

**Family PACT**  
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# Contraception in Women with Chronic Medical Conditions

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Sponsored by  
 California Department of Public Health,  
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## Contraceptive Risk Analysis

- Define the risk of pregnancy
- Define the risk of the method
  - The intrinsic safety risks of the method
  - That the method will make the disease worse
  - That the method won't work
  - That the patient will not use the method effectively
  - That the patient will not use EC or abortion as a backup

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## WHO Medical Eligibility Criteria

- Unique contributions
  - Evidence based
  - Comprehensive, up-to-date
  - Only “accepted” guideline of its kind
- Considerations for use in US
  - WHO Criteria were written to include “lowest common denominator” health systems
  - Conservative for use in the US
  - Consider as “tools not rules”

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- WHO Medical Eligibility Criteria (MEC) for Contraceptive Use (Third edition – 2004)
  - [http://www.who.int/reproductive-health/publications/MEC\\_3/index.htm](http://www.who.int/reproductive-health/publications/MEC_3/index.htm)
- WHO Selected Practice Recommendations for Contraceptive use (Second edition – 2004)
  - <http://www.who.int/reproductive-health/publications/spr/index.htm>
- OR
  - [www.familypact.org](http://www.familypact.org)
  - General/ Links

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## WHO Medical Eligibility Criteria

- **Combined hormonal contraceptives (CHC)**
  - COC: Combined oral contraceptives
  - CIC: Combined injectable contraceptives
  - P/R: Patch and Vaginal Ring
- **Progestin only contraceptives**
  - POP: Progestin only pills
  - DMPA: Depo-MPA (DepoProvera)
  - LNG/ETG: Implanon contraceptive implant
- **Intrauterine contraceptives**
  - Cu-IUD: ParaGard IUD
  - LNG-IUD: Mirena IUS

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## WHO Medical Eligibility Criteria

- WHO-1:** no restriction in contraceptive use
- WHO-2:** advantages generally outweigh theoretical or proven risks
  - If chosen, more than usual follow-up needed
- WHO-3:** theoretical or proven risks outweigh advantages of the method
  - Clinical judgment that this patient can safely use
- WHO-4:** Condition represents an unacceptable health risk if the method is used

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**2004 WHO Medical Eligibility Criteria**

- Consider the Patch and Ring to be “systemic” combined hormonal contraceptives (with Lunelle); not equivalent to OCs
- Risk categorization same as with OCs
  - “Assigned categories should be considered a preliminary ‘best judgment’ which will be re-evaluated as new data becomes available”

**Is there a Need for “Routine” Screening of Hormonal Contraceptive Users?**

- 2004 WHO Selected Practice Recommendations for Contraceptive Use
- Blood pressure measurement before initiation of
  - COC, P/R, POP, DMPA, and implants
- *Not recommended* as “contributing substantially to safe and effective use of contraceptive method”
  - Breast or genital tract examination
  - Cervical cancer screening
  - STI assessment or lab test screening
  - Hemoglobin determination
  - Other routine lab tests

**Medical Conditions Reviewed**

- Venous thrombosis
- (Arterial) ASCVD
  - Hypertension
  - Hyperlipidemia
  - Diabetes
  - Coronary heart disease
- Neurological conditions
  - Stroke
  - Headache
  - Seizure disorders

**Case Study: History of Deep Vein Thrombosis**

- 24 year old G<sub>1</sub>P<sub>0</sub> woman presents with a request for either the Pill or the Patch
- History of deep vein thrombosis in her right calf at 18 years old
- Hospitalized for 1 week: had “shots” for 5 days; then switched to “pills” for 3 months
- Mother “had a blood clot go to her lungs” during pregnancy
- Healthy non-smoker; stable relationship; intercourse once or twice a week

**Risk Factors for DVT and VTE**

- Age (especially >40 years old)
- Pregnancy, post-partum period (< 3-4 weeks)
- Obesity
- Immobilization with venous stasis
- Personal history of DVT or VTE
- Family history (inherited clotting disorder)
  - Factor V Leiden mutation (Protein C resistance)
  - Protein S, Protein C deficiency

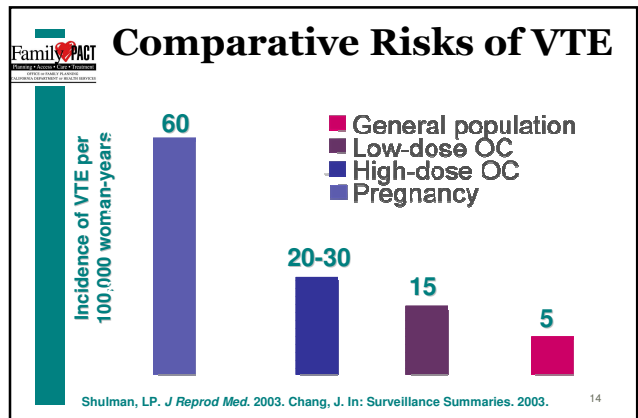
**Venous Thrombosis and CHC**

- Dynamic balance between blood coagulation (clotting) and fibrinolysis (clot breakdown)
- Estrogen-containing CHC methods
  - Increase pro-coagulation factors (V, VIII, X)
  - Decrease anticoagulant factors (protein C, S, antithrombin III)
  - Fibrinolysis activated; increase in profibrinolysins and a decrease in antifibrinolysins
  - The effect is analogous to revving the engine of a car and applying the brakes at the same time
- VTE in OC users is due to failure of mechanisms that maintain necessary balance in the system<sup>2</sup>

**Venous Thrombosis and CHC**

- ▲ DVT rates with increasing dose of estrogen
- OC and OrthoEvra have similar DVT risk (Jick, 2006)
  - NGM OCs: 4.2/10,000 women/year
  - OrthoEvra: 5.3/10,000 women/year
  - Age-adj RR: 1.1 (95% CI: 0.7-1.8)
- DVT risk declines with increasing duration of use
- Progestin type, dose have no (or minimal) impact
- No attributable risk of fatal PTE in OC users
- Smoking, HTN, hypercholesterolemia, and diabetes not risk factors for venous disease

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**Prior Venous Thrombosis and CHC**

*Conventional wisdom*

- If a woman has a history an idiopathic or post-partum DVT or VTE, she may be predisposed to recurrence if given exogenous estrogen
  - Hence, avoid E- containing contraceptives
- If the DVT was related to another condition (e.g., immobilization, trauma), without a history of recurrence, E-containing contraceptives may be considered

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**Venous Thrombosis and CHC**

*Factor V Leiden mutation, DVT risk, and OCs*

- Individuals with the FVLM have activated Protein C resistance and hypercoagulability
- Present in 70-90% of inherited thrombophilias
  - 20-40% of patients having a first DVT
  - 50% of those with > 1 episode of DVT
- Present in 1-5% of US population; 5% of Europeans; up to 15% of Scandinavians
- OC users with FVLM who use have a 30- fold increased risk of DVT (Lancet 1994:344:1453)

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**Venous Thrombosis and CHC**

- Best indicator of inherited clotting disorders is personal or close family history of DVT
- If *no* personal or family history of DVT, tests for (low) AT III, proteins C and S are unlikely to be positive and are poor predictors of DVT
- If personal or family history of DVT and considering CHC use or pregnancy, best screening test is an activated Protein C (\$100)
  - If abnormal, follow with PCR test for the Leiden mutation

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**Venous Thrombosis and CHC**

- Superficial varicose veins *do not* increase the risk of DVT or VTE, regardless method
- Women who are about to undergo *major* surgery should discontinue OC's 30 days before the procedure is scheduled
- Not necessary to interrupt OC's before short operative procedures with early physical activity

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**WHO MEC 2004:  
Venous Thrombosis**

- Known thrombogenic mutation (or)
- Past thromboembolic disorder
  - WHO- 4: COC, P/R
  - WHO-2: POP, DMPA, LNG/ETG, LNG-IUD
  - WHO-1: Cu-IUD
- Varicose veins: all methods are WHO-1
- Superficial thrombophlebitis
  - WHO-2: OC, P/R
  - WHO-1: all others

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**Venous Thrombosis and  
Contraception: Management**

- Combined Hormonal Contraceptives
  - OCs: use lowest dose of ethinyl estradiol (20 ug)
  - Patch: systemic uptake of EE → no liver first pass (good), but higher EE exposure than OC (bad)
  - Ring: systemic uptake of EE + low EE exposure
- Progestin only methods and IUCs do not increase risk of venous thrombosis and are a safe and effective choice

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**Arterial Disease and  
Contraceptives**

- Steps in atherosclerotic CV disease (ASCVD)
  - Development of an atheroma (plaque)
  - Plaque rupture; platelet aggregation
  - Thrombosis (clot) develops at site of rupture
  - Blocked coronary artery: myocardial infarction
  - Blocked cerebral artery: thrombotic stroke
- Estrogen contained in CHC predisposes *some* women to arterial thrombosis
- Studies show that MI in OC users is related to
  - Pre-existing ASCVD *and*
  - ▲ estrogen doses

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**Cardiovascular Risk Factors**

- Independent risk factors for ASCVD
  - Advanced reproductive age (35 or older)
  - Smoking >15 cigarettes per day
  - Chronic hypertension
  - Diabetes
  - Hyperlipidemia
- Cardiovascular risk is *multifactorial*
  - Larger the *number* of risk factors
  - Greater *severity* of each risk factor
- As risk factors increase in number or severity, a woman becomes a *less appropriate CHC candidate*

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**Completing the  
CV Risk Profile**

Condition	Screening test	If initial test is negative, repeat
Hypertension	Cholesterol FBG	Every 3 years
Diabetes	Cholesterol	Yearly
Hyper-cholesterolemia	FBG	Every 3 years
Age ≥ 45 years old	Cholesterol FBG	As indicated for health screening

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**Case Study:  
Chronic Hypertension**

- 38 year old G<sub>4</sub>P<sub>4</sub> woman with 2 year history of mild chronic hypertension
- Chronic hypertension discovered at last pregnancy
- Hypertension under fairly good control with diet management and a diuretic
- Considering surgical sterilization, but not yet sure of decision

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**Hypertension and Contraception**

- Clinical issues
  - OCs increase BP to a small degree in most women; significantly in about 5% of OC users
  - Women with hypertension may have developed arterial wall damage
  - Estrogen increases risk of thrombosis at site of atheroma
- Progestin only contraceptives
  - Don't affect BP (normotensive or HTN)
  - Not associated with arterial thrombosis (MI, CVA)

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**WHO MEC 2004: Hypertension**

- Any hypertension + clinical vascular disease (or)
- Controlled HTN + smoke >15 cigarettes /day
  - WHO-4: COC, P/R
  - WHO-3: DMPA
- Controlled moderate hypertension (S ≥160 or D ≥ 100)
  - WHO-4: COC, P/R
  - WHO-3: DMPA
- Controlled mild hypertension (S=140-159 or D=90-99)
  - WHO-3: COC, P/R
  - WHO-2: DMPA

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**HTN and Contraception: Management**

- In *all* new start users of OCs, re-evaluate BP 3 months after initiation (P/R: no data or recommendation)
- Controlled hypertensive patients using CHC
  - Evaluate CV risk profile
  - Use low estrogen effect product
  - Monitor BP after method initiation; if HTN worsens, discontinue
  - If possible, co-manage with primary care provider
- Progestin only methods and IUCs do not increase risk of either BP elevation or arterial thrombosis

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**Case Study: Hyperlipidemia**

- 35 year old G<sub>2</sub>P<sub>2</sub> woman with history of familial hyperlipidemia
- Father had a heart attack at 52: she was advised to have a cholesterol checked
- Total cholesterol: 285 mg/dl  
HDL = 38 mg/dl and LDL = 180 mg/dl
- She does not want surgical sterilization and desires a reversible method of contraception

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**Hyperlipidemia and Contraception**

- Mechanisms
  - Dyslipidemia contributes to arterial wall atheroma
  - Estrogen increases risk of arterial thrombosis
- Do CHC worsen the effect lipids on vessels?
  - Low dose OCs have minimal effect on HDL, LDL
  - In primates given high-cholesterol diet
    - Progestin alone decreases HDL and accelerates vessel narrowing
    - E + P lowers HDL, but less vessel narrowing because of protective effect of estrogen

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**WHO MEC 2004: Hyperlipidemia**

- Known hyperlipidemias
  - WHO 2/3: OC, P/R
  - WHO-2: all others
  - WHO-1: Cu-IUD
- Highest ASCVD risk associated with
  - Total cholesterol > 300 mg/dl
  - LDL >190 mg/dl
  - Triglycerides > 250 mg/dl

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**Hyperlipidemia and Contraception: Management**

- Combined hormonal contraceptives
  - Evaluate CV risk profile
  - Use low estrogen effect product
  - Re-evaluate lipids 3 months after CHC initiation
  - If possible, co-manage with primary care provider
- Progestin only methods
  - May cause lipid changes (▼HDL, ▲LDL), but most likely small and clinically insignificant
  - Do not increase risk of arterial thrombosis
- IUCs are safe and effective choice

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**Case Study: Diabetes Mellitus**

- 33 year old G<sub>3</sub>P<sub>3</sub> woman with gestational diabetes diagnosed in 2nd pregnancy
- No insulin between 2nd and 3rd pregnancies, required insulin during third pregnancy, which ended 2 years ago
- Uses glyburide for diabetes; considering switch to insulin due to poor control
- Would like to use a hormonal method of contraception, if possible

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**Diabetes and Contraception**

- Progestins may increase insulin resistance, but not usually to the point of clinically significant ↑ blood glucose
- Estrogen increases risk of thrombosis in vessels damaged by diabetic vascular disease
- CHC may be used in diabetics in the *absence* of clinically-manifest vascular disease, including
  - Retinopathy, nephropathy
  - Peripheral vascular disease, heart disease

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**Gestational Diabetes and Contraception**

- Older studies showed that OC may hasten insulin dependence; newer studies do not
- If GDM, ADA and ACOG recommend
  - 2 hour PGL (75 gm) 6 weeks postpartum
  - Given >50% of DM in next 10 years, have annual diabetes screening, irrespective of contraceptive method
- GDMs who become frankly diabetic may continue OC's

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**WHO MEC 2004: Diabetes**

- History of gestational diabetes: all are WHO-1
- DM *without* vascular disease (± insulin)
  - WHO-1: Cu-IUD
  - WHO-2: All others
- DM *with* vascular disease or DM > 20 years
  - WHO-3: OC, P/R, DMPA
  - WHO-2: POP, LNG/ETG, LNG-IUD
  - WHO-1: Cu-IUD

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**Diabetes and Contraception: Management**

- Adjust insulin or oral hypoglycemic as necessary
- Combined hormonal contraceptives
  - Evaluate CV risk profile
  - Use low E (thrombosis) + low P (glucose control)
  - If possible, co-manage with primary care provider
- Progestin only methods
  - May cause insulin resistance and ↑ blood glucose, but most likely small and clinically insignificant
  - Do not increase risk of arterial thrombosis
- IUCs are safe and effective choice

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**Case Study:  
History of Heart Disease**

- 42 year old G<sub>3</sub>P<sub>3</sub> referred to you by internal medicine physician
- Episode of acute chest pain one year ago; admitted to rule-out a MI
- Non-invasive tests equivocal
- Coronary angiography= 50% occlusion in two vessels. No CABG or PTCA done
- She has no complaint of angina currently

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**WHO MEC 2004:  
Coronary Heart Disease**

Current and history of ischemic heart disease

- **WHO-4: COC, P/R**
- **WHO-3: DMPA**  
POP, LNG/ETG continuation
- **WHO-2: LNG-IUD;**  
POP, LNG/ETG initiation
- **WHO-1: Cu-IUD**

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**Case Study:  
History of Stroke**

- 35 year old Latina woman G<sub>2</sub> P<sub>2</sub> seeks DMPA
- She is 6 months post-partum after uncomplicated NSVD
- History of “stroke” which occurred in Guatemala when she was 20 years old
- Slow to regain use of right arm; slight residual weakness
- Was advised not to take OCs in the future

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**Stroke (CVA)  
and Contraception**

- “Stroke” does not suggest actual cause
  - Thrombotic (ischemic) stroke
  - AVM or aneurysm (hemorrhagic stroke)
  - Cocaine induced arteriospasm
  - Infectious meningitis
- Stroke risk factors
  - HTN, smoking, diabetes, ▲body weight
  - Migraine headache with aura, focal neuro signs
- **Thrombotic stroke** (but not other CVA types) is associated with estrogen dose, but not progestin

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**WHO MEC 2004: Stroke**

History of thrombotic stroke

- **WHO-4: COC, P/R**
- **WHO-3: DMPA**  
POP, LNG/ETG continuation
- **WHO-2: LNG-IUD;**  
POP, LNG/ETG initiation
- **WHO-1: Cu-IUD**

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**Stroke and Contraception:  
Management**

- Document of thrombotic stroke vs. other types
- Combined hormonal contraceptives
  - Evaluate CV risk profile
  - Use low estrogen effect product
  - Co-manage with PCP, neurologist, or neurosurgeon
- Progestin only methods
  - DMPA may reduce seizure frequency
  - Does not increase risk of arterial thrombosis
- IUCs are safe and effective choice

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**Case Study: Headaches**

- Ms. K is a married 22 year old G3 Po TAB3 woman who requests OCs
- Her first two pregnancies were at 17 and 19 years old and occurred while using condoms
- States that she had experienced occasional "sick headaches" over the past 9 months, and mentioned that two episodes had been so severe that she had to go home from work

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**Headaches and Contraception**

- Most common headache is a tension headache
  - Muscle tightening and pain in neck, scalp
  - Improved with sleep, analgesics, relaxation
  - No interaction with hormones
- Migraine headaches
  - Common symptoms are nausea, vomiting, sonophobia, photophobia, visual spots/ flashing
- Pre-migraine *aura*: increased risk of stroke
  - Occurs 6-60 minutes before headache
  - Flickering zig-zag line moves toward periphery
  - Scotomata (loss of vision)

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**Migraine Headache**

- **Classic** migraine headaches
  - Aura, *before* onset of migraine headache
  - Transient hemianopsia (unilateral loss of vision)
  - Unilateral paresthesias (sensory defects)
  - Hemiparesis (weakness or paralysis)
  - Aphasia (speech defects)
- **Common** (or simple) migraine headaches
  - Typical migraines **without** aura or neurologic symptoms

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**WHO MEC 2004: Headaches**

- Non-migrainous headaches
  - WHO-1: all methods
- Migraines, < 35 years old, *no* aura or neuro symptoms
  - WHO 2: COC, P/R, progestin only methods
  - WHO 1: POP, Cu-IUC
- Migraines, ≥ 35 years old, *no* aura or neuro symptoms
  - WHO-3: COC, P/R
  - WHO-2: All others
  - WHO-1: POP, Cu-IUC

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**WHO MEC 2004: Headaches**

- Migraines, *with aura* or neurologic symptoms
  - WHO-4: COC, P/R (at any age)
  - WHO-2: POP, DMPA, LNG-IUD
  - WHO-1: Cu-IUD

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**Headaches and Contraception: Management**

- Differentiate migraine from non-migraine headaches; obtain neurologist consultation if necessary
- If catamenial (menstrual) headaches, suggest OCs or NuvaRing in extended regimen
- CHC in women with common migraines
  - Use low estrogen effect product
  - Recommend frequent follow-up visits
  - If HA worsening frequency or severity, or new neurological symptoms, CHC must be discontinued
- Progestin-only methods, IUC are safe and effective

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### Case Study: Seizure Disorder

- 24 year old G<sub>1</sub> P<sub>0</sub> TAB<sub>1</sub> has a history of seizures since 15 years old
- Maintained on phenytoin and carbamazepine
- Last seizure was 3 years ago; last visit to neurologist was 2 years ago
- Previously told that “OCs would not work” for her and that she should not use them
- Now in college and is highly motivated to prevent unintended pregnancy

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### Seizure Disorders

- Goals in contraceptive management of women with seizure disorders
  - Seizure control with anti-epileptic drugs (AEDs)
  - Highly effective contraception, as exposure to some AEDs is associated with congenital anomalies
  - Minimize interaction of AEDs and contraceptive
- Most women will have no change in the frequency or severity of seizure activity due to hormonal contraceptives

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### Secondary Metabolism of Steroid Drugs

CYP-450: Cytochrome P-450  
E-I drug: enzyme-inducing drug

- Induction of liver enzymes within 2 days
- Maximal effect in 1 week
- Return to normal 4 weeks after stopping

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### AEDs: Non Inducers of Hepatic Enzymes

Generic name	Brand name
Ethosuximide	Zarontin
Levetiracetam	Keppra
Tiagabine	Gabitril
Valproic acid	Depakene, Depakote
Vigabatrin	Sabril
Zonisamide	Zonegran
Clonazepam	Klonopin
Pregabalin	Lyrica

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### Enzyme Inducing Anti-Epileptic Drugs (AEDs)

Drug	Brand name	E reduction	P reduction
Carbamazepine	Tegretol ®	42%	58%
Felbamate	Felbatol ®	13%	42%
Lamotrigine	Lamictal ®	None	19%
Oxcarbazine	Trileptal®	48%	32%
Phenobarbital	generic	64-72%	None
Phenytoin	Dilantin ®	49%	42%
Topiramate	Topamax ®	15-33%	None

Thornycroft I, Epilepsy and Behavior 2006;9:31

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### Management of Women Using EI-AEDs

- Ideal contraceptives
  - IUCs (Mirena, ParaGard)
  - DMPA: high efficacy; improves seizure control
    - Unknown if DP-104 reduces seizure activity
- Oral contraceptives...non-evidence based
  - Use at least 35 mcg EE + high progestin product
  - Shorten hormone free interval to 4 days or less
- Avoid “low progestin” contraceptives
  - OrthoEvra patch; progestin only pills

Thornycroft I, Epilepsy and Behavior 2006;9:31

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## 2004 WHO Medical Eligibility Criteria

Drug	OC	P/R	POP	DMPA	Implant	C-IUC	LN-IUC
Rifampin (E-I)	3	2	3	2	3	1	1
E-I Anticonvulsants	3	2	3	2	3	1	1
Griseofulvin	2	1	2	1	2	1	1
Other antibiotics	3	3	3	3	3	3	3
Anti-retrovirals	2	2	2	2	2	I 2/3	C 2/3

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## Case Study: Woman with a History of Depression

- 28 year old G<sub>0</sub> P<sub>0</sub> woman using 20 ug EE monophasic OC for 2 years; no problems
- Feeling sad over the past 3 months, so tried St John's Wort tablets with no effect
- Her family medicine clinician recommended that she try fluoxetine (Prozac)
- Is the Pill making her depression worse?
- Will anti-depressants reduce OC efficacy?

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## Do Hormonal Contraceptives Cause or Worsen Depression?

- Older studies suggested that progestins *could*
  - Make pre-existing depression worse
  - Cause depression in a small % of users
  - “More likely” with progestin-only methods
- Newer (and better) studies show that *none* of these assertions is correct
- 2004 WHO Medical Eligibility Criteria
  - In depressed women, *all* methods are categorized as “WHO 1”

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## St John's Wort and OC Use

- St John's Wort widely used for depression
- Many studies show induction of CYP450 (3A4)
  - “Comparable to rifampin and carbamazepine when given for ≥10 days” (Markowitz, NEJM 2003)

### • Studies of SJW in OC users

Study	Hormone level	ovulation	Follicle growth
Hall 2003	P E ▼	no	NA
Pfrunder 2003	P ▼42%	no	no
Murphy 2006	P ▼15%	probable 38%	yes

- “Caution patients that OC effectiveness may be reduced”

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## OCs and Treatment of Depression and Bipolar Disorder

- **Depression**
  - Possible effect: St John's Wort
  - No effect
    - SSRIs (fluoxetine), SNRIs (venlafaxine)
    - Tricyclics (imipramine, amitryptaline)
- **Bipolar Disorder**
  - Enzyme-inducing anti-epileptic drugs
    - Carbamazepine, Oxcarbazine, Lamotrigine, Topiramate
  - No effect
    - Lithium, Aripiprazole (Abilify), Valproate

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## Case Study: Developmentally Delayed Woman

- 22 year old G<sub>0</sub> P<sub>0</sub> woman lives in group home; has profound developmental delay
- Has monthly menses with mild dysmenorrhea
- Has developed relationship with “boyfriend” in group home; found in bed together
- Very combative with prior attempts at pelvic exam

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**Contraception In The Developmentally Delayed**

- Limited access to contraceptive care
- Limited assessment of nature of sexual activity
- Limited by difficulties with patient consent
- Limited ability to use methods effectively

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**Contraception In The Developmentally Delayed**

- Preferred
  - LN-IUC is ideal (reduced menses)
  - Cu-IUC
  - Implant
  - Sterilization, if desired by pt and able to consent
- Acceptable
  - OCs, Patch, POP
  - DMPA
- Avoid
  - Vaginal ring, barriers, natural family planning

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**Case Study: Liver Disease**

- 24 year old G<sub>2</sub> P<sub>0</sub> TAB<sub>2</sub> woman would like to use “the Pill” or OrthoEVRA patch
- Previous history of IV drug use, but now clean
- Has 4 or 5 sexual partners per year
- Tested positive for hepatitis B virus (HBsAg+), 2 years ago; liver enzymes are mildly elevated
- Tested negative for hepatitis C and HIV
- Occasional drinker; no longer smokes

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**WHO MEC 2004: Liver Disease**

- Hepatitis carrier: all methods are WHO-1
- Mild cirrhosis: CHC-3; others-2, Cu IUD-1
- Severe cirrhosis, or
- Active hepatitis, or
- Benign liver tumor (adenoma), or
- Malignant liver tumor (hepatoma)
  - WHO-4: OC, P/R
  - WHO-3: all others
  - WHO-1: Cu IUC

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**Liver Disease and Contraception: Management**


- Few studies of CHC and liver disease
- Combined hormonal contraceptives
  - Determine the specific diagnosis
    - If cholestatic jaundice in pregnancy, avoid OCs
  - Order/review liver function tests
  - If no/ minimal ▲: OK to start; repeat LFTs in 2-3 mo
- Progestin only methods have no effect on liver disease
- IUCs are safe and effective choice

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**Case Study: Breast Mass in OC User**


- 41 year old G<sub>2</sub>P<sub>2</sub> lawyer using OC's for 9 years
- Regular withdrawal bleeds; wants to continue
- Past history is unremarkable
- Breasts nodular; 3 x 3 cm "prominence" R-UOQ
  - No fixation; no nipple discharge
- At breast clinic, told that biopsy not needed
  - Plan to "observe" over the next 3 months
  - "Up to the gynecologist" to decide whether to continue on OC's

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 **WHO MEC 2004: Breast Disease**


- Benign breast disease (or)
  - Family history of breast cancer
    - All methods are WHO-1
- Undiagnosed breast mass
  - WHO-2: COC, P/R, POP, DMPA, LN-IUD, LNG/ETG
  - WHO-1: Cu-IUD
- Past breast cancer and NED for  $\geq 5$  years
  - WHO-3: COC, P/R, POP, DMPA, LN-IUD, LNG/ETG
  - WHO-1: Cu-IUD
- Breast cancer treatment within 5 years
  - WHO-1: Cu-IUD; **all others are WHO-4**

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 **Breast Conditions and Contraception**

- OCs are an effective treatment of cyclic mastadynia and prevents breast cysts (advise extended regimen)
- Women with (biopsy-proven) fibroademoma may use hormonal contraceptive methods
- CHC users with abnormal breast findings
  - Guidelines recommend continuation of CHC until diagnosis is made; inform client of risks/benefits
  - Non-suspicious findings: plan follow-up exam
  - Suspicious findings: specialist referral for diagnostic mammogram *and* FNAC

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- All participants that return an evaluation form will receive a Certificate of Participation
- Those requesting CE credit must return evaluation and CE form-indicate CE requesting

**Complete forms and fax to 213 368-4410**

**Thank you for your participation!**

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