Pearls in birth control management

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Disclosure

None!

True or False: Hormonal birth control should be started <7 days from the start of a period

What can be used for emergency contraception?

A. Levonorgestrel PO in one dose
B. Medroxyprogesterone IM
C. Ulipristal PO in one dose
D. Levonorgestrel intrauterine device
E. Copper intrauterine device
F. All of the above

What's your experience with subcutaneous, user-administered Depo?

A. Never heard of it

B. Heard of it, but don't know enough to prescribe

C. Heard of it and know enough to prescribe but there are other barriers

D. I have a few patients utilizing it

E. I'm an expert!

Objectives

By the end of this lecture, you will be able to

- Use the Quick Start algorithm when initiating contraception or switching to a new method.
- Counsel and prescribe emergency contraception
- Counsel patients and offer management options for abnormal uterine bleeding while using hormonal birth control
- Discuss subcutaneous depo-provera and user-administration
- Discuss recently approved contraception

Quick Start Contraception

Case 1

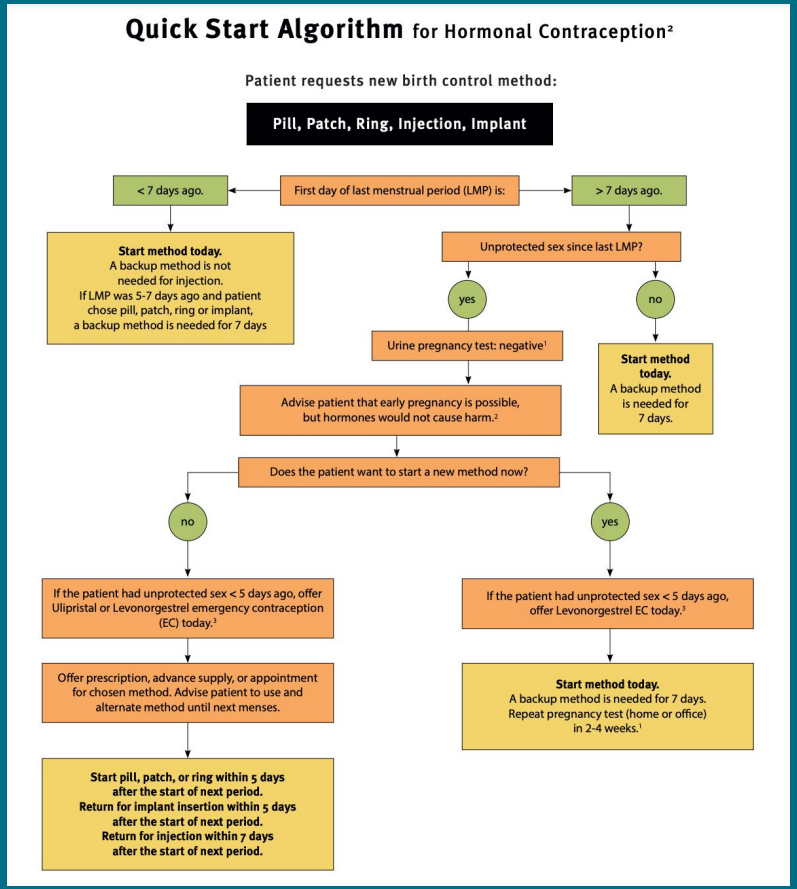
Emilia C (she/her, DFAB) is a 32yo G2P2 who presents for contraception. She used OCPs for many years, but stopped a few months ago due to an insurance lapse. Today, she is interested in the etonogestrel implant and is willing to get it today.

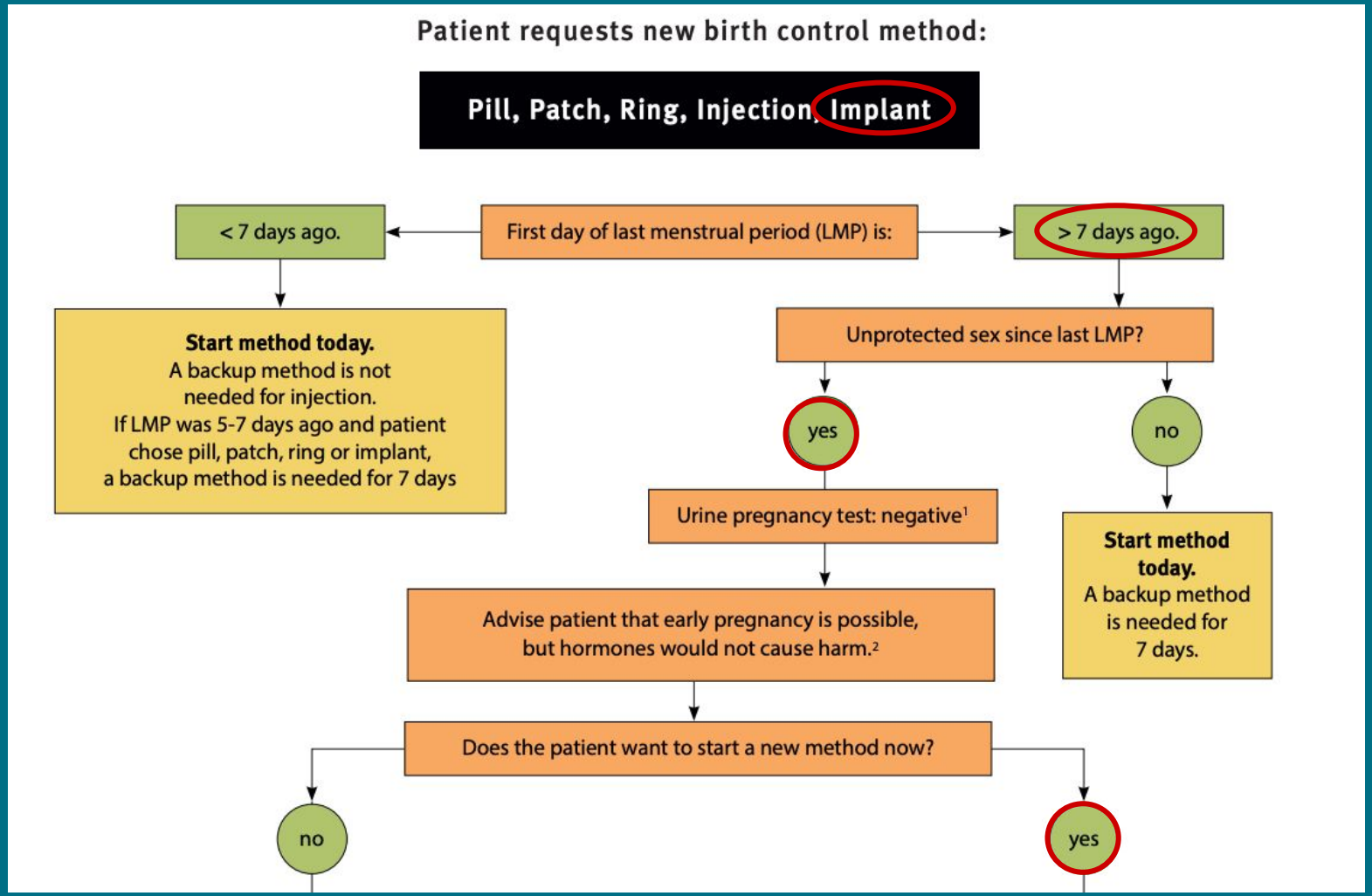
LMP: 10 days ago
Last unprotected sex: 4 days ago
No tobacco use or other contraindications for contraception

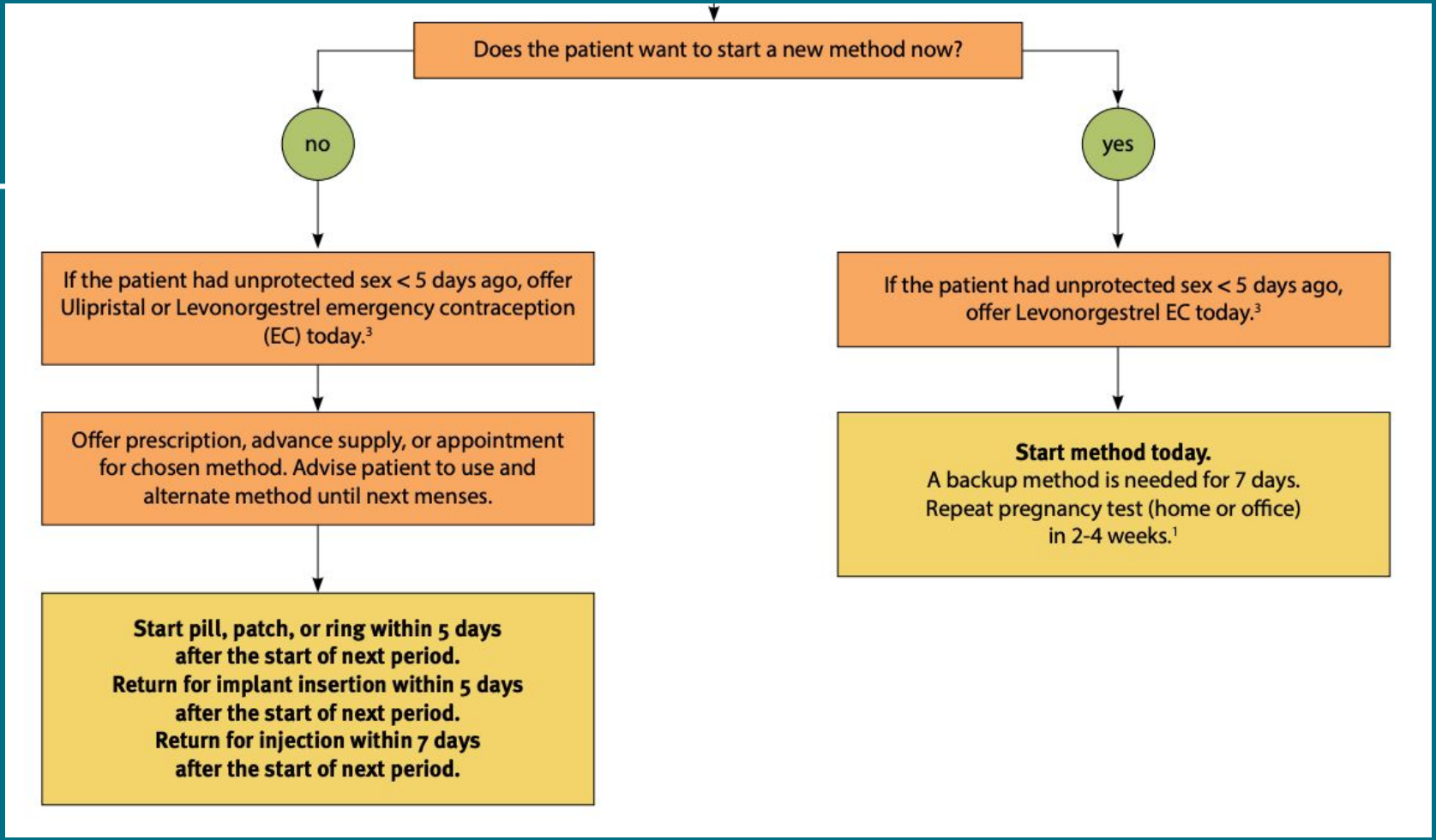
What's your next step in management?

Quick start

- Consult every time a new hormonal birth control is started
- Used to mitigate risk of early pregnancy




Patient requests new birth control method:
Pill, Patch, Ring, Injection, Implant
First day of last menstrual period (LMP) is:
< 7 days ago.
> 7 days ago.
Start method today.
A backup method is not needed for injection.
If LMP was 5-7 days ago and patient chose pill, patch, ring or implant, a backup method is needed for 7 days
Unprotected sex since last LMP?
yes
no
Urine pregnancy test: negative[1]
Start method today.
A backup method is needed for 7 days.
Advise patient that early pregnancy is possible, but hormones would not cause harm.[2]
Does the patient want to start a new method now?
no
yes


Does the patient want to start a new method now?
no
yes
If the patient had unprotected sex < 5 days ago, offer Ulipristal or Levonorgestrel emergency contraception (EC) today.[3]
Offer prescription, advance supply, or appointment for chosen method. Advise patient to use and alternate method until next menses.
Start pill, patch, or ring within 5 days after the start of next period.
Return for implant insertion within 5 days after the start of next period.
Return for injection within 7 days after the start of next period.
If the patient had unprotected sex < 5 days ago, offer Levonorgestrel EC today.[3]
Start method today.
A backup method is needed for 7 days.
Repeat pregnancy test (home or office) in 2-4 weeks.[1]

Case 1b

Emilia is interested in starting birth control today if possible. She understands the risk of early pregnancy and is considering other forms of contraception if it can be used as emergency contraception too.

How do you counsel her?

Emergency contraception

- Used to prevent pregnancy <120 hours after unprotected intercourse

- Different mechanisms of action for each therapy
  - Levonorgestrel likely inhibits or delays ovulation, delays follicular dev't
  - Ulipristal, a progesterone modulator, likely inhibits or delays ovulation
  - Copper IUD inhibits sperm motility and viability

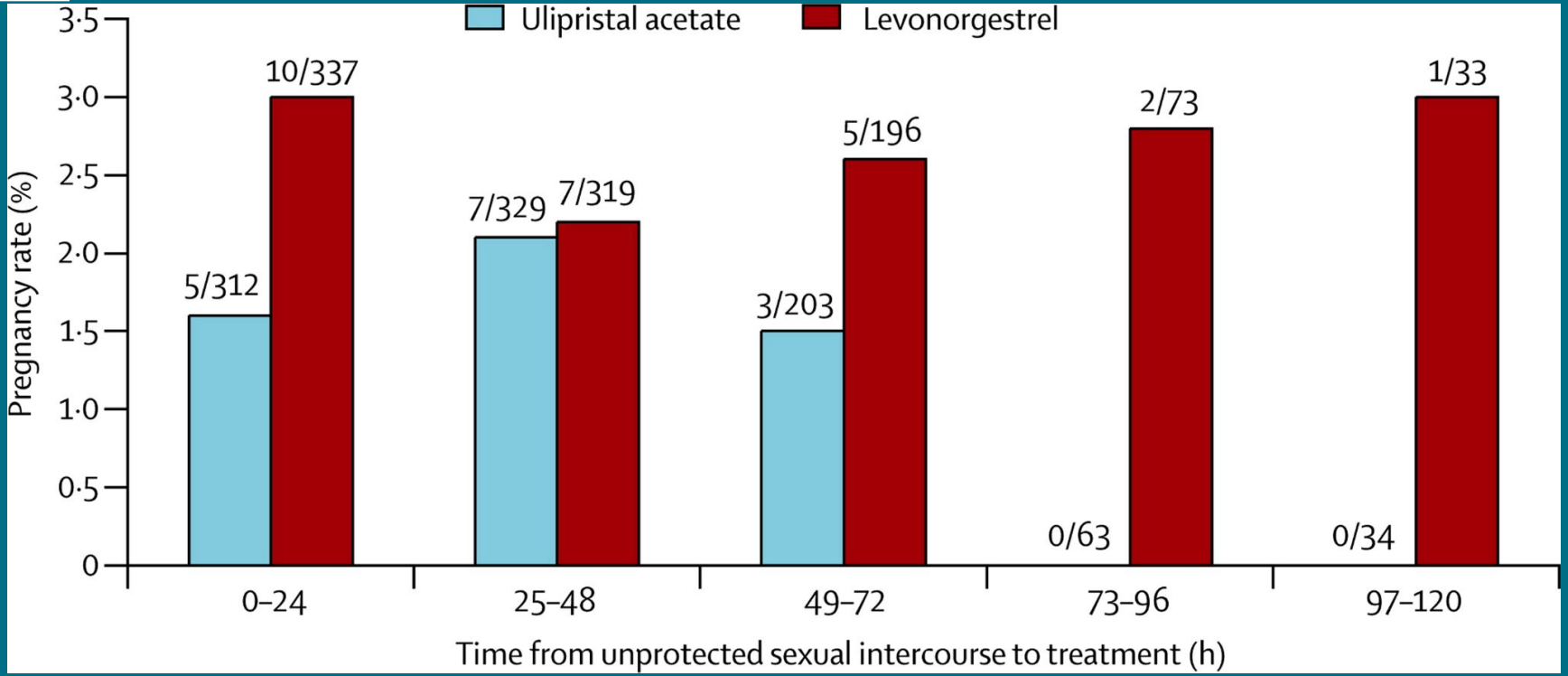
- Emergency contraception ≠ pregnancy termination

Emergency contraception options

* = not FDA approved for EC

Method	Pros	Cons
Levonorgestrel 1.5 mg (aka Plan B or LNG EC)	• One pill • Cheap! ~$12 • OTC • Does not interfere with BC	• Efficacy decreases immediately • No better than placebo if BMI >25
Ulipristal (aka Ella or UPA EC)	• Good efficacy up to 120 hrs, including for BMI >25 • One pill • Relatively cheap ~$42	• Requires Rx • May interfere with systemic hormonal BC
Copper IUD* (aka Paragard or CuIUD)	• Good efficacy up to 120 hrs, including for BMI >25 • Does not interfere with BC • Contraception for 10-12 yrs	• Requires a procedure and comfortable provider • Cost
Levonorgestrel IUD 52 mg* (aka Mirena and Liletta or LNG IUD)	• Good efficacy up to 120 hrs, including for BMI >25 • Does not interfere with BC • Contraception for 7-8 yrs	• Requires a procedure and comfortable provider • Cost

72-120 hours - oral options



Weight and LNG EC

	Weight (kg)				
	< 55	55–65	65–75	75–85	≥ 85
N total	349	608	426	155	193
N pregnancies	3	8	6	10	11
Pregnancy rate	0.9%	1.3%	1.4%	6.4%	5.7%

	BMI (kg/m²)				
	< 20	20–25	25–30	30–35	≥ 35
N total	249	873	367	149	93
N pregnancies	4	11	9	10	4
Pregnancy rate	1.61%	1.26%	2.45%	6.71%	4.30%

Weight vs BMI impact on LNG EC efficacy

	Weight < 75 kg	Weight > 75 kg
BMI < 25 kg/m²	1.3% (14/1115) (95% CI=0.7%–2.1%); percent of population=64.4%	12.5% (1/8) (95% CI=0.3%–52.7%); percent of population=0.5%
BMI > 25 kg/m²	1.4% (4/276) (95% CI=0.4%–3.7%); percent of population=15.9%	5.7% (19/332) (95% CI=3.5%–8.8%); percent of population=19.2%
BMI > 30 kg/m²	0.0% (0/20) (95% CI=0.1%–24.9%); percent of population=1.2%	6.3% (14/222) (95% CI=3.4%–10.4%); percent of population=12.8%
BMI > 35 kg/m²	NC (no data); percent of population=0.0%	4.3% (4/93) (95% CI=1.2%–10.6%); percent of population=5.4%

- If BMI <30, efficacy may not be impacted, even if weight is >75 kg
- Be aware of potentially lower efficacy if weight >75 kg, even if BMI <25

BMI

- 2016 pooled analysis:
  - 2 out of 3 LNG EC studies showed decreased efficacy (4.4 fold increased pregnancy risk); 1 study found no difference in efficacy
  - 2 studies UPA EC studies showed decreased efficacy but low grade evidence
- FDA 2016: “data are conflicting and too limited to make a definitive conclusion”; no need for label change right now
- Not a reason to deny oral EC!
  - No research to date has been adequately powered to ID a BMI threshold
- Ongoing NIH study investigating the efficacy of 3.0 mg levonorgestrel for people weighing >80 kg - stay tuned

Ulipristal and progesterone contraception

- Concern that exogenous progesterone and progesterone antagonist properties of ulipristal would interrupt action of EC or vice versa
- Based on pharmacodynamic data, not clinical evidence of increased pregnancy
- FDA recommends starting/restarting contraceptives containing progesterone **5 days after ulipristal administration**
- **Often barriers to returning to clinic**
- **Shared decision making is appropriate**

Overall efficacy

- Levonorgestrel PO: 2.2%
- Ulipristal: ~1.4%
- Copper IUD: 0-2%
- Levonorgestrel 52 mg IUD: 0.3%

How to manage oral EC

- Confirm UPI <120 hrs ago and pt's desire to avoid pregnancy
- Check weight; no other testing required
  - Counsel patients with weights >75 kg/BMI >30 on possible lower efficacy with LNG EC
- No absolute contraindication to LNG or UPA, but consider LNG EC if pt desires progesterone contraception, or delay initiation of BC by 5 days
- Counsel pt on administration right away
- No routine follow required unless period is >1 week later than expected
- Consider STI testing, ongoing contraception and advance provision of EC

Hormonal contraception and abnormal bleeding

Case 2

Aliyah is a 22yo (she/her, DFAB) who presents to you with a concern for abnormal uterine bleeding. She has had negative experiences with a few different birth control methods, including depo (noticed weight gain), OCPs (noticed decreased mood) and now is having unscheduled and heavy bleeding with the etonogestrel implant (Nexplanon).

How do you counsel her?

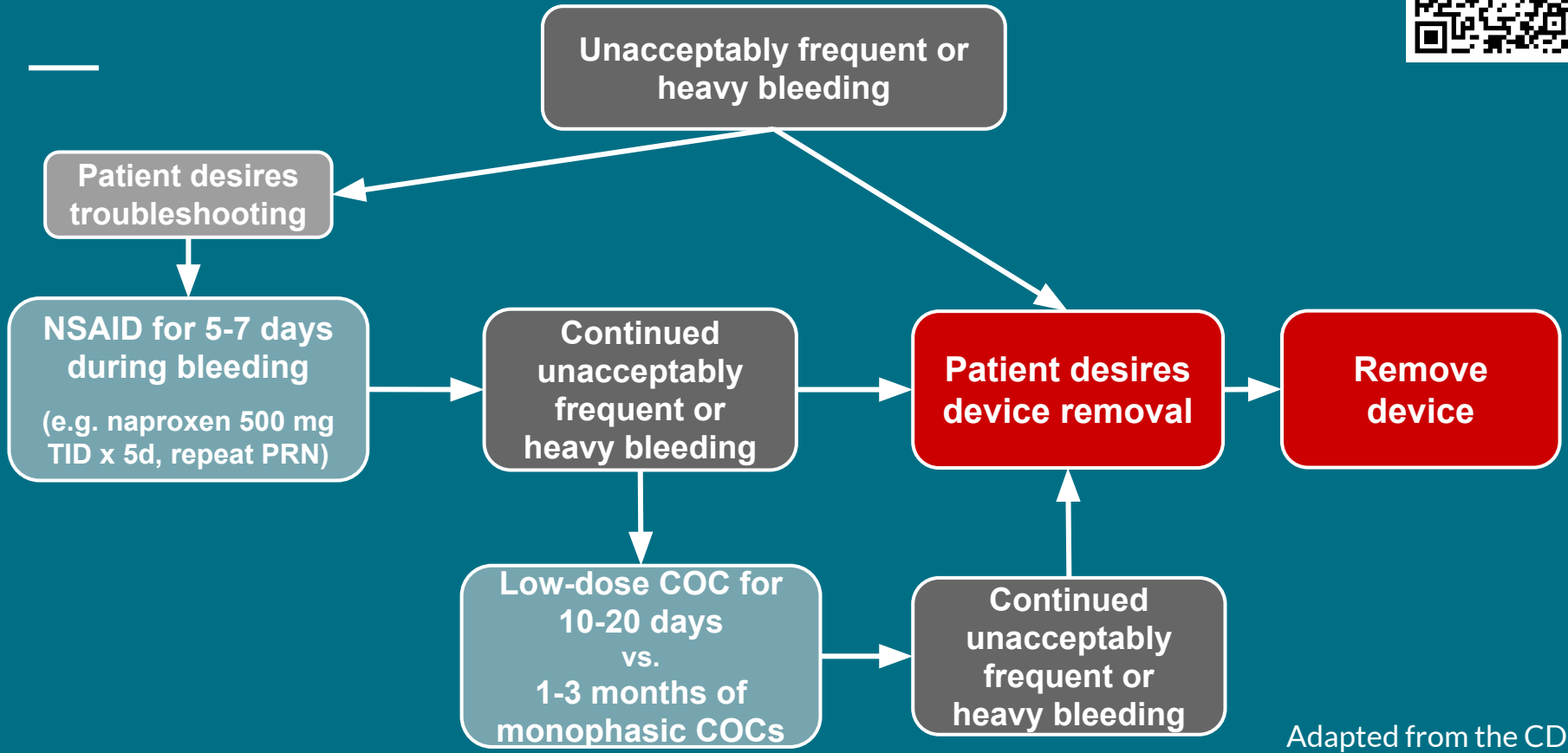
Hormonal BC and irregular bleeding

- Includes amenorrhea, spotting (<1 pad/day), unscheduled or heavy bleeding
- Why does it happen?
  - We don't really know!
  - Incomplete ovarian follicular suppression leading to fluctuating estradiol levels
  - Continuous progesterone causing unstable endometrium
- Unscheduled bleeding or amenorrhea is generally not harmful
- Common reason for patients to DC contraception - counsel your patients!

CDC Selected Practice Recommendations

- Rule out other causes such as STI, pregnancy; consider polyps, fibroids; update cervical ca screening if due
- Counsel on tobacco cessation, if applicable
- NSAIDs: better evidence for implants/etonogestrel
  - Consider celecoxib 200 mg once a day x 5 days, OR
  - Naproxen 500 mg TID for 5 days and repeat PRN
- LARC + Combined oral contraceptives (COCs): more stable dose of estrogen
  - Ensure no contraindications to estrogen use

Management for LARCs



Adapted from the CDC

Irregular Bleeding (Spotting, Light Bleeding, or Heavy or Prolonged Bleeding)

- If clinically indicated, consider an underlying gynecological problem, such as interactions with other medications, an STD, pregnancy, or new pathologic uterine conditions (e.g., polyps or fibroids). If an underlying gynecological problem is found, treat the condition or refer for care.
- If an underlying gynecologic problem is not found and the woman wants treatment, the following treatment options during days of bleeding can be considered:
  - NSAIDS for short-term treatment (5–7 days)
  - Hormonal treatment (if medically eligible) with low-dose COCs or estrogen for short-term treatment (10–20 days)
- If irregular bleeding persists and the woman finds it unacceptable, counsel her on alternative methods, and offer another method if it is desired.

US MEC
US SPR

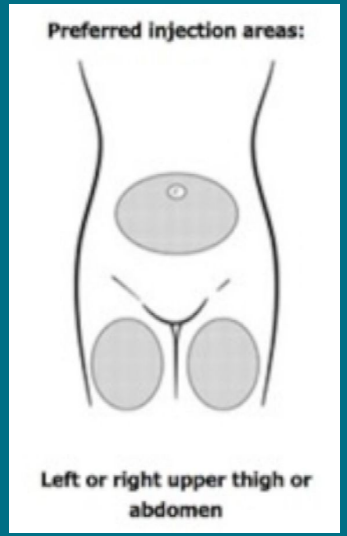
Subcutaneous DMPA

Case 3

Lesha is a 38yo (she/her, DFAB) who presents for contraception. She has tried multiple methods and likes Depo the best, but she finds it difficult to come for appointments every 3 months. She heard there may be a way to administer Depo herself and is asking you for more information.

User-administered Depo

- Increases pt autonomy - but not currently FDA approved for at-home administration
- Studies have shown it increases continuation without higher failure rates
- Comes in single dose, pre-filled syringes as “Depo SubQ Provera 104”, stored at room temp
- Anterior thigh or abdomen every 12-14 weeks



Managing user-administered SQ Depo

- Confirm eligibility, counsel on risks and benefits
  - Same eligibility criteria as provider-administered Depo
  - Consider obtaining weight
- Quick Start it!
- Rx 4 syringes with directions to administer q13 weeks (ok up to 14 weeks)
- Consider nurse teaching the first 1-2 injections

Case 3b

Months later, Lesha calls your office to report she missed her last shot and it's been >15 weeks since her last SQ Depo dose. She last had unprotected sex 2 days ago.

How do you manage?

How would you manage late depo administration

A. Evaluate for EC, restart depo immediately

B. Evaluate for EC, restart depo immediately, backup BC for 7 days

C. Evaluate for EC, obtain neg UPT, depo immediately, back up BC for 7 days, UPT in 2-4 weeks

D. Evaluate for EC, obtain neg UPT, alternative BC until next menses, depo within 7 days of menses onset

E. C or D

How would you manage late depo administration

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E. C or D

Managing user-administered SQ Depo

- No routine follow up required, but instruct patients to call office if >15 wks from last shot

    - EC (consider LNG EC)
    - Negative preg test prior to restarting
    - Back up method 1 week after restarting SQ Depo
    - Pregnancy test in 2-4 weeks

Resources for SQ Depo

- Safe needle disposal in New Mexico: https://safeneedledisposal.org/states/new-mexico/

- Clinic Toolkit https://ctcfp.org/RiseToolkit1/content/assets/o35EjidVQvCccCfM_I2qdwah5RpxBxx-8-User_Administration_DMPA-SC_Toolkit.pdf

New birth control options

Case 4

Riley is a 29yo (they/them, DFAB) who presents to you for contraceptive counseling. They would like to avoid any methods with hormones and are particularly interested in Phexxi.

How would you counsel Riley?

Phexxi (lactic acid/citric acid/potassium bitartrate)

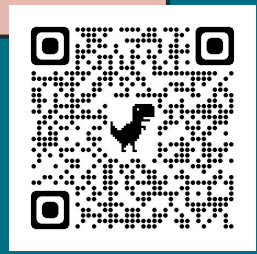
- User-administered vaginal suppository
- Lowers the vaginal pH, immobilizing sperm
- On-demand use; <1 hr *before* every time vaginal sex occurs
- About as effective as OCPs
  - 86% typical use, 93% perfect use

Drosperinone-estetrol: new OCP

- FDA approved in April 2021
- Estetrol has a longer half-life than estradiol, seems to be lower risk of VTE
- Drosperinone is possibly less weight dependent; more effective at higher BMI?
- Expect same medical eligibility as other OCPs

New contraceptive options

Method	Pros	Cons
Lactic acid, citric acid, potassium bitartrate (aka Phexxi)	• Non-hormonal • Use only as needed • Promotes pt autonomy	• 2nd - 3rd tier efficacy • Requires administration every time pt has penis-in-vagina sex • Cost?
Estetrol-drosperinone (aka Nextstellis)	• Longer half-life than estradiol • Decreased VTE risk	• Least androgenic progesterone; may not be a great option for trans/gender expansive pts • Same as other OCPs • Cost?



Bonus

Hormonal IUD comparison

	LNG-20 (Mirena)	LNG-18.6 (Liletta)	LNG-19.5 (Kyleena)	LNG-13.5 (Skyla)
FDA-approved duration of use	7 years	6 years	5 years	3 years
Evidence-proven duration of use	7 years	8 years	--	--

Key Points

- Use the Quick Start algorithm when initiating or switching birth control methods
- Provision of emergency contraception is safe and easy!
- NSAIDs and short course of COCs for abnormal uterine bleeding related to hormonal birth control
- User-administered SQ Depo is a contraception option that is effective and safe
- On-demand lactic acid/citric acid/potassium bitartrate (Phexxi) may be appropriate for patients who value autonomy and want to avoid hormones
- Estetrol-drosperinone is an emerging contraceptive option that may offer a better safety profile than ethinyl estradiol contraceptives

Contact

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