December 2, 2020

COFFEE WITH COLLEAGUES

Oral Contraceptives

Christine Pennesi, MD • Lisa Reebals, APRN

Text (513) 409-9506 • Today's Activity Code: 34099

In support of improving patient care, Cincinnati Children's Hospital Medical Center is jointly accredited by the Accreditation Council for Continuing Medical Education (ACCME), the Accreditation Council for Pharmacy Education (ACPE), and the American Nurses Credentialing Center (ANCC), to provide continuing education for the healthcare team.

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This activity was planned by and for the healthcare team, and learners will receive .75 Interprofessional Continuing Education (IPCE) credits for learning and change

If you feel this presentation was biased, please contact the cme at cme@cchmc.org

The following planning committee member/faculty has indicated commercial support relationship(s): N/A
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Coffee with Colleagues:

Menstrual Suppression & Contraception

Christine Pennesi, MD

Lisa Reebals, MSN, APRN-CNP

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Patient/Family Goals

PATIENT/FAMILY GOALS	
• Menstrual regulation • Menstrual suppression/lightening	• Symptom management (cramps, acne) • Contraception

- Start the visit by asking the patient/family what their goal is:
  - Monthly, predictable periods?
  - No periods or lighter bleeding?
  - Improved cramps?
  - Acne treatment?
  - Birth control?

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Patient History

PATIENT HISTORY

Consider obtaining contraception history (prior methods)

- Why did patient stop method?

- Ask about use of prior hormonal methods:
  - Type of method
    - Which pill(s)?
  - Length of treatment
  - Why did they discontinue?
    - Side effects
    - Compliance
    - “Failure” to relieve symptoms

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Past Medical & Family History

Does your patient have:

- Personal and/or family history of blood clots (DVT, PE) or clotting disorder?
- History of migraines with aura?
- History of high blood pressure?
- Active cancer or treated for breast cancer in the last 6 months?
- History of liver, kidney, or cardiac disease?

US MEC
US SPR
CDC

Resource: CDC US Medical Eligibility Criteria

Category 1: No restrictions

Category 2: Benefit outweighs risk

Category 3: Risk outweighs benefit

Category 4: Unacceptable health risk

Providing Contraception for Young People During a Pandemic Is Essential Health Care

Tracey A. Wilkinson, MD, MPH[1]; Melissa J. Kottke, MD, MPH, MBA[2]; Elise D. Berlan, MD, MPH[3]

» Author Affiliations | Article Information

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Review medical contraindication questions:

1. Have you recently given birth or are currently breastfeeding?
2. Have you ever been told you have high blood pressure?
3. Have you ever been told you have diabetes and have complications from it?
4. Have you ever had a stroke, blood clot in your legs or lungs, or heart attack, or been told you are prone to having blood clots?
5. Do you have a history of migraines with aura (headaches that started with warning signs or symptoms, such as flashes of light, blind spots, or tingling in your hands or face that come before the headache starts)?
6. Do you regularly take pills for seizures, tuberculosis, or HIV?
7. Do you have gallbladder disease or serious liver disease, or jaundice?
8. Have you ever been told you have rheumatic disease, such as lupus?
9. Have you ever been told you have breast cancer or an undiagnosed breast lump?

https://jamanetwork.com/journals/jamapediatrics/fullarticle/2765829

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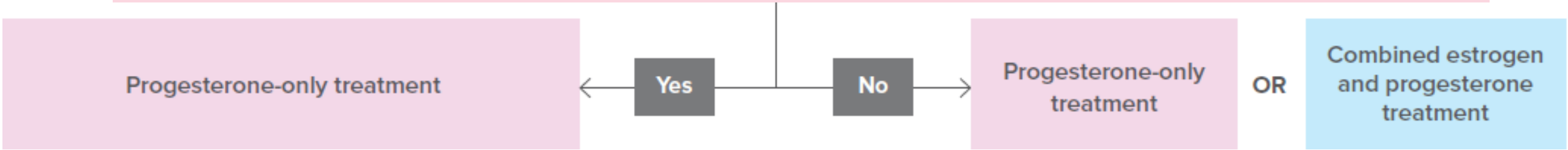

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If contra-indications to estrogen: Progesterone-Only Treatment

- Progesterone-only pills
- Depo-Provera (IM or subcutaneous shot)
- Nexplanon
- Levonorgestrel-IUD (Intrauterine device)




Resource/Images: BEDSIDER (Bedsider.org)
https://www.bedsider.org/methods

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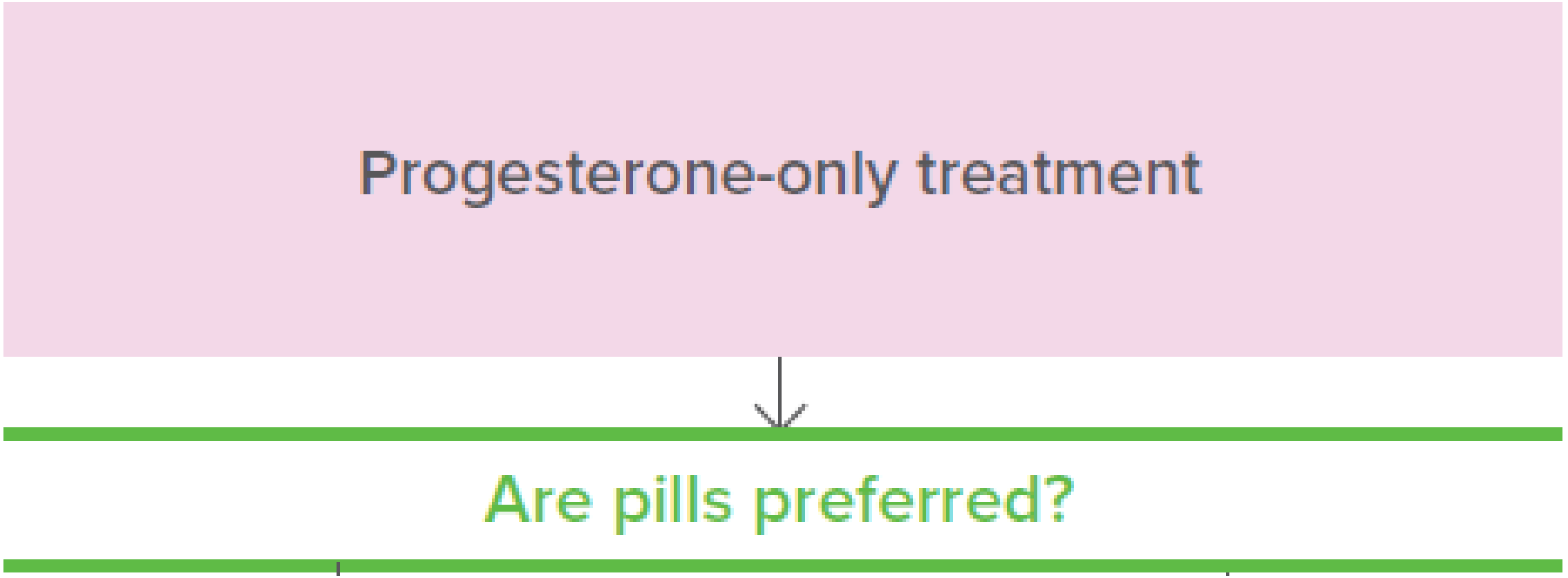
If contra-indications to estrogen: *Progesterone-Only Treatment*



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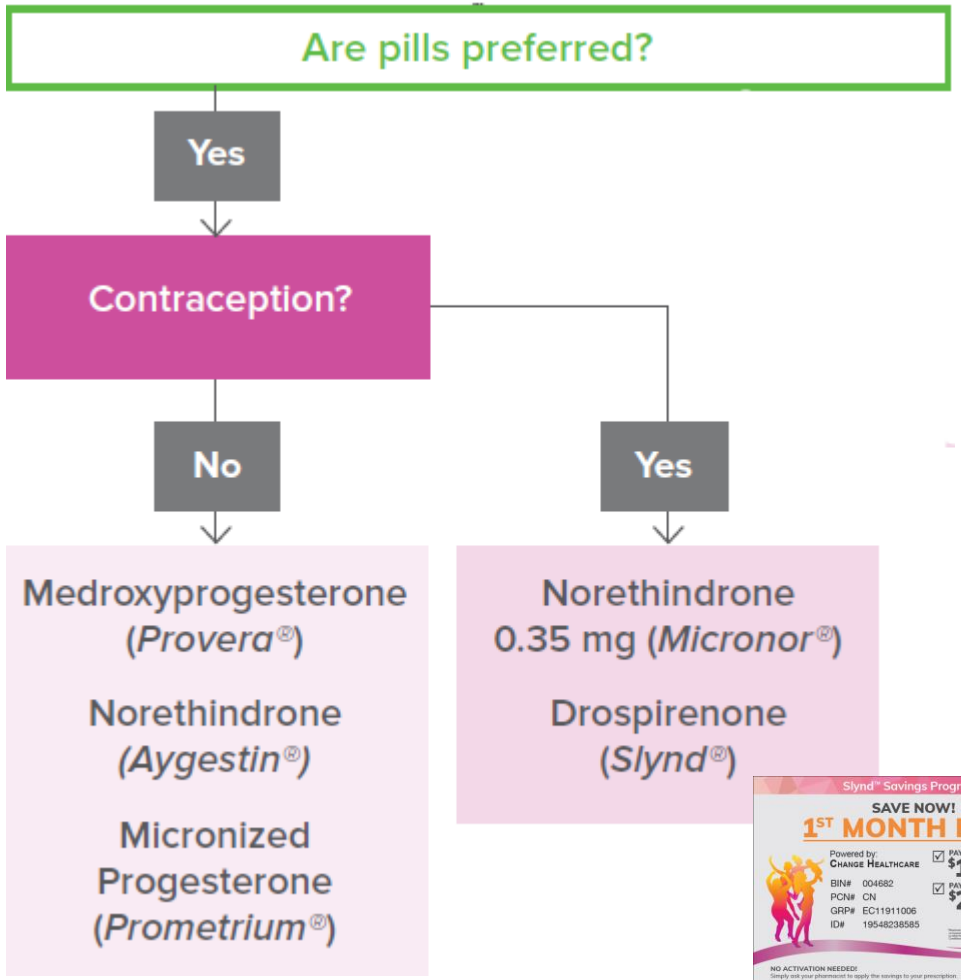

- Does the patient need contraception?
  - Yes → prescribe Micronor or Slynd ($$$)
  - No → prescribe any progesterone only pill
    - Micronor, Slynd, Provera, Aygestin, or Prometrium

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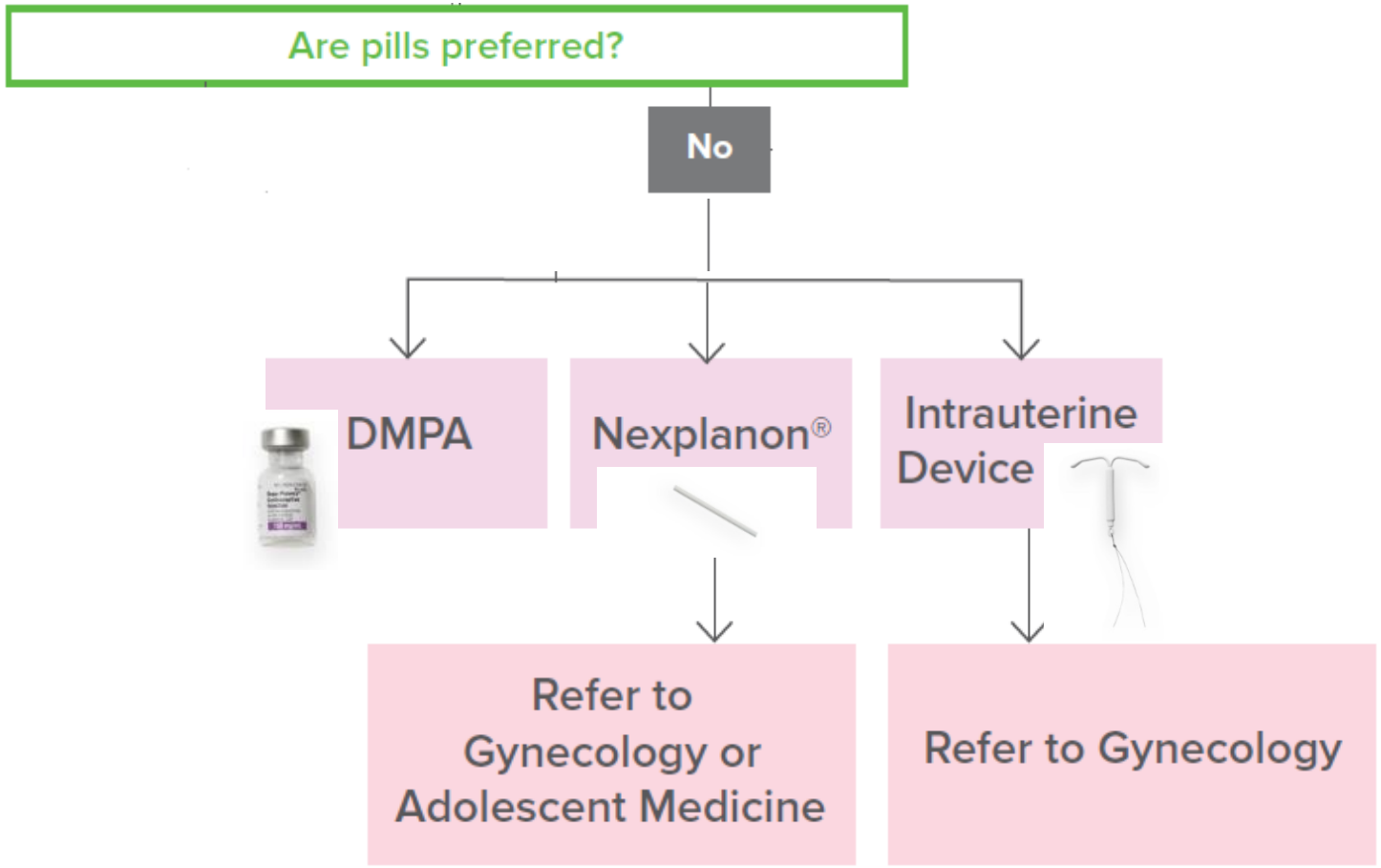
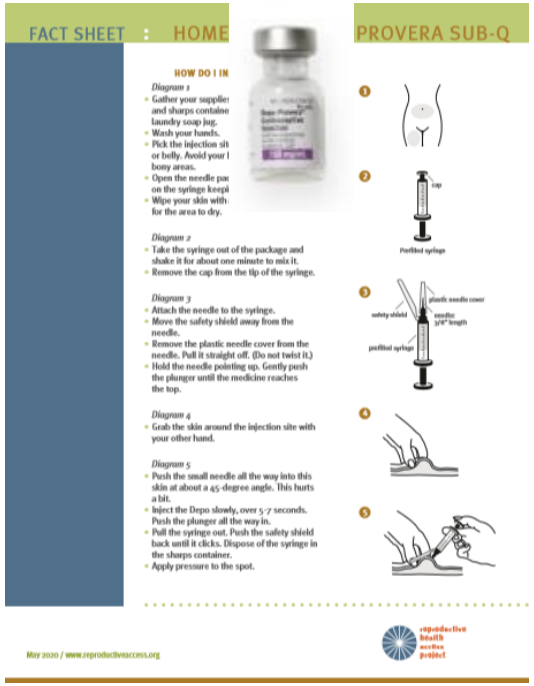
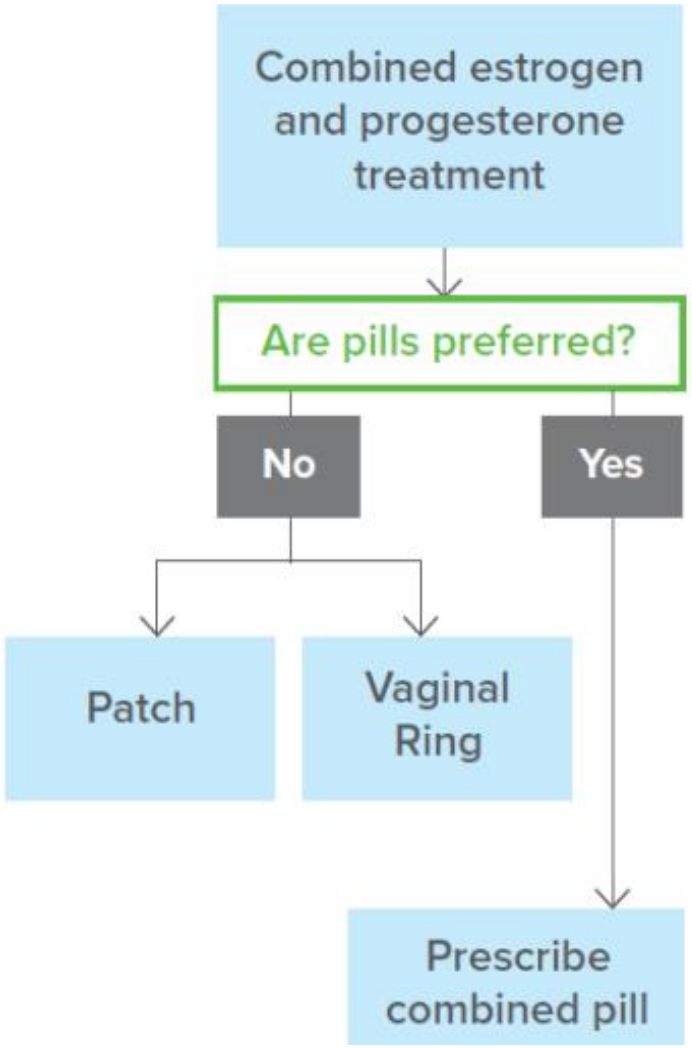
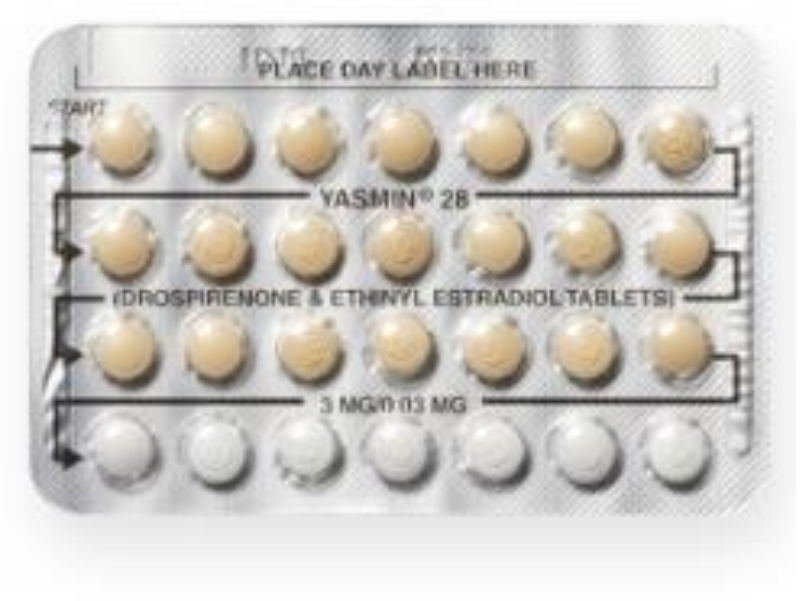




https://www.reproductiveaccess.org/resource/depo-subq-user-guide/

No Estrogen Contra-indications:
Combined Estrogen & Progesterone Treatment





Resource/Images: BEDSIDER (Bedsider.org)
https://www.bedsider.org/methods

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Choosing a Pill

- Where do I start?
  - All pills contain ethinyl estradiol (EE), a synthetic estrogen
    - Dose of EE changes (10 → 20 → 30 → 35 mcg)
  - The combined “birth control” pills all contain DIFFERENT forms progesterone
  - Recommend MONOPHASIC pills
  - What has the patient had in the past?
    - Did they like prior pill? If not, why?
    - Other considerations (Side effects, cost, etc.)

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Choosing a Pill

HORMONAL OPTIONS FOR MENSTRUAL MANAGEMENT			
Generation		**Brand name pills**	**Progestin characteristics**
1st	Norethindrone	Lo Loestrin® (10 mcg EE) Minastrin (20 mcg EE) Loestrin Fe® 1/20 (20 mcg EE) Femcon Fe (35 mcg EE) Loestrin® (30 mcg EE)	Pro-gestational (edema, bloating, irritability, anxiety/ depression), unscheduled bleeding
	Medroxyprogesterone	Provera® (no EE)	
2nd	Levonorgestrel	Allesse/Aviane® (20 mcg EE) Seasonale® (30 mcg EE) Mirena®, Kyleena® (intrauterine device; no EE)	Improved bleeding More androgen-related side effects (hyperlipidemia, oily skin, acne, facial hair growth)
	Norgestrel	Lo Ovral® (30 mcg EE)	
3rd	Norgestimate	Orthocyclen® (35 mcg EE) Sprintec® (35 mcg EE) Xulane® (patch; 35 mcg EE)	More potent progestin, less androgen side effects
	Desogestrel	Kariva® (20 mcg EE) Mircette® (placebo pills contain EE) Ortho-Cept® (30 mcg EE) Desogen® (30 mcg EE)	
	Etonorgestrel	Nuvaring® (vaginal ring; 15 mcg EE/day) Nexplanon® (arm implant; no EE)	
4th	Drospirenone	Yaz® (20 mcg EE) Yasmin® (30 mcg EE)	Has anti-mineralocorticoid AND anti-androgenic properties Concern for VTE risk Treatment for premenstrual dysphoric disorder (PMDD) and acne

Why are you starting the treatment?

INDICATIONS/SYMPTOMS (Why are you starting the treatment?)				
Acne/PCOS	**Menstrual headaches**	**Cyclic mood changes/ depression***	**Developmental disorders**	**Irregular bleeding within 1 year of menarche**
Drospirenone • Yaz® (20 mcg Ethinyl Estradiol (EE)) • Yasmin® (30 mcg EE) • Slynd® (does not contain EE)	Consider menstrual suppression Consider progesterone only pills	Yaz®/Yasmin® Avoid Depo-Provera® Consider menstrual suppression (continuous dosing skipping placebo) *SSRI first-line for premenstrual dysphoric disorder (PMDD)	Consider chewable OCP (FemCon®) Consider patch (Xulane®) Consider consultation for discussion about long-acting reversible contraception (LARC) options for long-term management	Consider patient's height and parents' height Consider the progesterone only pill

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Treatment for Acne

Acne/PCOS
Drospirenone • Yaz® (20 mcg Ethinyl Estradiol (EE)) • Yasmin® (30 mcg EE) • Slynd® (does not contain EE)

- Acne is a side effect of androgens
- Estrogen (ethinyl estradiol) raises sex hormone binding globulin (SHBG) which lowers “free” androgen levels
- Drospirenone (Slynd) has anti-androgen effects

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Treatment for Menstrual Headaches

Menstrual headaches
Consider menstrual suppression Consider progesterone only pills

- Can occur ~2 days prior or within 3 days of starting menses
- Onset and severity are related to drop in **estrogen**/progesterone hormone levels
- Consider extended cycling/menstrual suppression

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Treatment for Cyclic Mood Changes

Cyclic mood changes/ depression*
Yaz®/Yasmin®
Avoid Depo-Provera®
Consider menstrual suppression (continuous dosing skipping placebo)
*SSRI first-line for premenstrual dysphoric disorder (PMDD)

- PMDD: 1st line treatment = SSRI
- Menstrual suppression can provide stable daily hormone dose and reduce period frequency
- Mood changes related to progestin, individual

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Menstrual Suppression in Young Individuals with Special Needs

Developmental disorders
Consider chewable OCP (FemCon®)
Consider patch (Xulane®)
Consider consultation for discussion about long-acting reversible contraception (LARC) options for long-term management

- Consider medication route
- Sensory issues
- Option for sedation/anesthesia

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Treatment for Irregular Bleeding after Menarche

Irregular bleeding within 1 year of menarche

Consider patient's height and parents' height

Consider the progesterone only pill

- Immature HPO axis
- First line: Progesterone only!
  - Estrogen plays role in growth plate closure (epiphyseal fusion)

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Side Effects: What to do?

SIDE EFFECTS (What to do?)				
New Acne	**Headaches**	**Nausea**	**Mood changes**	**Breakthrough bleeding**
Switch to drospirenone containing pill If no estrogen contraindication, increase estrogen content	Decrease estrogen content or switch to progesterone only If associated with aura, switch to progesterone only pill If during placebo week, consider continuous dosing or Mircette® (EE dose during placebo week)	Consider change in time of dose Switch to lower estrogen content	Consider a different progesterone (avoid Depo-Provera®/medroxy-provera/norethindrone)	Increase dose of progesterone only pill (POP) Increase estrogen content (10→ 20→ 30→ 35 mcg) Ask about compliance

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Acne: What to do?

New Acne
Switch to drospirenone containing pill If no estrogen contraindication, increase estrogen content

- Switch progestin to drospirenone
  - Anti-androgen effects
- Increase EE level
  - Decreases free “T” (androgen) level

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Headaches: What to do?

Headaches
Decrease estrogen content or switch to progesterone only If associated with aura, switch to progesterone only pill If during placebo week, consider continuous dosing or Mircette® (EE dose during placebo week)

- Estrogen can cause headaches
  - Consider decreasing EE content or eliminating EE
- If headache present during placebo
  - Consider Mircette (10mcg EE during placebo)
- If aura, switch to progesterone-only method
  - Risk of stroke

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Nausea: What to do?

Nausea
Consider change in time of dose Switch to lower estrogen content

- Often resolves with time
- Consider changing dose time
  - AM → Bedtime
  - Bedtime → AM
- Estrogen can cause nausea
  - Consider lowering EE content

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Mood Changes: What to do?

Mood changes

Consider a different progesterone (avoid Depo-Provera®/medroxy-provera/norethindrone)

- Mood changes? Think progestin!
- Patients tolerate different progestins differently
- Consider switching progestin
- Avoid high-dose/irreversible progestin (Depo-Provera)
  - Consider PO Provera “test”

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Breakthrough Bleeding (BTB): What to do?

Breakthrough bleeding

Increase dose of progesterone only pill (POP)

Increase estrogen content
(10 → 20 → 30 → 35 mcg)

Ask about compliance

- If sexually active, rule out sexually transmitted infection (gonorrhea, chlamydia, trichomonas) and urine pregnancy test
- BTB is a common side effect during first few months on a new method
  - If this does not resolve:
    - Increasing EE content can help stabilize lining
    - Increasing progestin dose can suppress ovulation/hormonal fluctuations
- Missing/late doses (“hormone drops”) can result in BTB
  - Consistency is KEY!

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CCHMC Gynecology Resources

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Options for Medical Management of Periods

	Method	Administration	Expected bleeding pattern	Advantages	Disadvantages	Contraceptive failure rate
Combined estrogen and progesterone medications	Pills	Daily	• Regular, predictable cycles	• Many options for dosing/ formulations • Easily reversible	• Temporary/ mild: Nausea, upset stomach, irregular bleeding, breast pain • Serious: Increased blood pressure • Rare/ severe: Blood clot • Not recommended for patients with migraine headaches with aura, high blood pressure, personal or family history of blood clots, or limited mobility	6-9 pregnancies per 100 women in a year*
	Patch	Weekly		• Easily reversible		
	Vaginal ring	Monthly		• Easily reversible		
Progesterone only medications	Pills	Daily	• Limited bleeding at higher doses	• Many options for dosing • Easily reversible	• Potential for increased acne, mood changes, and weight gain • Requires consistent timing of administration	
	Injection	Every 3 months	• Irregular bleeding • 80% rate of no bleeding with long-term use	• Less frequent administration	• Potential for increased acne, mood changes, and weight gain • Reversible bone loss • Not recommended for patients with low bone strength	
	Implant	Every 3 years	• Lighter bleeding • 20% rate of no bleeding with long term use	• Ease of continuation	• Requires a procedure for placement (office) • Highest rates of persistent, unpredictable bleeding	Less than 1 pregnancy per 100 women in a year
	Intrauterine device	Every 5 years	• Lighter bleeding • 60% rate of no bleeding with long term use	• Ease of continuation • Limited systemic hormone circulation	• Requires a pelvic exam and procedure for placement (office or operating room) • Irregular bleeding and cramping for several weeks to months after placement • Not recommended for patients with an abnormal uterine shape or small uterus	

*Not all progesterone only pills are approved as contraception.
**In our clinic, surgical methods of management of menses typically are not considered.

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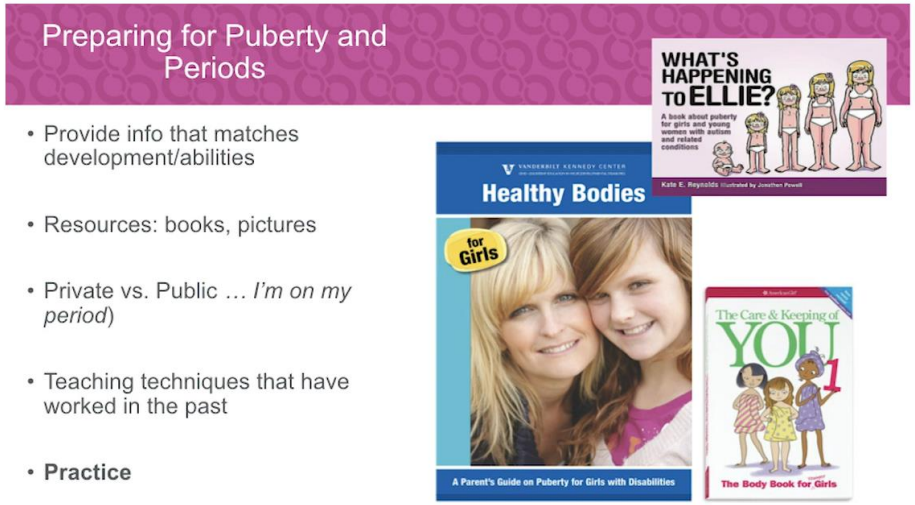
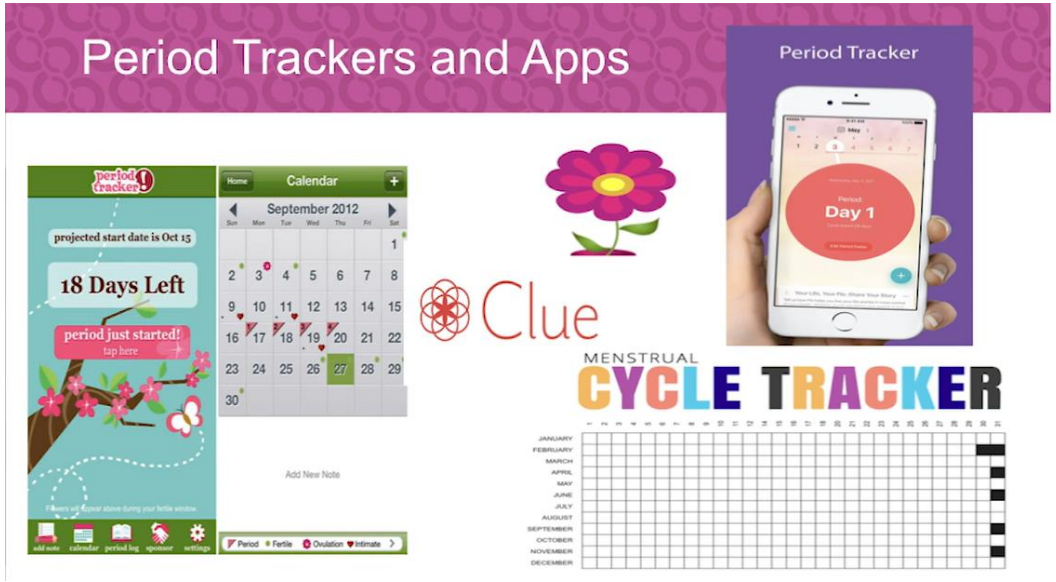
CCHMC Gynecology Resources

- https://videolibrary.globalcastmd.com/gyno-gab-ii-defeating-period-5
- https://videolibrary.globalcastmd.com/gyno-gab-ii-defeating-period-6





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Contraception during a Pandemic

reproductive health access project

This Issue | Views 29,860 | Citations 3 | Altmetric 114 | Comments

Viewpoint

FREE

May 7, 2020

Providing Contraception for Young People During a Pandemic Is Essential Health Care

Tracey A. Wilkinson, MD, MPH[1]; Melissa J. Kottke, MD, MPH, MBA[2]; Elise D. Berlan, MD, MPH[3]

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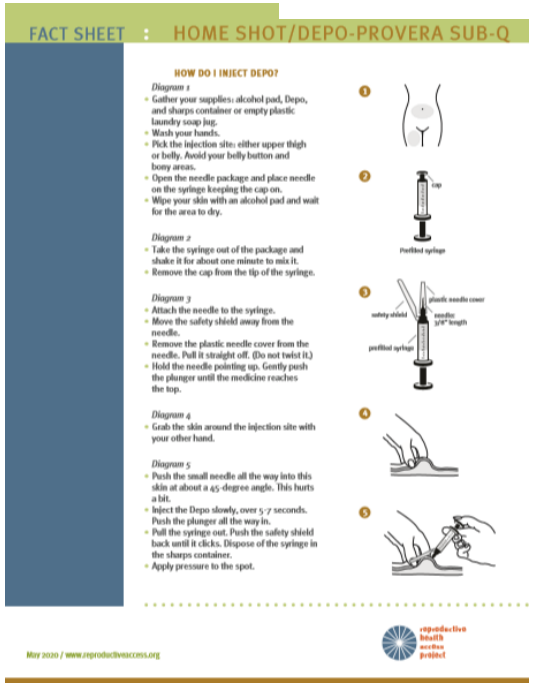
COVID-19 Resource Center

https://jamanetwork.com/journals/jamapediatrics/fullarticle/2765829


FACT SHEET : HOME SHOT/DEPO-PROVERA SUB-Q

HOW DO I INJECT DEPO?

https://www.reproductiveaccess.org/resource/depo-subq-user-guide/

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RESOURCES

- Center for Young Women's Health — youngwomenshealth.org
- CDC US Medical Eligibility Criteria (US MEC) — www.cdc.gov/reproductivehealth/contraception/mmwr/mec/summary.html
- Bedsider — bedsider.org
- Menstrual apps (for patients) — SpotOn, Flo, Clue, Period Tracker, MyCalendar - Period Tracker

Center for Young Women's Health

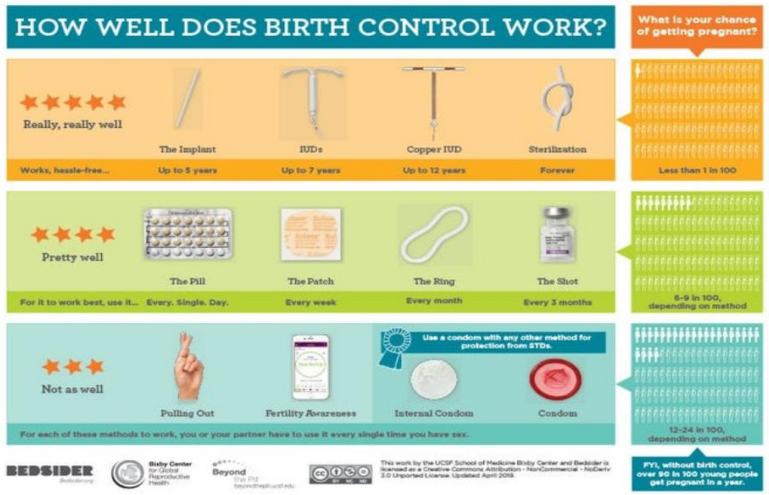
General Health | Sexual Health | Gynecology | Medical Conditions

Birth Control Pills: Frequently Asked Questions

US MEC
US SPR

CDC

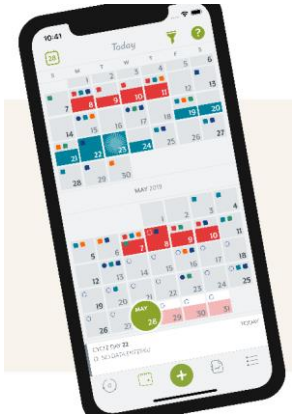
https://providers.bedsider.org/



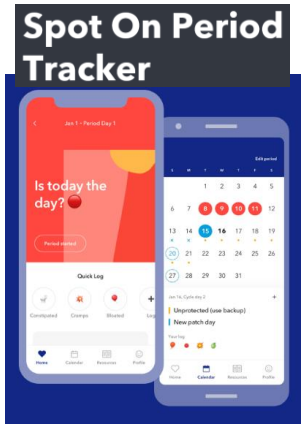
GoodRx

BEDSIDER

Clue



Spot On Period Tracker



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CME: Poll Questions

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Questions?

If you have clinical questions about prescribing contraceptives for menstrual suppression, email gynecology@cchmc.org.

For urgent issues, or to speak with the specialist on call 24/7, call the Physician Priority Link at 1-888-636-7997.


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December 2, 2020

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