

## Five Things Physicians and Patients Should Question

### 1 Don't do an inherited thrombophilia evaluation for women with histories of pregnancy loss, intrauterine growth restriction (IUGR), preeclampsia and abruption.

Scientific data supporting a causal association between either methylenetetrahydrofolate reductase (MTHFR) polymorphisms or other common inherited thrombophilias and adverse pregnancy outcomes, such as recurrent pregnancy loss, severe preeclampsia and IUGR, are lacking. Specific testing for antiphospholipid antibodies, when clinically indicated, should be limited to lupus anticoagulant, anticardiolipin antibodies and beta 2 glycoprotein antibodies.

### 2 Don't place a cerclage in women with short cervix who are pregnant with twins.

Women with a short cervical length who are pregnant with twins are at very high risk for delivering preterm, but the scientific data, including a meta-analysis of data published on this issue, shows that cerclage in this clinical situation not only is not beneficial, but may in fact be harmful, i.e., associated with an increase in preterm births.

### 3 Don't offer noninvasive prenatal testing (NIPT) to low-risk patients or make irreversible decisions based on the results of this screening test.

NIPT has only been adequately evaluated in singleton pregnancies at high risk for chromosomal abnormalities (maternal age >35, positive screening, sonographic findings suggestive of aneuploidy, translocation carrier at increased risk for trisomy 13, 18 or 21, or prior pregnancy with a trisomy 13, 18 or 21). Its utility in low-risk pregnancies remains unclear. False positive and false negative results occur with NIPT, particularly for trisomy 13 and 18. Any positive NIPT result should be confirmed with invasive diagnostic testing prior to a termination of pregnancy. If NIPT is performed, adequate pretest counseling must be provided to explain the benefits and limitations.

### 4 Don't screen for intrauterine growth restriction (IUGR) with Doppler blood flow studies.

Studies that have attempted to screen pregnancies for the subsequent occurrence of IUGR have produced inconsistent results. Furthermore, no standards have been established for the optimal definition of an abnormal test, best gestational age for the performance of the test or the technique for its performance. However, once the diagnosis of IUGR is suspected, the use of antenatal fetal surveillance, including umbilical artery Doppler flow studies, is beneficial.

### 5 Don't use progestogens for preterm birth prevention in uncomplicated multifetal gestations.

The use of progestogens has not been shown to reduce the incidence of preterm birth in women with uncomplicated multifetal gestations.

## Five More Things Physicians and Patients Should Question

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### Don't perform routine cervical length screening for preterm birth risk assessment in asymptomatic women before 16 weeks of gestation or beyond 24 weeks of gestation.

The predictive ability of cervical length measurement prior to 16 weeks of gestation for preterm birth risk assessment is limited. It should be performed, when indicated, between 16 and 24 weeks of gestation. Routine cervical length screening for preterm birth risk assessment in asymptomatic women beyond 24 weeks of gestation has not been proven to be effective.

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### Don't perform antenatal testing on women with the diagnosis of gestational diabetes who are well controlled by diet alone and without other indications for testing.

Monitoring of glucose levels and maintaining adequate glycemic control for gestational diabetes are paramount to decreasing adverse outcomes, including stillbirth. If nutritional modification and glucose monitoring alone control maternal glycemic status such that pharmacological therapy is not required, the risk of stillbirth due to uteroplacental insufficiency is not increased. Thus, the use of routine antepartum testing (e.g. biophysical profile (BPP) or nonstress test (NST)) in the absence of other co-morbidities is not indicated.

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### Don't place women, even those at high-risk, on activity restriction to prevent preterm birth.

There are no studies documenting an improvement in outcomes in women at risk for preterm birth who are placed on activity restriction, including bed rest. There are multiple studies documenting untoward effects of routine activity restriction on the mother and family, including negative psychosocial effects. Therefore, activity restriction should not be routinely prescribed as a treatment to reduce preterm birth.

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### Don't order serum aneuploidy screening after cfDNA aneuploidy screening has already been performed.

Serum biochemistry and cell free DNA (cfDNA) are both screening tests for fetal aneuploidy. When low-risk results have been reported on either test, there is limited clinical value of also performing the other screen. While serum screening may identify some aneuploidies not detected by cfDNA, the yield is too low to justify this test if cfDNA screening has already been performed.

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### Don't perform maternal serologic studies for cytomegalovirus and toxoplasma as part of routine prenatal laboratory studies.

Routine serologic screening of pregnant women for CMV and toxoplasmosis is not recommended due to poor predictive value of these tests and potential for harm due to false positive results. Serologic screening during pregnancy for both diseases should be reserved for situations in which there is clinical or ultrasound suspicion of maternal or fetal infection.

## How This List Was Created

As a national medical specialty society, the Society for Maternal-Fetal Medicine relies on the input of any number of its committees in the development of various documents. In the case of the items included in this list, the Publications Committee reviewed the literature and evidence from SMFM's published documents for possible topics. For SMFM's first set of five recommendations a sub-group of the Committee initially developed a list of 10 items that the Committee then ranked for the top five with input and suggestions by the Society's Executive Committee. For SMFM's second set of recommendations, the sub-group of the Committee developed a list of 12 items that the Committee then ranked for the top five, again soliciting input and suggestions by the Society's Executive Committee. The final list has been reviewed and approved by the Society's Risk Management Committee and Executive Committee.

SMFM's disclosure and conflict of interest policy can be found at [www.smfm.org](http://www.smfm.org).

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## Sources

- Dizon-Townson D, Miller C, Sibai B, Spong CY, Thom E, Wendel G Jr, Wenstrom K, Samuels P, Cotroneo MA, Moawad A, Sorokin Y, Meis P, Miodovnik M, O'Sullivan MJ, Conway D, Wapner RJ, Gabbe SG; Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network (NICHD MFMU). The relationship of the factor V Leiden mutation and pregnancy outcomes for mother and fetus. *Obstet Gynecol*. 2005 Sep;106(3):517–24.

Silver RM, Zhao Y, Spong CY, Sibai B, Wendel G Jr, Wenstrom K, Samuels P, Caritis SN, Sorokin Y, Miodovnik M, O'Sullivan MJ, Conway D, Wapner RJ; Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units (NICHD MFMU) Network. Prothrombin gene G20210A mutation and obstetric complications. *Obstet Gynecol*. 2010 Jan;115(1):14–20.

Kupfermirc MJ, Eldor A, Steinman N, Many A, Bar-Am A, Jaffa A, Fait G, Lessing JB. Increased frequency of genetic thrombophilia in women with complications of pregnancy. *N Engl J Med*. 1999 Jan;340(1):9–13. [published erratum appears in *N Engl J Med* 1999 Jul 29;341(5):384].
- Durnwald CP, Momirova V, Rouse DJ, Caritis SN, Peaceman AM, Sciscione A, Varner MW, Malone FD, Mercer BM, Thorp JM Jr, Sorokin Y, Carpenter MW, Lo J, Ramin SM, Harper M, Spong CY; Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network (NICHD MFMU). Second trimester cervical length and risk of preterm birth in women with twin gestations treated with 17-alpha hydroxyprogesterone caproate. *J Matern Fetal Neonatal Med*. 2010 Dec;23(12):1360–4.

Berghella V, Odibo AO, To MS, Rust OA, Althuisius SM. Cerclage for short cervix on ultrasonography: meta-analysis of trials using individual patient-level data. *Obstet Gynecol*. 2005;106:181–9.
- American College of Obstetricians and Gynecologists Committee on Genetics. Noninvasive prenatal testing for fetal aneuploidy. Committee Opinion No. 545. *Obstet Gynecol*. 2012 Dec;120(6):1532–4.
- Society for Maternal-Fetal Medicine Publications Committee, Berkley E, Chauhan SP, Abuhamad A. Doppler assessment of the fetus with intrauterine growth restriction. *Am J Obstet Gynecol*. 2012 Apr;206(4):300–8.
- Society for Maternal-Fetal Medicine Publications Committee, Berghella V. Progesterone and preterm birth prevention: translating clinical trials data into clinical practice. *Am J Obstet Gynecol* 2012 May;206(5):376–86.

Combs CA, Garite T, Maurel K, Das A, Porto M; Obstetrix Collaborative Research Network. 17-hydroxyprogesterone caproate for twin pregnancy: a double-blind, randomized clinical trial. *Am J Obstet Gynecol*. 2011 Mar;204(3):221.e1–8.

Combs CA, Garite T, Maurel K, Das A, Porto M; Obstetrix Collaboration Research Network. Failure of 17-hydroxyprogesterone to reduce neonatal morbidity or prolong triplet pregnancy: a double-blind, randomized clinical trial. *Am J Obstet Gynecol*. 2010 Sep;203(3):248.e1–9.

Caritis SN, Rouse DJ, Peaceman AM, Sciscione A, Momirova V, Spong CY, Iams JD, Wapner RJ, Varner M, Carpenter M, Lo J, Thorp J, Mercer BM, Sorokin Y, Harper M, Ramin S, Anderson G; Eunice Kennedy Shriver National Institute of Child Health and Human Development Maternal-Fetal Medicine Units Network (NICHD MFMU). Prevention of preterm birth in triplets using 17 alpha-hydroxyprogesterone caproate: a randomized controlled trial. *Obstet Gynecol*. 2009 Feb;113(2 Pt 1):285–92.
- Iams JD, Goldenberg RL, Meis PJ, Mercer BM, Moawad A, Das A, Thom E, McNellis D, Copper RL, Johnson F, Roberts JM. The length of the cervix and the risk of spontaneous premature delivery. National Institute of Child Health and Human Development Maternal Fetal Medicine Unit Network. *N Engl J Med*. 1996 Feb 29;334(9):567-72.

Conoscenti G, Meir YJ, D'Ottavio G, Rustico MA, Pinzano R, Fischer-Tamaro L, Stampalija T, Natale R, Maso G, Mandruzzato G. Does cervical length at 13–15 weeks' gestation predict preterm delivery in an unselected population? *Ultrasound Obstet Gynecol*. 2003 Feb;21(2):128-34.

Ozdemir I, Demirci F, Yuçel O, Erkorkmaz U. Ultrasonographic cervical length measurement at 10-14 and 20-24 weeks gestation and the risk of preterm delivery. *Eur J Obstet Gynecol Reprod Biol*. 2007 Feb;130(2):176-9.

Berghella V, Talucci M, Desai A. Does transvaginal sonographic measurement of cervical length before 14 weeks predict preterm delivery in high-risk pregnancies? *Ultrasound Obstet Gynecol*. 2003 Feb;21(2):140-4.

- 7
 Rosenstein MG, Cheng YW, Snowden JM, Nicholson JM, Doss AE, Caughey AB. The risk of stillbirth and infant death stratified by gestational age in women with gestational diabetes. *Am J Obstet Gynecol.* 2012;206:309.e1-7.
- 8
 Society for Maternal-Fetal Medicine (SMFM), Habeber E, Sciscione A. SMFM Consult Activity Restriction in Pregnancy. *Contemp Ob Gyn.* 2014
- 9
 Society for Maternal-Fetal Medicine (SMFM) Publications Committee. Society for Maternal-Fetal Medicine Consult Series #36: Prenatal aneuploidy screening using cell-free DNA. *Am J Obstet Gynecol.* 2015 Jun;212(6):711-6.  
 Committee Opinion No. 640: Cell-Free DNA Screening For Fetal Aneuploidy. *Obstet Gynecol.* 2015;126(3):e31-7.
- 10
 Society for Maternal-Fetal Medicine (SMFM), Hughes BL, Gyamfi-Bannerman C. Society for Maternal-Fetal Medicine Consult Series #39: Diagnosis and antenatal management of congenital cytomegalovirus (CMV) infection. *Am J Obstet Gynecol.* 2016 (in press).  
 American College of Obstetricians and Gynecologists. Practice Bulletin #151: Cytomegalovirus, Parvovirus B19, varicella zoster, and toxoplasmosis in pregnancy. *Obstet Gynecol.* 2015 Jun;125(6):1510-25.

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The Society for Maternal-Fetal Medicine (SMFM) is a society of physicians and scientists who are dedicated to the optimization of pregnancy and perinatal outcomes. SMFM was established in 1977 and is the membership organization for obstetricians/gynecologists who have additional formal education and training in maternal-fetal medicine. There are currently about 2,000 active members of SMFM. The Society hosts an annual scientific meeting in which new ideas and research in the area of maternal-fetal medicine are presented. The Society is also an advocate for improving public policy and expanding research funding and opportunities in the area of maternal-fetal medicine.

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