




**Last Chance Ambulatory Care Pharmacy Webinar—Obstetrics/Gynecology**  
**September 5, 2013**  
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**Conflicts of Interest** 


- I have no conflicts to disclose.

**Objectives** 


- Recommend appropriate therapy for contraception, emergency contraception, infertility, and postmenopausal therapy.
- Apply appropriate therapy for drug therapy during pregnancy.
- Formulate a plan to educate patients and health care professionals about medication use during pregnancy and lactation

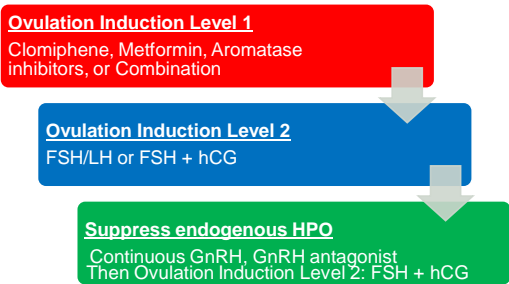
**Key Concepts--Contraception** 

- Purpose of product
- Efficacy
  - Differences in products (perfect, typical use)
  - Drug Interactions
- Compliance
  - Administration frequency
- Managing Adverse Effects
- When to use back-up methods
- Emergency contraceptives

**Infertility--Role of Hormones** 

- FSH = mature egg
- LH = ovulation
  - Gonadotropin products: FSH/LH, FSH >>LH
- hCG = structurally similar to LH
  - Products: hCG
- Progesterone = luteal support or induce menses
- Disease specific treatments
  - Hyperprolactinemia, PCOS

**Infertility Medications** 



**Ovulation Induction Level 1**  
 Clomiphene, Metformin, Aromatase inhibitors, or Combination

**Ovulation Induction Level 2**  
 FSH/LH or FSH + hCG

**Suppress endogenous HPO**  
 Continuous GnRH, GnRH antagonist  
 Then Ovulation Induction Level 2: FSH + hCG

Progesterone support needed for level 2 therapy

### Key Concepts – Pregnancy/Lactation

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- Factors assessing medication use and safety
  - Pharmacokinetic changes
  - Medication characteristics
    - Molecular weight, Lipophilicity, Ionization, Protein binding
  - Placental characteristics
    - Efflux proteins, bloodflow, thickness, diffusion distance
  - Other
    - Stage at time of exposure, maternal/fetal genotypes, dose, specificity, other simultaneous exposures

### Pregnancy Related Decisions and Education

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**Risks of Untreated Condition**

- Risks to Mom?
- Risk to Fetus/PG outcomes?

**Risks of Treatment**

- Risks to Mom?
- Risk to Fetus/PG outcomes?
- Source of data?
- Timing/Stage for risk?
- Is there a dosage associated with risk?

**Education**

- Purpose
- Proper Use
- Potential ADR to Mom
- Potential ADR to fetus and pregnancy outcomes (Discuss timing of exposure)

### Pregnancy

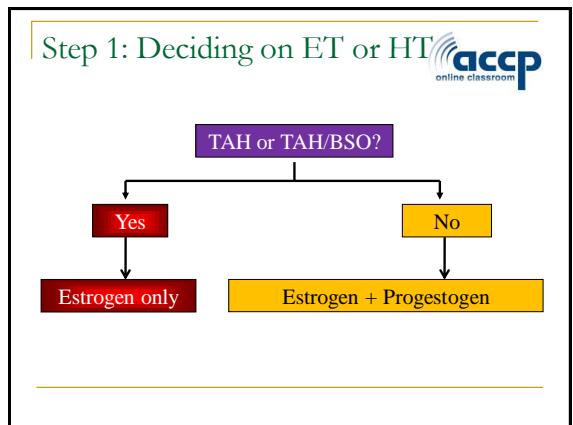
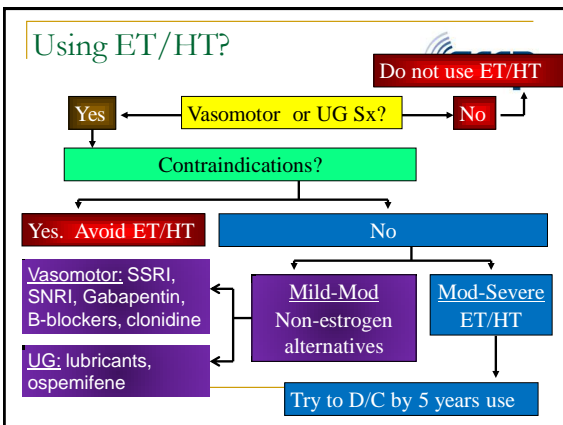
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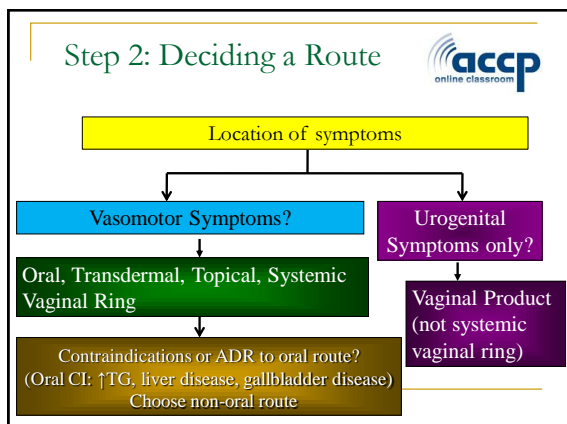
- Acute Conditions
  - Ask your patients about symptoms
  - Risk vs. Benefit
  - Nonpharm treatments
- Chronic Conditions
  - Balance **risk of untreated condition** vs. risk of Med

### Lactation

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- Evaluating safety
  - Relative infant dose
  - Therapeutic infant dose
  - Pediatric ADR
  - Age of the infant
- Unsafe meds
  - Short-term: Pump and dump
- Most Likely safe meds
- References: Medications and Mother's Milk (Hale), LactMed, etc





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A 44 yo female is requesting a hormonal contraceptive. PMH: s/p gastric bypass surgery (4 months ago), DVT (4 months ago, 10 years ago), vaginal dryness. Current Medications: multiple vitamin Qday, warfarin 4mg Qday. SH: (+) tobacco (1ppd), (+) EtOH (socially), (-) illegal drugs. ALL: latex (rash)

- Case 1.1

Please select and recommend the best hormonal contraceptive for this patient.

### Case 1.1

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- A 44 yo female is requesting a hormonal contraceptive. PMH: s/p gastric bypass surgery (4 months ago), DVT (4 months ago, 10 years ago), vaginal dryness. Current Medications: multiple vitamin Qday, warfarin 4mg Qday. SH: (+) tobacco (1ppd), (+) EtOH (socially), (-) illegal drugs. ALL: latex (rash)

Please select and recommend the best hormonal contraceptive for this patient.

- Alesse (ethinyl estradiol and levonorgestrel) tablet Qday
- Ortho Evra (ethinyl estradiol and norelgestromin) patch q3 weeks
- Micronor (norethindrone) tablet Qday
- Implanon (Etonogestrel) injection q3 years**

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A 25 yo female is at the office requesting emergency contraception (EC). She states that she was out of the country and forgot her birth control pills. She had unprotected intercourse 4 days ago. Is worried about N/V she has experienced in the past with EC. She also complains about vaginal discharge and itching that started a few days ago. PMH: allergic rhinitis, Schizophrenia, IBS-D, dyslipidemia. Labs: (+) gonorrhea. Medications: fexofenadine 180mg Qday, aripiprazole 15mg Qday, lorazepam 1mg TID. Allergies/ADR: haloperidol (EPS).

- Case 2.1

Please select and recommend the best hormonal contraceptive for this patient.

### Case 2

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- A 25 yo female is at the office requesting emergency contraception (EC). She states that she was out of the country and forgot her birth control pills. She had unprotected intercourse 4 days ago. Is worried about N/V she has experienced in the past with EC. She also complains about vaginal discharge and itching that started a few days ago. PMH: allergic rhinitis, Schizophrenia, IBS-D, dyslipidemia. Labs: (+) gonorrhea. Medications: fexofenadine 180mg Qday, aripiprazole 15mg Qday, lorazepam 1mg TID. Allergies/ADR: haloperidol (EPS).

What is the best recommendation for EC?

- OTC Levonorgestrel
- Ulipristal**
- Ethinyl estradiol and levonorgestrel
- Copper IUD

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She calls you back and states her insurance won't cover EC and only provides a 10% discount on some therapies. She gets levonorgestrel (Plan B OneStep). Is concerned about nausea/vomiting especially with her current IBS flare. What is the best recommendation? PMH: allergic rhinitis, Schizophrenia, IBS-D, dyslipidemia. Labs: (+) gonorrhea. Medications: fexofenadine 180mg Qday, aripiprazole 15mg Qday, lorazepam 1mg TID. Allergies/ADR: haloperidol (EPS).

- Case 2.2

What is the best recommendation?

## Case 2 -- Question 2



- She calls you back and states her insurance won't cover EC and only provides a 10% discount on some therapies. She gets levonorgestrel (Plan B OneStep). Is concerned about nausea/vomiting especially with her current IBS flare. What is the best recommendation? PMH: allergic rhinitis, Schizophrenia, IBS-D, dyslipidemia. Labs: (+) gonorrhea. Medications: fexofenadine 180mg Qday, aripiprazole 15mg Qday, lorazepam 1mg TID. Allergies/ADR: haloperidol (EPS).

What is the best recommendation?

- A. Promethazine
- B. Pyridoxine
- C. Ondansetron
- D. Meclizine**



She requests a new hormonal contraceptive to avoid using something daily. She desires to attempt conception in 8 months. PMH: allergic rhinitis, Schizophrenia, IBS-D, Dyslipidemia. Labs: (+) gonorrhea. Medications: fexofenadine 180mg Qday, aripiprazole 15mg Qday, lorazepam 1mg TID. Allergies/ADR: haloperidol (EPS). Ht: 5'3" Wt 275lb. Labs: LDL 145, TC 205, TG 140, HDL 35

- Case 2.3

What is the best recommendation?

## Case 2 –Question 3



- She requests a new hormonal contraceptive to avoid using something daily. She desires to attempt conception in 8 months. PMH: allergic rhinitis, Schizophrenia, IBS-D, Dyslipidemia. Labs: (+) gonorrhea. Medications: fexofenadine 180mg Qday, aripiprazole 15mg Qday, lorazepam 1mg TID. Allergies/ADR: haloperidol (EPS). Ht: 5'3" Wt 275lb. Labs: LDL 145, TC 205, TG 140, HDL 35

What is the best recommendation?

- A. Ortho-Evra patch (ethinyl estradiol/norelgestromin)
- B. NuvaRing vaginal ring (ethinyl estradiol/etonogestrel)**
- C. Depo-Provera injection (medroxyprogesterone)
- D. Mirena IUD (norethindrone)



A 26 year old female has been attempting conception for 14 months without success. She and her husband are getting frustrated. Last menstrual period was 5 weeks ago and lasted 4 days. Labs today: FSH normal, LH normal, Estradiol normal, Testosterone normal, Prolactin high.

- Case 3.1

What is the best recommendation?

## Case 3



- A 26 year old female has been attempting conception for 14 months without success. She and her husband are getting frustrated. Last menstrual period was 5 weeks ago and lasted 4 days. Labs today: FSH normal, LH normal, Estradiol normal, Testosterone normal, Prolactin high. What is the best recommendation today?

- A. Cabergoline**
- B. Clomiphene
- C. Ganirelix
- D. Follitropin



A 28 yo female is returning to the office for follow-up on her infertility. She has been unsuccessful with pregnancy after six months of metformin 1g BID. PMH: PCOS, Obesity, Pre-diabetes, DVT (4 years ago on Trivora). Labs: Prolactin 10 (normal 6-15). What is the next best recommendation?

- Case 4.1

What is the best recommendation today?

## Case 4



- A 28 yo female is returning to the office for follow-up on her infertility. She has been unsuccessful with pregnancy after six months of metformin 1g BID. PMH: PCOS, Obesity, Pre-diabetes, DVT (4 years ago on Trivora). Labs: Prolactin 10 (normal 6-15). What is the next best recommendation?

What is the best recommendation today?

- A. Clomiphene
- B. Menotropins (FSH/LH)
- C. Urofollitropin (FSH)+ Choriogonadotropin (hCG)**
- D. Leuprolide (GnRH agonist)



Her follicular ultrasound reveals egg size of 18 mm, so she is started choriogonadotropin yesterday. Current medications: Urofollitropin (FSH), prenatal vitamin, choriogonadotropin (hCG), metformin1g BID. PMH: PCOS, Obesity, Pre-diabetes, DVT (4 years ago on Trivora). Labs: Prolactin 10 (normal 6-15).

- Case 4.2

What additional therapy should be started?

## Case 4 –Question 2



- Her follicular ultrasound reveals egg size of 18 mm, so she is started choriogonadotropin yesterday. Current medications: Urofollitropin (FSH), prenatal vitamin, choriogonadotropin (hCG), metformin1g BID. PMH: PCOS, Obesity, Pre-diabetes, DVT (4 years ago on Trivora). Labs: Prolactin 10 (normal 6-15). What additional therapy should be started?

- A. Bromocriptine
- B. Progesterone**
- C. Guaifenesin
- D. Ganirelix (GnRH antagonist)



A 28 year old G3P0 female is at the office for a 16 week ObGyn visit without complaints. PMH: spontaneous abortion (@18 weeks), pre-term delivery (@21, 26 weeks). PMH: asthma, chronic HTN, history of pre-eclampsia. Current medications: methyl dopa 500mg BID, albuterol 2P Q4h prn SOB, fluticasone 110mcg 2P BID, prenatal vitamin. The resident wants to know what medication can be started for prevention of preterm labor.

- Case 5.1

What is the best recommendation?

## Case 5



- A 28 year old G3P0 female is at the office for a 16 week ObGyn visit without complaints. PMH: spontaneous abortion (@18 weeks), pre-term delivery (@21, 26 weeks). PMH: asthma, chronic HTN, history of pre-eclampsia. Current medications: methyl dopa 500mg BID, albuterol 2P Q4h prn SOB, fluticasone 110mcg 2P BID, prenatal vitamin. The resident wants to know what medication can be started for prevention of preterm labor. What is the best recommendation?

- A. 17 hydroxyprogesterone**
- B. Terbutaline
- C. Oxytocin
- D. Betamethasone



Her BP today was 158/94, P88. 1 week ago BP was 156/92, P86. She states she is tired from the last dose increase of the methyl dopa and doesn't think she can tolerate any more. PMH: asthma, chronic HTN, history of pre-eclampsia. Current medications: methyl dopa 500mg BID, albuterol 2P Q4h prn SOB, fluticasone 110 mcg 2P BID, prenatal vitamin.

- Case 5.2

What is the best recommendation?

## Case 5 – Question 2



- Her BP today was 158/94, P88. 1 week ago BP was 156/92, P86. She states she is tired from the last dose increase of the methyldopa and doesn't think she can tolerate any more. PMH: asthma, chronic HTN, history of pre-eclampsia. Current medications: methyldopa 500mg BID, albuterol 2P Q4h prn SOB, fluticasone 110 mcg 2P BID, prenatal vitamin.

What is the best recommendation today?

- A. HCTZ
- B. Nifedipine**
- C. Labetalol
- D. Clonidine



She has SOB with chest tightness and wheezing 4 times per week that require albuterol at work. States she has been waking up with SOB and wheezing once a week for the past month. PMH: asthma, chronic HTN, history of pre-eclampsia. Current medications: methyldopa 500mg BID, albuterol 2P Q4h prn SOB, fluticasone 110 mcg 2P BID, prenatal vitamin. Refill history on time.

- Case 5.3

What is the best recommendation?

## Case 5 – Question 3



- She has SOB with chest tightness and wheezing 4 times per week that require albuterol at work. States she has been waking up with SOB and wheezing once a week for the past month. PMH: asthma, chronic HTN, history of pre-eclampsia. Current medications: methyldopa 500mg BID, albuterol 2P Q4h prn SOB, fluticasone 110 mcg 2P BID, prenatal vitamin. Refill history on time.

What is the best recommendation?

- A. Start Prednisone 40mg Qday x6 days
- B. Increase fluticasone to 220mcg 2P BID
- C. Change to fluticasone/salmeterol 250/50 1P BID**
- D. Add montelukast 10mg Qday



A 25 year old female is 15 weeks gestation and here for her a prenatal visit. She is currently depressed but is cautious to start any therapy because of the risk of birth defects. PMH: DM type 2, obesity, and bipolar I. Labs today: A1c 7.8, H/H 11/35.5, Plt 250. The ObGyn feels that therapy is warranted and is asking for your help.

- Case 6.1

What is the best recommendation?

## Case 6



- A 25 year old female is 15 weeks gestation and here for her a prenatal visit. She is currently depressed but is cautious to start any therapy because of the risk of birth defects. PMH: DM type 2, obesity, and bipolar I. Labs today: A1c 7.8, H/H 11/35.5, Plt 250. The ObGyn feels that therapy is warranted and is asking for your help.

What is the best recommendation?

- A. Lithium
- B. Olanzapine
- C. Valproic acid
- D. Lamotrigine**



The patient calls back after reading the Rx leaflet and internet stating that lamotrigine has a risk of oral clefts. She is asking for a new therapy.

Properties: 55% protein bound, Pregnancy category C  
 Animal: reduced fetal weight, delayed ossification, intrauterine fetal death, no malformations  
 Human: oral clefts with 1<sup>st</sup> trimester exposure<sup>1</sup>

- Case 6.2

Which one of the following is the best information to include when educating the patient on the risks and benefits of the drug?

## Case 6 – Question 2



- The patient calls back after reading the Rx leaflet and internet stating that lamotrigine has a risk of oral clefts. She is asking for a new therapy.
  - Properties: 55% protein bound, Pregnancy category C
  - Animal: reduced fetal weight, delayed ossification, intrauterine fetal death, no malformations
  - Human: oral clefts with 1<sup>st</sup> trimester exposure<sup>1</sup>

Which one of the following is the best information to include when educating the patient on the risks and benefits of the drug?

- A. Degree of protein binding
- B. Gestational timing of risks and pregnancy**
- C. FDA Pregnancy category
- D. Rate of birth defects in animal data

Briggs GG, et al. Drugs in Pregnancy and Lactation, 8th ed. Philadelphia: Lippincott Williams & Wilkins, 2008.



A 38yo female is 2 weeks post-partum and breastfeeding. Baby was born at 34 weeks. She fell and hit her head chasing after her dog. She is symptomatic, so her physician has ordered an MRI with contrast. Because of her claustrophobia and anxiety, she was prescribed alprazolam 1mg. She wants to breastfeed until the infant is a year old.  
 Contrast dye: milk:plasma 1.2, oral absorption: 90%, Molecular weight: 300, lactation category 4, relative infant dose: 15%.  
 Alprazolam: t1/2 12-15h, Molecular weight 309, milk:plasma 0.36, oral: complete, lactation category 3, relative infant dose: 7.8%

- Case 7.1

What should you educate the patient regarding lactation?

## Case 7



- A 38yo female is 2 weeks post-partum and breastfeeding. Baby was born at 34 weeks. She fell and hit her head chasing after her dog. She is symptomatic, so her physician has ordered an MRI with contrast. Because of her claustrophobia and anxiety, she was prescribed alprazolam 1mg. She wants to breastfeed until the infant is a year old.
  - Contrast dye: milk:plasma 1.2, oral absorption: 90%, Molecular weight: 300, lactation category 4, relative infant dose: 15%.
  - Alprazolam: t1/2 12-15h, Molecular weight 309, milk:plasma 0.36, oral: complete, lactation category 3, relative infant dose: 7.8%

What should you educate the patient regarding lactation?

- A. Medications safe to use in breastfeeding
- B. Stop breastfeeding and restart in 2 days
- C. Pump and dump x2 days then restart breastfeeding**
- D. Switch to formula

Hale TW. Medications and Mothers' Milk, 2008:



A 56yo female is asking about postmenopausal estrogens to help with her night sweats, vaginal dryness and irritation especially with intercourse, and urinary incontinence. She states she can't sleep because of them. She tried black cohosh and soy without success. PMH: gallstones (laser removal 1mo and 5 years ago), HTN. BP: 144/92, P84. Meds: HCTZ 25mg Qday, MVI Qday

- Case 8.1

What is the best recommendation?

## Case 8



- A 56yo female is asking about postmenopausal estrogens to help with her night sweats, vaginal dryness and irritation especially with intercourse, and urinary incontinence. She states she can't sleep because of them. She tried black cohosh and soy without success. PMH: gallstones (laser removal 1mo and 5 years ago), HTN. BP: 144/92, P84. Meds: HCTZ 25mg Qday, MVI Qday

What is the best recommendation?

- A. Estradiol tablets
- B. Estradiol + drospirenone tablets
- C. Estradiol patch
- D. Estradiol + levonorgestrel patch**



A 24 year old female who is 28 weeks gestation is in for a routine prenatal visit. Past medical history: allergic rhinitis. Vaccine: all childhood vaccines up to date. Labs: rubella titer (not detected)

- Case 9.1

What vaccine should you administer today?

## Case 9



- A 24 year old female who is 28 weeks gestation is in for a routine prenatal visit. Past medical history: allergic rhinitis. Vaccine: all childhood vaccines up to date. Labs: rubella titer (not detected)
- What vaccine should you administer today?
  - A. Intranasal influenza
  - B. Tdap**
  - C. HPV
  - D. MMR

## Time to Review &amp; Answer Questions?



A 29yo female is complaining of intolerable hot flashes, mood swings, and decreased libido. States her symptoms have improved with estrogen except her libido has worsened. She states her husband has been patient but she is tired of feeling this way. PMH: depression, TAH/BSO (3 mo ago due to delivery complication). Meds: Conjugated equine estrogens 0.9mg Qday, Citalopram 20mg Qday.



- Case 10.1

What is the best recommendation?

## Case 10



- A 29yo female is complaining of intolerable hot flashes, mood swings, and decreased libido. States her symptoms have improved with estrogen except her libido has worsened. She states her husband has been patient but she is tired of feeling this way. PMH: depression, TAH/BSO (3 mo ago due to delivery complication). Meds: Conjugated equine estrogens 0.9mg Qday, Citalopram 20mg Qday. What is the best recommendation?
  - A. Add medroxyprogesterone
  - B. Add testosterone**
  - C. Increase citalopram to 40mg
  - D. Increase conjugated equine estrogen to 1.25mg

A 24 year old female is having spotting 6 days after starting a new pill pack for the past 2 cycles. She has been on this product for 6 months. Past medical history includes acne and PCOS.



- Case 11.1

What is the best adjustment in her contraceptive?

## Case 11



- A 24 year old female is having spotting 6 days after starting a new pill pack for the past 2 cycles. She has been on this product for 6 months. Past medical history includes acne and PCOS.
- What is the best adjustment in her contraceptive?
- A. Increase estrogen activity**
  - B. Decrease estrogen activity
  - C. Increase progestin activity
  - D. Decrease progestin activity





A 62 yo female is complaining of vaginal dryness, itching, and painful intercourse despite trying vaginal lubricants. She tired of feeling like this. PMH: fibrocystic breast disease, DM, TAH/BSO (2 years ago). Meds: metformin, glipizide. Labs: LDL 98, TC 190, TG 138, HDL 52. A1c 7.8

■ Case 12.1

What is the best recommendation today?

## Case 12

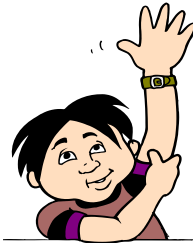


- A 62 yo female is complaining of vaginal dryness, itching, and painful intercourse. She tired of feeling like this. PMH: fibrocystic breast disease, DM, TAH/BSO (2 years ago). Meds: metformin, glipizide. Labs: LDL 98, TC 190, TG 138, HDL 52. A1c 7.8

What is the best recommendation today?

- A. Black cohosh
- B. Ethinyl estradiol tablets
- C. Estradiol and norethindrone patch
- D. 17 $\beta$  vaginal cream**

## Time to Review & Answer Questions?



A 35yo female who works at the hospital had a (+) PPD. She will be starting rifampin and INH for 9 months. She desires a hormonal contraceptive for cycle control and contraception. PMH: Endometriosis, Migraines. Meds: Naproxen 500mg BID prn pain, Propranolol ER 120mg Qday, Rizatriptan 10mg x1 prn migraines.

■ Case 13.1

What is the best recommendation today?

## Case 13



- A 35yo female who works at the hospital had a (+) PPD. She will be starting rifampin and INH for 9 months. She desires a hormonal contraceptive for cycle control and contraception. PMH: Endometriosis, Migraines. Meds: Naproxen 500mg BID prn pain, Propranolol ER 120mg Qday, Rizatriptan 10mg x1 prn migraines.

What is the best recommendation?

- A. Depot Medroxyprogesterone (Depo-Provera)**
- B. Etonogestrel (Implanon)
- C. Ethinyl Estradiol and Desogestrel (Mircette)
- D. Ethinyl Estradiol and Norelgestromin (Ortho-Evra)



A 39 year old female is requesting a hormonal contraceptive. Ht: 5'2" Wt: 155lb. Medications: fexofenadine 180mg Qday (forgets about 3x/wk). SH: (+) tob: 1 ppd, (-) illegal, (+) EtOH on the weekends. PMH: Allergic rhinitis, chlamydia (diagnosed today)

■ Case 14.1

What is the best recommendation today?

## Case 14



- A 39 year old female is requesting a hormonal contraceptive. Ht: 5'2" Wt: 155lb. Medications: fexofenadine 180mg Qday (forgets about 3x/wk).
- SH: (+) tob: 1 ppd, (-) illegal, (+) ETOH on the weekends. PMH: Allergic rhinitis, chlamydia (diagnosed today)

What is the best recommendation?

- A. Norethindrone (Miconor) tablet Qday
- B. Etonogestrel (Nexplanon)**
- C. Ethinyl Estradiol/Drospirenone (Yaz) tablet Qday
- D. Ethinyl Estradiol/Etonogestrel ring (NuvaRing) q3weeks



You recommend starting glyburide 5mg Qday in a 33yo female with new onset gestational DM patient with FBS averaging 99 (range 86-104). The resident is hesitant to use oral therapies in pregnancy.

Efflux activity: High, Molecular Weight: 300, Pregnancy category B

- Case 15.1

Which of the following could you use to help educate the resident about glyburide safety in pregnancy?

## Case 15



- You recommend starting glyburide 5mg Qday in a 33yo female with new onset gestational DM patient with FBS averaging 99 (range 86-104). The resident is hesitant to use oral therapies in pregnancy.
  - Efflux activity: High, Molecular Weight: 300, Pregnancy category B
- Which of the following could you use to help educate the resident about glyburide safety in pregnancy?

- A. High activity with placental efflux proteins**
- B. Low molecular weight
- C. Pregnancy category B
- D. Remains unionized in maternal serum



A 19yo female is calling because she forgot her Seasonique birth control pill the last 2 days. She is in her 2<sup>nd</sup> week of the pill pack. She is a Sunday starter. Last menstrual period lasted 4 days. PMH: amenorrhea.

- Case 16.1

What is the best recommendation for management?

## Case 16



- A 19yo female is calling because she forgot her Seasonique birth control pill the last 2 days. She is in her 2<sup>nd</sup> week of the pill pack. She is a Sunday starter. Last menstrual period lasted 4 days. PMH: amenorrhea. What is the best recommendation for management?

- A. Take the missed pills as soon as you remember.
- B. Take 2 pills today and 2 pills tomorrow
- C. Throw out missed pills, continue as usual, use back-up method x7 days**
- D. Continue pack until Sunday, throw out pack, start a new pack immediately, and use back-up method x 7 days



A 27yo female is 9 weeks gestation. She is in for her first prenatal visit. She is experiencing nausea constantly and vomits 1-2 times per day.

Today: 5'5" Wt: 144 lb, 122/70, P90

UA: Trace protein, otherwise normal

Pre-pregnancy: Wt: 143 lb, 120/68, P80

- Case 17.1

What is the best recommendation?

## Case 17



- A 27yo female is 9 weeks gestation. She is in for her first prenatal visit. She is experiencing nausea constantly and vomits 1-2 times per day.
- Today: 5'5" Wt: 144 lb, 122/70, P90  
UA: Trace protein, otherwise normal
- Pre-pregnancy: Wt: 143 lb, 120/68, P80

What is the best recommendation?

- A. Vitamin B6
- B. Metoclopramide**
- C. Emetrol
- D. Promethazine



A 23 yo female is here for 1<sup>st</sup> prenatal visit. States she feels good but tired. She has 3 servings milk/d, 1 serving cheese, and occ yogurt. PMH: epilepsy. Meds: Carbamazepine 200mg BID, Prenatal vitamin.

- Case 18.1

What additional therapy should you recommend today?

## Case 18



- A 23 yo female is here for 1<sup>st</sup> prenatal visit. States she feels good but tired. She has 3 servings milk/d, 1 serving cheese, and occ yogurt. PMH: epilepsy. Meds: Carbamazepine 200mg BID, Prenatal vitamin.

What additional therapy should you recommend today?

- A. Calcium and vitamin D
- B. Folic Acid**
- C. Iron
- D. Vitamin B12



A 30 year old G2P1 female (30 weeks) is here for a routine Ob visit. She complains of right lower calf erythema, warmth, pain, and edema. The physician suspects a DVT and is sending her for further testing but wants to know what therapy to prescribe if it is a DVT. PMH: factor V Leiden deficiency. Meds: prenatal vitamin. Ht: 5'4" Today's Weight: 150lb (68.4kg). Pre-Pregnancy Weight: 135lb (61.4kg)

- Case 19.1

Please select and recommend the most appropriate therapy.

## Case 19



- A 30 year old G2P1 female (30 weeks) is here for a routine Ob visit. She complains of right lower calf erythema, warmth, pain, and edema. The physician suspects a DVT and is sending her for further testing but wants to know what therapy to prescribe if it is a DVT. PMH: factor V Leiden deficiency. Meds: prenatal vitamin. Ht: 5'4" Today's Weight: 150lb (68.4kg). Pre-Pregnancy Weight: 135lb (61.4kg) Please select and recommend the most appropriate therapy.

- A. Heparin 5000 units BID
- B. Enoxaparin 70mg BID**
- C. Enoxaparin 60mg BID
- D. Warfarin 5mg Qday



A 30yo female is here for pre-conception evaluation. PMH: nonsignificant. Vaccines: Tdap (1/2011), Hep A vaccine (5/2005)  
Labs: rubella (non-reactive),  
Hbs Ag (-), anti-HBc (-), anti-HBs (+),  
HIV (-)  
Meds: prenatal vitamin Qday

- Case 20.1

What vaccine should you administer prior to conception?

## Case 20



- A 30yo female is here for pre-conception evaluation.  
PMH: nonsignificant. Vaccines: Tdap (1/2011), Hep A vaccine (5/2005)
- Labs: rubella (non-reactive),
- Hbs Ag (-), anti-HBc (-), anti-HBs (+),
- HIV (-)
- Meds: prenatal vitamin Qday

What vaccine should you administer prior to conception?

- A. Tdap
- B. Hep B
- C. HPV
- D. MMR**

