Top Ten Things To Know
Diagnosis and Treatment of Fetal Cardiac Disease

1. Fetal cardiac medicine has evolved considerably over the past two decades, predominantly in response to advances in imaging technology and innovations in therapies. It is now understood that the fetal circulation is different than the postnatal circulation, structural disease may progress in utero, and cardiac function and stability of the cardiovascular system plays an important role in fetal wellness.

2. This scientific statement addresses the current practice of fetal cardiac medicine, including diagnosis and management of fetal cardiovascular disease. It includes topics relevant to fetal cardiac medicine, including the diagnosis of congenital heart disease (CHD) and arrhythmias, assessment of cardiac function and the cardiovascular system, and available treatment options.

3. The diagnosis of cardiac disease in the fetus is mostly made using ultrasound, however new technologies including three and four dimensional echocardiography, magnetic resonance imaging, and fetal electrocardiography and magnetocardiography are available.

4. Recommendations are included relating to the specifics of fetal diagnosis and include the timing of referral for study, indications for referral, and experience suggested for performance and interpretation of studies.

5. The components of a fetal echocardiogram are described in detail, including descriptions of the assessment of cardiac anatomy, cardiac function, and rhythm and include descriptions of the assessment of cardiac anatomy, cardiac function, and rhythm.

6. Complimentary modalities for fetal cardiac assessment are reviewed, including the use of advanced ultrasound techniques, fetal magnetic resonance imaging, and fetal magnetocardiography and electrocardiography for rhythm assessment.

7. Models for parental counseling and a discussion of parental stress and depression assessments are reviewed.

8. Available fetal therapies including medical management for arrhythmias or heart failure and closed or open intervention for diseases affecting the cardiovascular system such as twin-twin transfusion syndrome, lung masses, and vascular tumors are highlighted.

9. Recommendations regarding delivery planning strategies for fetuses with CHD include models based on classification of disease severity and delivery room treatment. Catheter based intervention strategies to prevent progression of disease in utero are also discussed.

10. Outcome assessment highlights the benefit of prenatal diagnosis and management as they impact outcome for babies with CHD.

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