Ob/Gyn Care for Patients with Congenital Heart Defects

Point-of-Care Tool

OVERVIEW

Pregnancy may pose significant health risks for patients with CHD.

- Educate parents and ultimately the patient about the potential risks of pregnancy and other women's health concerns.
- Emphasize effective contraceptive management during adolescence and early adulthood.
- Well in advance of pregnancy, refer for prepregnancy consult with Pregnancy Heart Team or congenital cardiology and maternal-fetal medicine (MFM) physicians.

CONTRACEPTION AND GYNECOLOGIC HEALTH

- Provide early patient education about potential impact of pregnancy on cardiac health.
- Advise patient about importance of contraception and facilitate selection of a method. Long-acting reversible contraceptive (LARC) methods have high effectiveness, few contraindications and high patient acceptance.
- Ensure that adolescent and young adult patients receive appropriate immunizations including HPV (https://www.cdc.gov/vaccines/schedules/easy-to-read/adolescent-easyread.html).

PREPREGNANCY HEALTH CARE

The early phase of prepregnancy health care consists of ensuring that patients understand the potential risks of pregnancy in patients with CHD and that pregnancy should always be a planned event. Many resources exist to guide counseling:

- European Society for Cardiology 2018 guidelines (https://academic.oup.com/eurheartj/article/39/34/3165/5078465) (which includes the WHO classification system)
- CARPREG II (https://assets.radcliffecardiology.com/s3fs-public/article/2020-12/tablet-carpreg-ii-risk-predictors.png) risk scoring system

Preconception health care begins in earnest when a patient decides they are actively ready to become pregnant.

- Comprehensive review of medical history and physical exam
- Updated cardiology evaluation, which may include EKG and echocardiogram and other studies as clinically indicated.
Detailed review of medication list to assess for potential teratogens; should include non-cardiac medications which the patient is taking

- Cardiac Medications With Potential Effects on Pregnancy or Lactation
  - The FDA “Pregnancy Drug Categories” A-X were discontinued in 2015 and are no longer utilized.

Establish plan for discontinuing or substituting cardiac medications before conception or in early pregnancy; in some cases, these medications may be continued after consultation with congenital cardiologist and maternal-fetal medicine. Patients with CHD should not be advised to stop medications without first consulting their cardiologist.

Review and administration of immunizations

Cervical cancer screening beginning at age 21 and other age-appropriate preventive health screenings

Tobacco/nicotine cessation, alcohol avoidance, cessation of drug use including marijuana

Daily intake of 400 mcg folate

**SPECIALIZED PREGNANCY CARE**

Patients with CHD should establish care early with their Ob/Gyn. A detailed assessment performed before pregnancy will have determined the appropriate level of care needed.

- All patients with CHD are at increased risk to have a child with CHD. Perform fetal echocardiography at 18-22 weeks.

- Low risk lesions - low risk of cardiac events and death during pregnancy. Congenital cardiologist and MFM physician may clear for delivery at a local hospital where appropriate backup resources are available.
  - Repaired lesions such as atrial septal defect (ASD), ventricular septal defect (VSD), patent ductus arteriosus (PDA), total anomalous pulmonary venous return (TAPVR)
  - Unrepaired ASD, VSD; repaired Tetralogy of Fallot without residual lesion

- High risk lesions - increased risk of cardiac events and death during pregnancy; ideally managed during pregnancy, delivery and post-partum care in centers with a multidisciplinary Pregnancy Heart Team.
  - Marfan syndrome / other hereditary thoracic aortic disease
  - Patients with Fontan circulation, systemic right ventricle, and unrepaired cyanotic CHD
  - Systemic right ventricle with diminished function; dilated aortic root; severe coarctation

Pregnancy Heart Team includes members from cardiology, maternal-fetal medicine, obstetrics, obstetric anesthesia, pharmacy, and nursing and focuses on risk stratification and multidisciplinary care planning.

Levels of Maternal Care [https://www.acog.org/programs/lomc](https://www.acog.org/programs/lomc)

This project is supported by the Centers for Disease Control and Prevention of the U.S. Department of Health and Human Services (HHS) as part of a financial assistance award totaling $400,000 with 100 percent funded by CDC/HHS. The contents are those of the author(s) and do not necessarily represent the official views of, nor an endorsement, by American Academy of Pediatrics, CDC/HHS, or the U.S. Government.