Birth Control – The Basics and Beyond
Thanks to:

- Tara Scott
- Norma Jo Waxman
- Linda Prine
- Alan Guttmacher Institute
6.3 Million Pregnancies in the U.S.

- 25% Unintended Used Contraception
- 23% Unintended No Contraception
- 52% Intended

Mandy

- 17 y/o girl with normal sports physical 4 years ago
- LMP 3 weeks ago
- Here today for pregnancy test
- She had unprotected sex 4 days ago.
- Her urine pregnancy test is negative.
- What would you prescribe for her today?
Emergency Contraception (EC)  
Mechanism of action:

**DOES NOT DISRUPT AN IMPLANTED PREGNANCY**

- Inhibits **ovulation**
- Traps sperm in thickened **cervical mucus**
- Inhibits tubal **transport of egg or sperm**
- May interfere with **fertilization** or early cell division

Effectiveness

- Difficult to evaluate but levonorgestrel is more effective than doing nothing
- Levonorgestrel 1.5 mg prevents about 75% of pregnancies (56-89%)
- Ulipristal acetate 30 mg (Ella) is more effective in head to head studies
- ?Mifepristone
How Long After the Morning After? Latest WHO Trial (LNG)

von Hertzen et al. Lancet 2002;360:1803
Levonorgestrel 1.5 mg

• Plan B–One Step = 1 pill
• Next Choice= 2 pills (.75 mg each) – take both at the same time
• Next Choice-One Dose = 1 dose

Taking the Full 1.5mg as a single dose increases the number of women who get the full dose and does not increase side effects
Emergency Contraception

• NextChoice Available without a prescription for women over 17 – however it costs $45
• If you prescribe it, patients don’t have to pay – it is covered by MediCal, FPACT and Partnership
• We have EC available in clinic to give to patients with FPACT – you can dispense up to 2 packs at a time.
Advanced prescription - does providing ECPs in advance increase risk-taking?

• Empirical evidence from multiple studies comparing advance prescription of EC with counseling only

• Validated results show:
  – Advance prescription increases EC use 2-4x;
  – Advance prescription does NOT generally change use of other methods of contraception;
  – Advance prescription has been shown to decrease number of unintended pregnancies.
Mandy

• 17 y/o girl
• LMP 3 weeks ago
• Here today for pregnancy test
• She had unprotected sex 4 days ago.
• Her urine pregnancy test is negative.
• She would like birth control and has FPACT
• What can you give her today? What are the risks of starting a method today?
Window pregnancy

• High Sensitivity Urine Pregnancy Test (almost all home and office tests!) detect 25 mcg bHCG
• They do not turn positive till 7-10 days after ovulation.
• So there is a “window” during which a woman may be pregnant and have a negative test.
• Depending on cycle length, this is about Days 12 -25 of the cycle
Window preg practice case

- LMP 8/2 or 8/3
- Unprotected sex every day 8/5 – 8/15
- Cycle length always 28 days
- Urine HCG today (8/23) neg
- Window pregnancy possible?
Window preg practice case 2

- LMP 7/26
- Unprotected* sex every weekend since
- Cycle length 30-32 days
- Urine HCG today (8/23) neg

- Window pregnancy possible?
Why do we care about window pregnancy?
Why do we care about window pregnancy?

- Risk of method to developing fetus
- Risk of delay of diagnosis of pregnancy
- Risk of putting in long term method in a woman already pregnant
Oral contraceptives are NOT teratogenic

- Meta-analysis of 12 prospective studies shows that estrogen/progestin oral contraceptives do not cause birth defects

Maria

• Maria is a 30 y/o G2P2 who is 6 months post partum and would like birth control
• Her mother and older sister have diabetes but are not on insulin
• She did not have diabetes in pregnancy
• Her BMI is 32
• “What method do you recommend doctor?”
http://www.reproductiveaccess.org/
## Medical Eligibility for Initiating Contraception

<table>
<thead>
<tr>
<th>Condition</th>
<th>Qualifier for condition</th>
<th>Estrogen/ Progestin: pill, patch, ring</th>
<th>Progestin-only: pill</th>
<th>Progestin-only: injection</th>
<th>Progestin-only: implant</th>
<th>Progestin IUD</th>
<th>Copper IUD</th>
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See Postpartum IUDs
CDC Medical Eligibility Guidelines

- 6 mo post partum – All Class 1
- BMI>30 – All Class 1 except COC are Class 2
- FH DM – not addressed
  - Hx of GDM – All class 1
  - DM without vascular disease – All Class 2 except Paragard Class 1
Obesity and Birth Control

• All hormonal methods appear to be a bit less effective in obese women
• Obese women may be at increased risk of developing DM when on Depo
• Increased risk of DVT in obese women may be additive to increased risk in COCs

• IUDs are a great method in this population
“Quick Start”

- As many as 25% of women do not start prescribed OCPs with Sunday or 1st day start.

- “Quick Start”¹ – first pill on day of visit at any time of the month. Confirm HCG neg. If she needs EC, start contraception w/in 24 hrs of EC.
  - More women using pill in 3rd cycle
  - No increased spotting or bleeding

Pearls about the Pill

• Dispense pills to FPACT patients (bill under Treatment=>Procedures)
• Show patients how to use pack (Days of the week, where to start etc). Take first pill now.
• 7 days of perfect use = protected from pregnancy
• What to do if you forget pills
• How to remember (ie alarm, toothbrush etc)
Emma

• 19 y/o college freshman with a new boyfriend and a nosey roommate. Wants a method that her roommate won’t find out about
• Doesn’t want anything implanted in her body
NuvaRing

- Low estrogen dose: 15 mcg
- 2 inch flexible soft ring
- No wrong placement
- May remove up to 3 hours
- Most don’t notice during sex
- 98.8% Effective
NuvaRing: Effects on the Vagina

• Nonabsorbent
• Increase in discharge, NOT infection
• Improves microflora content
• No change in pap smear or colpo results
• Clinical trials suggest there may be a vaginal benefit from using the ring
• No decrease in efficacy with tampons or anti-mycotics

Vaginal Ring Expulsion

- Spontaneous expulsion infrequent - 2.6%
  - Occurred only once in almost all cases

- If expelled or removed, wash with warm water and reinsert within 3 hours

- If removed for longer than 3 hours, either:
  - Reinsert and use backup method for 7 days
  - Permit withdrawal bleed (if near end of use)

NuvaRing- Alternative use regimens:

• “Package insert”: 21 on/ 7 days off

• 4 or 5 weeks on, then 4-7 day hormone free interval

• “Calendar month” use 1-25th of month, then off for rest of month
Counseling Tips

• The ring should never be out for more than 7 days.
• Women are often confused about when to restart the ring after they get their period ie 7 days after they start bleeding, or 7 days after they stop bleeding etc
• Even if they are still bleeding on Day 7 they need to reinsert the ring
• Warn them about the discharge and tell them it is not an infection!
Lawonda

• 24 yo G3P2Tab1

• Currently using OCP, but admits to frequently forgetting to take pill

• Wants to try the patch because her friends like it
Contraceptive Patch

- Apply weekly x 3, then one week off
- Ethinyl Estradiol-Norelgestromin: 0.02mg-0.150mg/24 hours
- Failures in trials were in women over 198 pounds, but still rare
- Same contraindications as OC’s
- Same efficacy as OC’s
- OK to shower, swim, exercise w/ patch on

OrthoEvra and DVT Risk

• November 2005 FDA Warning
• Patch Uses are exposed to 60% more estrogen than 30 mcg ethinyl estradiol OCP and 3.4 times more than the ring
• FDA Study 2011 – 1.55 times higher risk VTE than OCP.
• Yaz (OR 1.56) and NuvaRing (OR 1.55) also had increased risk
Adherence with OCPs: What Women Say

NFSG Survey, 1997
Adherence with OCPs:
What Women Do!

Extended Cycle Regimens- Why?

- OCP’s 21 day on/ 7 day off cycle chosen to:
  - Mimic physiologic menstrual cycle
  - Reassurance that not pregnant
- No clinical trial shows that monthly menses is healthier, safer, or easier to tolerate
- Convenience
- May improve:
  - endometriosis, anemia, dysmenorrhea, metorrhagia, PMS, menstrual migraines

Extended Cycle Regimens

- May increase efficacy and adherence
- Symptoms associated w/ OCP worse during withdrawal bleed
- Brief manipulation of a cycle
- Can use any OCP, patch, ring (off-label)

Lifetime Number of Menstrual Cycles

Billing

• FPACT covers all fertile women and men regardless of immigration status
• MediCal covers all types of birth control
• MAs can sign patients up for FPACT quickly
• FPACT also covers STI, UTI, pap, colpo
FPACT – Need an S code
Under Treatment go to Procedures
Take home point #1

• Think about a window pregnancy! – Ask about last unprotected sex
Take home point #2

• When dispensing COCs be sure to talk about 7 days and you are covered! Be sure the patient understands that issues is days with out hormones – bleeding is irrelevant
Take home point #3

• Don’t forget to dispense FPACT meds and condoms and lubricant in clinic
• If you do dispense, bill for it!
Take home point #4

• “Just do Something” – In your quest to promote highly effective birth control don’t forget that douching and withdrawal are better than doing nothing at reducing pregnancy. Give women props for doing something!!