Contraception Health Notes at Brookfield Family Practice

Health Notes on Contraception Choices

Given all the different choices, deciding on birth control may be confusing. The first step is to determine what best fits your needs.

Some things to consider:

- **Cost of the medication**
- **Side effect profile**
- **Ease of use**
- **Sexual behavior/STD considerations**
- **Future reproductive goals**
- **Medical conditions**

Hormones used in contraceptive methods

Estrogen- A hormone that inhibits growth of the follicle. The follicle is what releases the egg during the ovulation period.
Progestin-A synthetic progesterone. Progesterone is responsible for preventing ovulation from occurring.

(1) Long Acting Reversible Contraceptives (LARC)-Implants and IUDs

Implants-Long acting and rapidly reversible rods that do not contain estrogen (progestin only). They are placed under the skin in the upper inner arm.

How they work: The progestin in the implant prevents ovulation and increases the thickness of cervical mucous. This creates a hostile environment for sperm. **Nexplanon** is a single rod that lasts up to 4 years (FDA approved for 3 years).

Method	Pros	Cons
The Implant (Nexplanon®) **Perfect use*: 0.05% *Typical use*: 0.05% Cost: $800 without health insurance	-Long lasting -No daily pill -Decreases cramps -Can be used while breastfeeding -Can become pregnant after removal.	-May cause irregular bleeding -After 1 year may have no period at all -No protection against HIV or other STIs

*Perfect use refers to failure rate of contraceptives when used correctly all the time within first year of use.
Typical use refers to failure rate of contraceptives when factoring in human error within the first year of use.

Intrauterine Devices (IUD)-This is the most popular form of LARC

Two main types available in US:
1. Medicated IUD- Levonorgesterel (a progestin) that is FDA approved for either 3 or 5 years of use
How it works:

- Thickens cervical mucus to inhibit movement of sperm.
- Inhibits survival of sperm that enter the uterus.

2. Copper containing IUD- Effective for up to 12 years (FDA approved for 10 years)
How it works:

- Causes a sterile inflammatory reaction in the uterus that effectively kills sperm.

Method	Pros	Cons
Progestin IUD (Liletta®, Mirena®, Skyla®) Perfect use: 0.2% Typical use: 0.2% Cost: $500-$800+ without insurance	-Lasts 3 to 7 year depending on which IUD -No daily pill -May improve period cramps and bleeding -Can be used while breastfeeding -Can become pregnant after removal	-May cause lighter periods, spotting, or no period at all -Uterus can be injured during placement (rare) -Does not protect against HIV or other STIs

Method	Pros	Cons
Copper IUD (ParaGard®) Perfect use: 0.6% Typical use: 0.8% Cost: $500-$800+ without insurance	-Can last up to 12 years -No daily pill -Can be used while breastfeeding -Can become pregnant after removal	-May cause more cramps and heavier periods -May cause spotting between periods -Uterus can be injured during placement (rare) -Does not protect against HIV or other STIs

(2) Surgical methods of birth control

Tubal Ligation (perfect use 0.5%/typical use 0.5%) -*Permanent* form of birth control only performed when a woman has finished childbearing.

It involves interrupting the fallopian tubes with bands, clips, cautery, or removal of part or all of the tubes. Each method has its advantages and disadvantages, as well as different failure rates.

Vasectomy (perfect use 0.10%/typical use 0.15%) -A minor surgical procedure in males where the vas deferens are cut and tied to prevent sperm from entering the urethra, thereby preventing fertilization from occurring.

(3) Hormonal Methods

These forms of births control all act in a similar manner. They either combine the use of estrogen and progestin or are progestin only methods that prevent ovulation from occurring.

- Injectables
- Combined Oral Contraceptives
- Progestin only pills
- Contraceptive patch
- Vaginal ring

Injectable Contraceptive

- Depo Provera: A progestin only medication given in office as an intramuscular injection. It is administered every 12 weeks or four times a year.

How it works:

- Suppresses ovulation, thickens cervical mucus and thins the endometrium.

Method	Pros	Cons
The Shot (Depo-Provera®) Perfect use: 0.2% Typical use: 6% Cost: $250 for 1st injection, $150 for follow up injections (without insurance)	-Effective for 12 weeks -Decreases periods -Helps prevent uterine cancer -No daily pill -Can be used while breastfeeding	-May cause spotting, weight gain, depression, hair/skin changes, change in sex drive -May cause delay in getting pregnant after cessation -Side effects may last up to 6 months after cessation -Does not protect against HIV or other STIs

Combined Oral Contraceptive Pills (COCPs)

This method remains one of the top choices for contraceptives among women. There are various formulations of COCs. Most contain one form of estrogen and a progestin component. These pills prevent ovulation from occurring.

Method	Pros	Cons
The Pill Perfect use: 0.3% Typical use: 9% Cost: $20-50 per month without insurance	-Regular and less painful periods -Can improve PMS symptoms -Can improve acne -Helps prevents ovarian cancer [-Able to get pregnant right after stopping pills	-Side effects of nausea, weight gain, headaches, change in sex drive—some of this can be relieved by switching to a different brand -May cause spotting -Does not protect against HIV or other STIs

Transdermal Patch-This is similar to COCPs. It is placed weekly and used three weeks per month.

Method	Pros	Cons
The Patch (Ortho Evra®) Perfect use: 1% Typical use: 9% Cost: $30-35 per month	-Regular and less painful periods -No daily pill -Able to get pregnant right after stopping	-Irritation of skin under patch -May cause spotting the first 1-2 months -Does not protect against HIV or other STIs

Hormonal Vaginal Ring-This is a small and flexible ring that must remain in place continuously for three weeks, followed by a one-week ring-free interval.

Method	Pros	Cons
The Ring (NuvaRing®) Perfect use: 1% Typical use: 9% Cost: $80 per month (no insurance)	-One size fits all -No spermicide needed -Regular and less painful periods -No daily pill -Able to get pregnant right after stopping the ring	-Can increase vaginal discharge -May cause spotting first 1-2 months of use -Does not protect against HIV or STIs

Progestin only pill

Often used post-partum while a woman is breastfeeding in order to avoid potential estrogen effects on milk production. Also used in women who cannot tolerate estrogen or with medical conditions where estrogen use can be dangerous (i.e history of blood clots).

Method	Pros	Cons
Progestin-Only Pills Perfect use: 0.5% Typical use: 5% Cost: $15-50 per month (no insurance)	-Can be used while breastfeeding -Able to get pregnant right after stopping the pills	-Often causes spotting -May cause depression, hair or skin changes, change in sex drive -Does not protect against HIV or other STIs

(4) Emergency Contraception

- Reduces the risk of pregnancy by 89% if started within 72 hours after unprotected sex
- Available over the counter to women age 15 and older

Ulipristal acetate (Ella)- This is the most effective emergency contraceptive pill. It delays ovulation for at least 5 days.
Plan B pill (levonorgestrel)- another form of emergency contraception that is effective if taken within 72 hours of unprotected sex.

**Insertion of copper IUD*-most effective form of emergency contraception in general. Can be inserted up to 120 hours after unprotected sex.

Method	Pros	Cons
Emergency Contraception Pills (Plan B One-Step® Ella®) Cost: $40-50	-Can be used while breastfeeding -Available at pharmacies, health centers, healthcare providers	-May cause stomach upset or nausea -Next period may come early or late -May cause spotting -Does not protect against HIV or other STIs -Ella® requires a prescription -May be expensive

(5) Barrier Methods

There are several barrier methods including the female condom, diaphragms, cervical cap, withdrawal method, and spermicides. However, the most common barrier method by far is the male condom.

Method	Pros	Cons
Male/External condom Perfect use: 2% Typical use: 18% Cost: $2-6 per package of 3 condoms	-Can buy at many stores -Can put on as part of foreplay -Helps prevent early ejaculation -Can be used for oral, vaginal or anal sex -Protects against HIV and other STIs -Can be used while breastfeeding	-Can decrease sensation -Can cause loss of erection -Can break or slip off

(6) Timing Methods

These include the calendar method, cervical mucous ovulation detection, and basal body temperature. All of these methods are based on identifying the fertility period in a woman's cycle by either using a calendar or by typical symptoms within in a woman's cycle.

Method	Pros	Cons
Fertility Awareness (Calendar method) Perfect use: 9% Typical use: 25%	-Costs little -Can be used while breastfeeding -Can help with avoiding or trying to become pregnant	-Must abstain from sex or use another method of contraception during fertile days -Not very effective if periods are irregular -Many things to remember with this method -Does not protect against HIV or STIs