyl estradiol, 0.09 mg/0.02 mg (Lybrel), is approved for administration as one pill daily for 365 days.

INJECTION

Medroxyprogesterone acetate (Depo-Provera) is administered once every 3 months as an IM or SC injection.² Irregular bleeding occurs in most women, and about 50% of women have amenorrhea.⁴

VAGINAL RING

The thin, pliable vaginal ring (Nuva-Ring) releases 15 mcg of ethinyl estradiol and 0.12 mg of etonogestrel daily.⁵ The ring is left in place for 3 weeks and then removed for 1 week. A back-up form of contraception should be used until the ring has been in place for 7 consecutive days.⁵

TRANSDERMAL PATCH

The ethinyl estradiol/norelgestromin patch (20 mcg/150 mcg daily; Ortho Evra) is applied to the buttocks, abdomen, upper torso, or outer arm and left in place for 3 weeks.⁵ The patch is removed for 1 week.⁵

DRUG-ELUTING INTRAUTERINE DEVICE

The levonorgestrel-releasing IUD (20 mcg daily; Mirena) is recommended for women who have had at least one child, are in a monogamous relationship, and

have no history of pelvic inflammatory disease, ectopic pregnancy, or any condition that would increase the risk of ectopic pregnancy. The IUD may be left in place for up to 5 years.⁶

IMPLANTS

The etonogestrel (68 mg) subdermal implant (Implanon) must be inserted by a trained clinician. Implanon may be left in place for 3 years.⁷

BOTTOM LINE

Patients can choose from contraceptive forms such as pills, injections, vaginal rings, transdermal patches, and subdermal implants. The table “Hormonal contraceptives at a glance” (in the online version of this article) provides a brief overview of available hormonal birth control options. [JAAPA](#)

For information that can be photocopied and handed to patients, please turn the page.

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ON THE WEB

- Table. Hormonal contraceptives at a glance

Please see the online version of this article at www.jaapa.com for this enhancement.

Patient Information

Q: What types of birth control are available?

›WHAT TYPES OF HORMONAL BIRTH CONTROL CAN I CHOOSE FROM?

The most common type of hormonal birth control is “the Pill.” Several other types of birth control are also available. These other types are an injection, a vaginal ring, a patch, and an intrauterine device that releases medication.

›HOW DO I KNOW WHICH TYPE IS RIGHT FOR ME?

You should talk to your health care provider (HCP) about your lifestyle and your relationship with your partner. You will need to have regular checkups. Your HCP can explain how often you will need a checkup. All types of birth control have risks and side effects. Your HCP can explain the risks and side effects.

›WHAT DRUGS ARE IN BIRTH CONTROL PILLS?

Most birth control pills contain estrogen and progestin. These are called combination pills. Combination birth control pills are available with different amounts of estrogen and progestin in them. Some birth control pills contain only progestin. This type may be better for certain women. Women who are breast-feeding would use a progestin-only pill. A woman who is older than 35 years would use this type of pill. A woman who smokes would use this type of pill. If a woman has a history of blood clots, her HCP may prescribe this type of pill. A progestin-only pill must be taken at the same time each day. If you take the pill late, it might not keep you from becoming pregnant.

›HOW OFTEN DO I HAVE TO TAKE A PILL?

You take one pill every day. Most birth control pills come in a package contain-

ing 21 active pills and 7 inactive pills. Some packages contain 24 active pills and 4 inactive pills. Active pills contain the medication that keeps you from becoming pregnant. The inactive pills do not have any medication in them. You take the inactive pills so you remember to take a pill every day, no matter what.

›HOW DOES THIS AFFECT MY PERIOD?

Birth control pills may relieve some of the symptoms you get with your period. Birth control pills will control when you get your period. You will get your period on the days you take the inactive pills. You take active pills daily for 13 weeks when you are taking a continuous-use pill. You will get your period only four times a year while you are taking this type of pill. Another type of continuous-use pill will stop your period for a year.

›WHAT IS THE INJECTION AND HOW DOES IT WORK?

The injection contains progestin. Your HCP gives you the injection in your muscle or under your skin. You will need to visit your HCP for an injection every 3 months. Your periods may change and become unpredictable. Your periods may completely stop.

›WHAT IS A VAGINAL RING?

The vaginal ring is a thin and flexible ring that is inserted into your vagina. The ring releases medication into your body to prevent pregnancy. You insert the ring in your vagina and leave it there for 3 weeks. You remove the ring and wait 1 week before inserting a new ring. You will get your period during this week. Most patients do not feel the ring once it has been inserted. Your partner usually does not notice the ring during sex. Your HCP will explain

how to insert and remove the ring. The ring will not get lost in the vagina.

›HOW DO I USE THE PATCH?

The birth control patch is applied to the skin on the buttocks, abdomen, upper torso, or outer arm like a band-aid. You wear the patch for 3 weeks and then remove it. You will not wear a patch for 1 week before placing a new patch your skin. You will get your period when you are not wearing a patch. You should place the patch in a different spot each time to avoid skin problems.

›CAN I USE AN INTRAUTERINE DEVICE?

An intrauterine device (IUD) that releases medication into your womb must be inserted by your HCP. This type of birth control is recommended only for certain women. You can use the IUD if you have at least one child. You should have only one sexual partner. The IUD should not be used by women who have certain health conditions. Your HCP can tell you if you can use an IUD.

›WHAT IS AN IMPLANT?

An implant is a small rod that your HCP inserts under the skin on the inner side of the upper arm. The implant releases progestin into your body to prevent pregnancy. The implant may be left in place for 3 years, and then it must be removed.

›THE BOTTOM LINE

Women can choose from many different types of hormonal birth control. The most commonly used form of birth control is the Pill. You should ask your HCP to explain the different types of birth control. Your HCP can help you decide which type is best for you. [JAAPA](#)



TABLE. Hormonal contraceptives at a glance

Type	Dosage	Side effects	Failure rate ^a
Combination OCPs	1 tablet/d	<ul style="list-style-type: none"> • Common: GI upset, irregular bleeding, and changes in weight and mood • Rare: hypertension, thromboembolism 	1-2
Progestin-only pills	1 tablet/d	Breast tenderness, irregular bleeding, and weight gain	2
Injection	IM or SC, every 3 mo	Breast tenderness, irregular bleeding, headache, and weight gain	<1 (IM)
Vaginal ring	1 ring/3 wk; removed for 1 wk	<ul style="list-style-type: none"> • Same as combination OCPs • May also cause vaginitis or increased vaginal discharge 	1-2
Transdermal patch	1 patch/3 wk; removed for 1 wk	<ul style="list-style-type: none"> • Same as combination OCPs • Dermatologic reaction at application site may occur • May be less effective in patients >198 lb 	1-2
Drug-eluting IUD	1 device/5 y	Same as injection Dysmenorrhea and vaginal discharge	<1
Subdermal implant	1 implant/3 y	Same as injection	<1

Key: IUD, intrauterine device; OCPs, oral contraceptive pills.

^a Failure rate = number of pregnancies per 100 patients per year.

Data from Gebhart F;¹ *Pharmacist's Letter/Prescriber's Letter*;² American Academy of Family Physicians Web site;^{3,5} Bayer HealthCare Pharmaceuticals Inc,⁶ Organon USA Inc,⁷ and Birth Control Guide. FDA Web site. <http://www.fda.gov/Fdac/features/t1997/babyguide2.pdf> Accessed on February 6, 2008.