

Indications for fetal cardiology referrals

The fetal cardiology unit at the Evelina Children's Hospital provides a tertiary service for assessment and management of pregnancies at high risk for congenital heart disease. This document outlines those pregnancies which should be judged to be at increased risk and are appropriate for referral. If you have any questions about a referral and would like guidance, we would encourage direct contact with our unit.

1. **Suspected congenital heart disease on a scan:** If there is any suspicion of a fetal cardiac defect on an ultrasound scan we aim to evaluate the fetal heart as soon as possible. Please contact us directly by telephone or fax about such cases.
2. **Family history of congenital heart disease (CHD) in a first degree relative:** First degree relative means that the mother, father or a previous child has a confirmed abnormality of the heart structure. Such pregnancies are known to be at increased risk for congenital heart disease and have an acknowledged indication for fetal echocardiography. For more distant relatives, the evidence is less strong and automatic referral of such cases is not necessary, although we are happy to discuss and see the patient depending on individual circumstances.

A history of "heart murmur", mitral valve prolapse, patent foramen ovale or rheumatic fever are not generally regarded as an indication for detailed fetal echocardiography.

3. **Increased nuchal translucency:** There is an accepted association between increased nuchal translucency (NT) and congenital heart disease which is independent of the fetal karyotype. We are happy to accept referrals for fetal cardiac assessment according to the NT protocol of the referring unit. We offer early fetal echocardiography (at 14 weeks) for NT above the 99th percentile (3.5mm). Lesser degrees of NT, between 2.5 and 3.5mm are normally assessed in the midtrimester. We do not recommend referral of fetuses with NT below the 95th centile (2.2-2.5mm) unless the structure of the heart is felt to be abnormal at the referral unit. Such "Suspected CHD" referrals will be managed according to the usual protocol (see point 1) irrespective of NT.
4. **Diabetes Mellitus – mothers who are established diabetics and who have been taking insulin or oral hypoglycaemic drugs prior to pregnancy:** There is an increased incidence of congenital heart disease in this group of patients and we are happy to assess such pregnancies in the midtrimester.

5. **Mothers taking known teratogenic drugs**
6. **Non-cardiac malformations which are associated with congenital heart disease:** Some non-cardiac malformations, for example, exomphalos and diaphragmatic hernia, have a recognised association with congenital heart disease. We are happy to see such cases, where an established association is recognised.
7. **Fetal hydrops:** There is an acknowledged association between hydrops and abnormalities of the heart structure and/or rhythm. This is a referral indication for fetal cardiac assessment
8. **Monochorionic twins:** There is an increased incidence of congenital heart disease and we are happy to take referrals for this indication
9. **Fetal Arrhythmia**
 - a. tachycardia (heart rate > 180 beats per minute) – please refer
 - b. sustained bradycardia (heart rate < 120 beats per minute) – please refer
 - c. Irregular rhythm – this rhythm is usually benign and resolves spontaneously. Although we will see affected fetuses, many units manage them without referral to us. We have an information leaflet available on request. There is a very small risk of tachycardia developing which merits referral if this occurs. It is important that the local unit ensures that the four chamber view and views of the great arteries appear normal. If there is any concern then referral should be made as in indication 1.
10. **Maternal Anti-Ro or anti-La antibodies:** Mothers who have anti-Ro and /or La antibodies are candidates for fetal cardiology assessment in view of the risk of developing fetal heart block. If the mother has a connective tissue disease such as lupus but does NOT have anti Ro or La antibodies referral is not necessary.