

## CONTRACEPTION FOR WOMEN WITH CHRONIC MEDICAL CONDITIONS

The Family PACT Program encourages the use of the World Health Organization (WHO) *Medical Eligibility Criteria for Initiating Contraceptive Methods*, an evidence-based guideline that offers recommendations for four risk levels, based upon a matrix of 34 medical conditions and six types of contraceptive methods (attached). The risk levels are defined as:

- WHO-1.** A condition for which there is no restriction for the use of the contraceptive method. *Use the method in any circumstances.*
- WHO-2.** A condition where the advantages of using the method generally outweigh the theoretical or proven risks. *Generally use the method.*
- WHO-3.** A condition where the theoretical or proven risks usually outweigh the advantages of using the method. *Use of the method is usually not recommended unless other more appropriate methods are not available or not acceptable.*
- WHO-4.** A condition which represents an unacceptable health risk if the contraceptive method is used. *The method is not to be used.*

### KEY POINTS

- In women with chronic medical conditions, the medical risks of pregnancy almost always outweigh the risks of contraceptive use.
- Women who use estrogen-containing combined hormonal contraceptives (oral contraceptives [OCs], Patch, Ring) and who have underlying cardiovascular disease (CVD) have an increased risk of heart attack and stroke. The development of CVD is multifactorial, and a woman's risk of CVD increases with a greater number of risk factors and an increasing severity of each risk factor. CVD risk factors include increasing age (especially over 35 years old), cigarette smoking, hypertension, diabetes, and abnormal lipid levels (increased triglycerides and low-density lipoprotein [LDL] cholesterol and decreased high-density lipoprotein [HDL] cholesterol).

## QUESTIONS AND ANSWERS

### Are any routine screening tests recommended before the initiation of hormonal contraceptives?

- According to WHO guidelines (and Family PACT Standards), a blood pressure check is the only routine screening test necessary for a woman initiating a hormonal contraceptive method. If the method is continued, Family PACT Standards also require a blood pressure measurement at least every two years thereafter.
- Women aged 40 years old or older or those with mild hypertension (see KEY POINTS, above) also should be evaluated for type 2 diabetes (with a fasting plasma glucose test) and hyperlipidemia (with a total cholesterol level or lipid profile).

### Can a combined hormonal contraceptive be used in women with a history of deep vein thrombosis or pulmonary embolism (venous thromboembolic events [VTE])?

In addition to estrogen-induced thrombosis, risk factors for VTE include obesity, advanced age, prolonged immobilization, and inherited coagulopathy, such as the Factor V Leiden mutation.

- Women with a known inherited coagulopathy or a personal history of an idiopathic or post-partum VTE must not use a combined hormonal contraceptive (WHO-4). Both intrauterine contraception (IUC) devices and progestin-only methods are safe.
- Women with a first degree family member with a history of VTE or a known inherited coagulopathy (e.g., Factor V Leiden, Protein S, Protein C deficiency) should be advised to undergo hematologic evaluation for inherited coagulopathy.
- Women with varicose veins or a history of superficial thrombophlebitis may use all hormonal methods.

### If a patient requires anticoagulation after a previous VTE, what methods of contraception can she use?

- If lab studies document that she is adequately treated with the anticoagulant drug being used, she can use any hormonal contraceptive method.
- Both the IUCs are acceptable methods, but the Levonorgestrel IUC is preferred due to the potential for increased bleeding with Copper IUC (Cu-IUC).

### Can a woman with treated hypertension use combined hormonal contraceptives?

- Women with controlled hypertension (systolic <159 / diastolic <99 ) without vascular disease or other CVD risk factors may be offered combined hormonal contraceptives (WHO-3), but blood pressure must be followed closely after method initiation. Hypertensive smokers, those with vascular disease, or women with poorly controlled hypertension (systolic >160 / diastolic >100) are considered to be WHO-4 in regard to combined hormonal contraceptives.

### Can I give combined hormonal contraception to a woman with a history of gestational hypertension? If starting pills, how often does she need follow-up?

- When current blood pressure is normal, combined hormonal methods are WHO-2. A follow-up blood pressure check in two months is recommended to ensure that hypertension does not develop as a result of method initiation.

### What methods can be used for women with type 2 diabetes or those with a history of gestational diabetes (GDM)?

- In diabetic women *WITH* vascular disease (i.e., retinopathy, nephropathy, peripheral vascular disease, heart disease) or diabetes >20 years duration, IUCs or progestin-only methods are preferred, while combined hormonal contraceptives are WHO-3.
- In diabetics *WITHOUT* vascular disease, all methods are considered to be safe whether or not the woman uses insulin.
- In women with a history of GDM, all methods are WHO-1. All women with gestational diabetes should be screened at six weeks postpartum with a 75gm, two-hour post-glucose load test to evaluate her for type 2 diabetes; if normal, repeat every two years.

## QUESTIONS AND ANSWERS (CONTINUED)

### Which methods are best in women who have a seizure disorder?

- DepoProvera (DMPA) is an ideal choice because of its low failure rate, lack of interaction with **any** anti-seizure medication, and because using DMPA may reduce the number of seizure episodes. Either of the IUCs also are excellent choices as they would not be expected to interact with anti-seizure drugs.
- Women who use a combination of certain enzyme inducing anti-seizure drugs and some hormonal contraceptives may have a significant reduction in blood level of progestin (and, in some cases, estrogen), enough to allow follicle development and ovulation. Drugs in this category include phenobarbital, phenytoin (Dilantin<sup>®</sup>), carbamazepine (Tegretol<sup>®</sup>), felbamate (Felbatol<sup>®</sup>), lamotrigine (Lamictal<sup>®</sup>), oxcarbazine (Trileptal<sup>®</sup>), and topiramate (Topamax<sup>®</sup>). Combined hormonal contraceptives, progestin-only pills, and progestin implants (Implanon<sup>®</sup>) are all categorized as WHO-3 in women who use these anticonvulsant drugs.
- If a woman who uses a listed anti-seizure medication insists upon using OCs, prescribe a product with a relatively higher progestin dose and at least 35mcg of ethinyl estradiol, cycled as an extended regimen with a short (three to four day) hormone free interval.

### Can women with migraine headaches use combined hormonal contraceptives?

- A critical issue is whether the woman experiences an *aura* before the onset of her headache. Pre-migraine auras begin within 60 minutes of headache onset and can consist of a flickering zigzag lines that moves toward periphery of the visual field, scotomata (blind spots) or intermittent loss of vision.
- All forms of contraception are acceptable in clients with any headache type, including simple migraine, EXCEPT those with aura or who are over 35 years old. In women who have migraines with aura, regardless of age, combined hormonal contraceptives are WHO-4.
- If a woman is older than 35 and has migraines without aura, all methods are acceptable *except* combined hormonal contraceptives, which are WHO-3.

### What methods can be used in women with a past history of breast cancer?

- For patients with a history of breast cancer treatment within five years, the Cu-IUC is WHO-1, but all other reversible methods are WHO-4.
- For patients with a history breast cancer and who have no evidence of recurrent breast cancer for more than five years, the Cu-IUC is WHO-1 and all other methods are a WHO-3.
- Key point: If a patient declines Cu-IUC or condoms, the levels of estrogen and progesterone from pregnancy would be much higher than the levels from all hormonal methods that are WHO-3.

### Can women with benign breast conditions (such as a fibroadenoma or fibrocystic change) or a family history of breast cancer use combined hormonal birth control?

- All methods are WHO-1. A woman with an undiagnosed breast mass may remain on any hormonal method during her medical evaluation (all are WHO-2), as the risk of pregnancy outweighs the risk of hormones should breast cancer be confirmed.

### What is the best contraceptive method for a woman with sickle cell anemia?

- While all methods are considered to be safe (WHO-1 or -2), DMPA may be the best choice, as it may decrease the likelihood of painful sickle cell crises.

### Can a woman with fibroids use a hormonal method of contraception?

- All hormonal methods of contraception are categorized as WHO-1 in women with fibroids. In women with distortion of the uterine cavity, use of both IUCs are classified as WHO-4.

### When is liver disease a problem?

- In a woman who is an asymptomatic hepatitis virus carrier, all methods are WHO-1.
- If she has severe cirrhosis, active hepatitis, a history of a benign liver tumor (adenoma) or a malignant liver tumor (hepatoma), or a history of cholestatic jaundice in pregnancy, combined hormonal contraceptives are classified as WHO-4, the Cu-IUC is considered to be WHO-1, and all other methods are classified as WHO-3.

## PROGRAM POLICY

This Alert provides an interpretation of the Family PACT Standards regarding care of adolescent clients: Providers should refer to the Family PACT *Policies, Procedures, and Billing Instructions* for the complete text of the Family PACT Standards, official administrative practices, and billing information. For the purposes of this and other Family PACT Clinical Practice Alerts, the term "shall" indicates a program requirement; the term "should" is advisory and not required.

## RESOURCES FOR MORE INFORMATION

- World Health Organization (WHO) Medical Eligibility Criteria for Contraceptive Use, 3rd Edition, 2004 downloaded from: <http://www.who.int/reproductive-health/publications/mec/>.
- The attached table summarizing the WHO Medical Eligibility Criteria can be downloaded in multiple formats at: [http://reproductiveaccess.org/contraception/WHO\\_chart.htm](http://reproductiveaccess.org/contraception/WHO_chart.htm).
- Thorneycroft I, Klein P, Simon J. The impact of antiepileptic drug therapy on steroidal contraceptive efficacy. *Epilepsy & Behavior* 2006;9(1):31-39.
- ACOG Committee on Practice Bulletins- Gynecology. ACOG practice bulletin. No. 73: Use of hormonal contraception in women with coexisting medical conditions. *Obstet Gynecol.* 2006 Jun;107(6):1453.
- Gittes EB, Strickland JL. Contraceptive choices for chronically ill adolescents. *Adolesc Med Clin.* 2005 Oct;16(3):635.