

What Pediatricians Need to Know about Prescribing Oral Contraceptives

(it's easier than you may think!)

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Session Goals

1. Understand how OCPs work to treat common adolescent conditions
2. Identify 4 categories of OCPs and select the best formulation for the condition being treated
3. Prescribe OCPs with greater confidence and intention
4. Confidently discuss OCP use and safety with patients and their parents

Barriers to Teens receiving OCP's

- Concerns about Confidentiality
- Cost
- Misperceptions and Misinformation
- Physician concerns or comfort with prescribing

Hormonal Treatment:

When Would a Pediatrician Prescribe OCPS?

- Birth control
- Painful Periods
- Heavy Periods
- Acne
- +/- Menstrual Headaches/Migraines without aura
- +/- Physical or Developmental Disabilities
- +/- PMS / PMDD / Menstrual Magnification of Mental Health Issues

How Do They Work?

Estrogen

- Inhibits FSH (no cysts)
- Thickens/stabilizes the endometrium (fertilizer)

Progestins

- Prevents LH surge (no ovulation)
- Thins Endometrium (lawn mower)
- Thickens cervical mucus
- Decreases tubal motility

Hormonal Side Effects

Estrogen

Nausea, breast tenderness,
headache, fluid retention,
melasma

↑ SHBG, ↓ Testosterone

↑ HDL, ↓ LDL, ↑

Triglycerides

Progestins

Increased appetite, fatigue,
headache, fluid retention

19-nor T derivatives = androgenic

(impairs lipid profile, possible effect on carb metabolism)

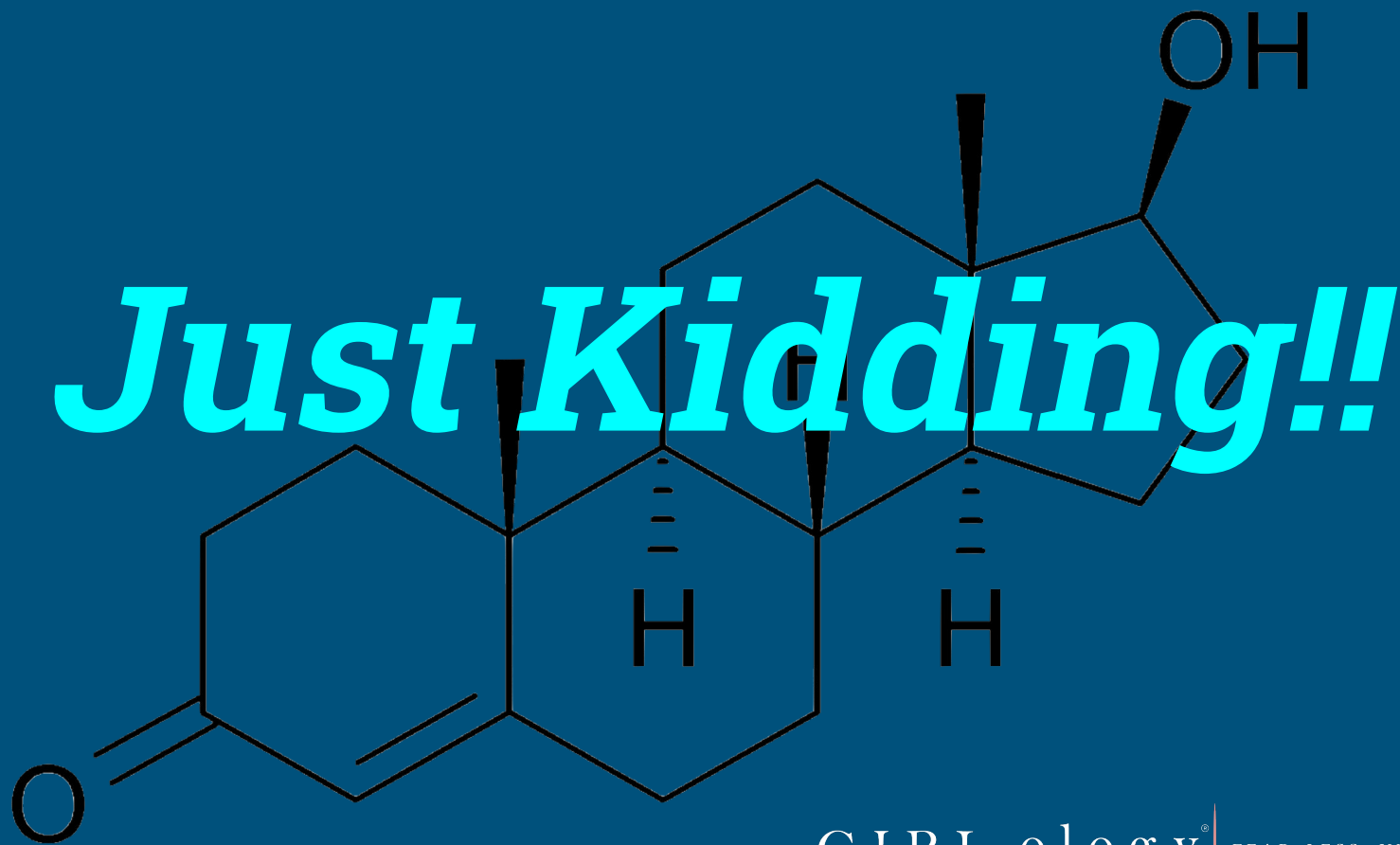
Let's get a little Nerdy - it will help!

The original OCPs were a failure

Each generation created some improvements but also some side effects or loss of effectiveness

ESTROGENS - all same, 20-35 mcg = LOW dose

The PROGESTINS are the THING



1st - 3rd Gen Progestins are 19-Nor-Testosterone Derivatives

	Progestin	Progestin & Androgen Activity	Example
1st Generation	Norethindrone Norethindrone acetate Ethinodiol diacetate	Moderate progestin Moderate androgenicity	LoEstrin 1.5/30
2nd Generation	Norgestrel Levonorgestrel	High progestin High androgenicity	LoOvral (30/0.3 nor) Nordette (30/1.5 levo)
3rd Generation	Desogestrel Norgestimate	High progestin LOW androgenicity	Sprintec
4th Generation	Drospirenone (= Spironolactone derived) =25 mg equivalent **Clinically relevant dose = 50-200 mg daily	Moderate progestin ZERO androgenicity (anti-androgen)	Yasmin (21/7) Yaz (24/4)

Dosing Patterns

Traditional 21/7

Newer regimens - shorter placebo interval 24/4

Increased efficacy, lower failure rate b/c of missed 1st pil;

Continuous dosing 84/7 or 365

BTB common - E+P balance takes a while

Pt control

YES, it's completely safe. "Periods" on OCPS are "withdrawal bleeds" and not necessary as long as the uterus has progesterone protecting it.

Contraindications

Known or suspected pregnancy

Less than 21 days post partum

Undiagnosed abnormal genital bleeding (r/o STI, cancer, or anatomic lesions)

Migraines with true Aura (i.e. focal neurologic symptoms)

Known thrombophilia / high risk for DVT

Major surgery with prolonged immobilization

Vascular Disease or Elevated BP

Liver tumors or Severe Cirrhosis

Solid organ transplant

Lupus with + APA

Questions for all adolescents

Menarche

Describe pattern of cycles

Describe duration and flow

Menstrual cramps? Other symptoms?

First Day of last menstrual cycle

Normal Or Not?

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What's a Normal Period?

WHAT IS A NORMAL AGE TO START?

9-16

Average is 12.5 yrs. Periods start 1-3 years after breasts "bud" and about 6 months after the fastest growth spurt. Most girls get their first period when their breasts are Tanner 3+ and pubic hair is Tanner 4+.

HOW OFTEN?

21-45 days

After the first three periods, cycle length should be 21-45 days. Periods should happen no more often than every 21 days and no farther apart than 45 days. Any cycle lengths > 90 days are not normal and need medical attention.

WHAT'S A CYCLE LENGTH?

day 1 to day 1

Your cycle length is the number of days counting from the 1st day of one period, to the 1st day of the next period. It is an important measure of your menstrual health. In adolescence, the cycle length is less consistent than in adulthood, but should still be within the 21-45 day range mentioned above.

HOW MUCH?

3-6 products/day

It's hard to measure how much blood is lost with a period, but most girls use between 3 and 6 pads or tampons per day. If you are filling more than 6 maxi products per day, you should check with your doctor. If you ever soak more than 1 maxi per hour for several hours, you should contact your doctor.

HOW LONG?

≤7 days

A normal period lasts anywhere from 3 to 7 days. If your period is lasting more than 7 days every cycle, please check in with your doctor.

WHAT COLOR?



The color of your period flow doesn't always look like blood you are used to seeing. It can range from pink to brown to almost black and everything in between. The color changes depending on how long the blood has been in your uterus and vagina.

HOW PAINFUL?

relief with   

Menstrual cramps are very common, especially in the first 1-2 days of your period. Most cramps will get better with moderate exercise, healthy diet, heat, or over the counter pain medicines taken as directed. If your pain is keeping you from doing your normal activities, please talk with your doctor.

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Questions for all adolescents

One Key Question:

Would you like to become pregnant in the next year?

But what about...?

Future Fertility - Protective

Cancer - No increased lifetime risk of breast cancer. At 10 years post pill, no increased breast cancer in current/past users, women with family history, those who started OCPs at young age. 1 case per 50K per year if under 35.

Even with strong fam hx (>2 1st degree relatives) - increased baseline risk but OCs to NOT increase that risk further.

BRCA1/2 - no increase in breast ca dx. But REDUCES ovarian cancer risk.

LIFETIME: SIGNIFICANT reduction in risk for ovarian, endometrial and colon

Depression/Suicide - no contraindication. No increase in symptoms in most studies.

Dutch study - depression dx in 1.7/100 (no contraception) vs. 2.2/100 on any method

Clots - RARE. Risk of VTE ~1-5/10K (baseline) vs ~3-10/10K on OCPs vs 30/10K in pregnancy

Weight Gain - Nope

Drug Interactions

Antibiotics

Broad spectrum abx DO NOT LOWER hormone levels
ONLY exception: Rifampin & Griseofulvin

Anti Seizure Meds (liver enzyme inducing)

Carbamazepine, Felbamate, Phenobarb, Dilantin

Lamictal does not affect OCPs, but **OCPs lower Lamictal levels**

Some HIV Meds

St. John's wort

OCPs can INCREASE levels of Cyclosporine, Prednisolone, Theophylline

OCPs can DECREASE levels of Topiramate

Pick a Pill

Case Studies

14 year old presents with sore throat (she was brought in by her older sister), but at the end of the visit, asks you how can she get on birth control?

WILL YOU PICK A PILL?

Case Studies

13 year old comes in with mom and dad for heavy periods occurring about every 5-6 weeks. She is 5'3" weight 180 lbs with BMI of 31.9. Menarche was 1 year ago.

PICK A PILL...

Case Studies

A college student comes in to talk to you about her trip abroad this summer. She has heard that she can stop her period with OCP's. She wants to know your thoughts.

PICK A PILL...

Case Studies

Mom brings in her Middle School kid who is getting teased about terrible acne. They are using BP washes and Adapalene gels prescribed by you 4 months ago, but mom thinks they are not using them as directed because it isn't getting better.

Will you recommend a PILL?

Case Studies

Sophomore in HS recently started having cramps with her periods and has been missing days at school. She has never had problems in the past and Mom thinks she is just faking it to get out of classwork. Menarche was 3 years ago.

PICK A PILL...

Case Studies

A patient is off at school and has become sexually active. She arranges a telehealth visit. She is requesting OCP's.

PICK A PILL...

Case Studies

14 year old with menarche at 11 with irregular cycles. She hasn't had a period in 4 months.

BEFORE YOU PICK A PILL...

PICK A PILL...

How to Reduce Phone Calls!

Counseling

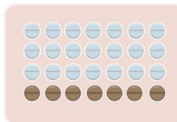
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Take home info

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Using Birth Control Pills

28-DAY PACK



Take your pill at the same time every day

- Put your pills somewhere that makes you see them around the same time EVERY SINGLE DAY (like with your tooth brush, or taped to the mirror, or with your breakfast stuff)
- Set an alarm on your phone as a back up and label the alarm "PILL?" When the back up alarm goes off, you should have already taken your pill.

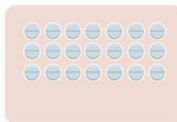
Take your pills in order

- Start at the upper left corner and follow the arrows, or go row by row. Each row is a week.

The placebo pills will bring on your period

- When you get to the last week, the pills will be a different color. These are PLACEBO pills, meaning they do not have any hormones. When the hormones stop, your bleeding can begin. Any amount of bleeding in that week is considered your "period."

21-DAY PACK



If your pack has only 3 weeks / 21 days of pills

- You will skip taking pills for the 4th week (or as long as your doctor told you). That is the week you will get your period because being on no hormones brings on your period. Start a new pack immediately after the "off" week. Do not go more than 7 days without taking a pill.

If you miss a pill

- Take it as soon as you remember, then get back on track the next day. If you've already missed a full day, you can take two pills at one time to catch up.
- If you miss pills, your birth control will not work to prevent pregnancy, and you will probably have bleeding when you don't expect it.

The most important pill is always the first pill in a new pack. Don't be late!

Side effects are common but usually disappear over a few months

- The most common side effects are breakthrough bleeding (bleeding when you aren't supposed to be), nausea, headaches, breast tenderness. Weight gain is not a usual side effect, but teens gain weight as part of normal growth.
- Serious side effects include leg swelling and pain, shortness of breath, severe headache, and chest pain. If you have any of these symptoms, contact your doctor right away.

There are GOOD side effects

- Birth control pills will make your periods very predictable, lighter, and less painful. They will improve acne for most people. They reduce the risk of anemia from heavy periods. They also PROTECT against ovarian cancer and endometrial cancer.

The pill will NOT protect against sexually transmitted infections. If you are having sex, use condoms every time & get tested regularly.

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Following Up: When

3-6 month follow up

- Confirm compliance

- [BP check (average increase: 8/6)]

- Assess satisfaction / concerns / side effects

- Another opportunity to chat about sexual health!

Annually (but *PLEASE* don't hold her OCP hostage!)

Following Up: Adjustments







Concerns / side effects

- Break through bleeding / Irregular Bleeding
 - 1st 3 months: reassure
 - Confirm correct use
 - Increase Estrogen (early BTB)
 - Increase Progestin potency (late BTB)



Following Up: Adjustments

Concerns / side effects

- Persistent cramps
- Persistent heavy bleeding
- Moody
- Headaches
- Weight gain
- Acne not improved
-  Progestin potency
-  Progestin/androgen potency
-  Change CLASS
- Depends on when
-  Progestin/androgenicity
-  Androgenicity /  Estrogen

When to Refer?

- Any contraindication
- Complex medical conditions or multiple meds (VTE, htn, complex migraine, obesity, depression, diabetes, lupus, VWD, seizure d/o)
- One switch and still not satisfied / improved
- PCOS concerns
- Endometriosis concerns
- +/- Risky Sexual Behaviors

Session Takeaways

1. Pediatricians can feel comfortable prescribing OCPs
2. OCPs are very safe and highly effective for many conditions
3. For pediatricians, basic knowledge about OCP formulations and use will optimize their efficacy and success
4. For your patients, quality counseling will optimize their efficacy and success

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