

# Management of Suspected Fetal Ectopic Heart Beats /Arrhythmia

## Guideline information

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Summary of document:

Guideline for the antenatal management of suspected fetal ectopic heart beats/ arrhythmia .This guideline provides the appropriate referral and care pathways for those women who may have suspected fetal ectopic heart beats.

Scope:

All Health Care Professionals caring for pregnant women who may have suspected fetal ectopic heart beats.

Please Note: The guidance below uses the term “woman” (pronouns she or her) to describe individuals whose sex assigned at birth was female, male or non-binary. It is important to acknowledge it is not only people who identify as women for whom it is necessary to access women’s health and reproductive services. Therefore, this should include people who do not identify as women but who are pregnant or have recently given birth. Obstetric and Midwifery services and delivery of care must therefore be appropriate, inclusive and sensitive to the needs of those individuals whose gender identity does not align with the sex they were assigned at birth.

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1.0 – New Guideline

2.0 - Updated

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Antenatal Management of Suspected Fetal Ectopic Heartbeat, Arrhythmia

**Key points:**

Care and referral pathways for women who are suspected /confirmed antenatal Fetal heart Arrhythmia/Ectopic beats.

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## Scope

Health care professionals caring for women who have suspected fetal heart ectopic beats.

## Aim

The aim of this guideline is to set out the antenatal management for suspected fetal heart ectopic or irregular heart beat.

## Objectives

The aim of this document will be achieved by the following objectives:

- Flow chart for initial Antenatal Management of Suspected Fetal Heart Irregularities/ectopic beats
- Referral criteria as advised by Fetal Medicine Unit, University Hospital of Wales
- Patient information leaflet

## Introduction

Ectopic beats are the most common detected fetal arrhythmia. Fetal arrhythmia is the term used to describe any irregular fetal heartbeat. The detection of fetal irregularities are usually found during a routine antenatal appointment. They are most likely to present from 28-32 weeks of gestation but can be detected as early as 18 weeks onwards.

Most cases of irregular fetal heart rhythms will not require any treatment and resolve spontaneously.

## Antenatal Management of Antenatal Fetal heart Arrhythmia/Ectopic beats

If ectopic beat/arrhythmias are suspected refer to Triage.

## Triage review

Perform full antenatal Assessment and exclude labour, maternal tachycardia and maternal sepsis

- Abdominal Palpation
- Fetal auscultation , perform CTG is gestation >26 weeks
- Baseline temperature, pulse, respirations and blood pressure.
- Urinalysis

## Care Pathway

1. If Fetal heart within normal limits between 110bpm and 160bpm regardless of ectopic beat/rhythm
  - Give Advice for women with benign Arrhythmias ([See Appendix 1](#))
  - Ultrasound scan not required
  - Community Midwives to auscultate Fetal heart weekly.
  - Refer back to Triage only if FH>160bpm or <110bpm
2. If Fetal heart rate less than 110bpm or greater than 160bpm and fetal arrhythmia/ ectopics present
  - Review by senior obstetrician for simple reassurance and advice ([See Appendix 1](#))
  - Fetal heart rate checked twice weekly

- Weekly auscultation of Fetal Heart by CMW
  - Weekly antenatal ultrasound scan to exclude the presence of sustained arrhythmia or fetal hydrops.( scan to undertaken within 2 working days)
  - Review in Consultant clinic
3. If fetal heart rate baseline returns to baseline of >110bpm and <160bpm ( regardless of rhythm /ectopic beats)
- No further ultrasound scans are required and Community Midwives to auscultate Fetal heart weekly.
  - Refer back to Triage only if FH>160bpm or <110bpm

## Referral to Fetal Medicine

Referral to fetal medicine/ fetal echocardiogram is not indicated UNLESS:

- There are signs of developing fetal hydrops or
- Sustained Heart rate arrhythmia/ ectopic i.e.
  - Sustained FHR.180bpm \*
  - or Sustained FHR <110bpm

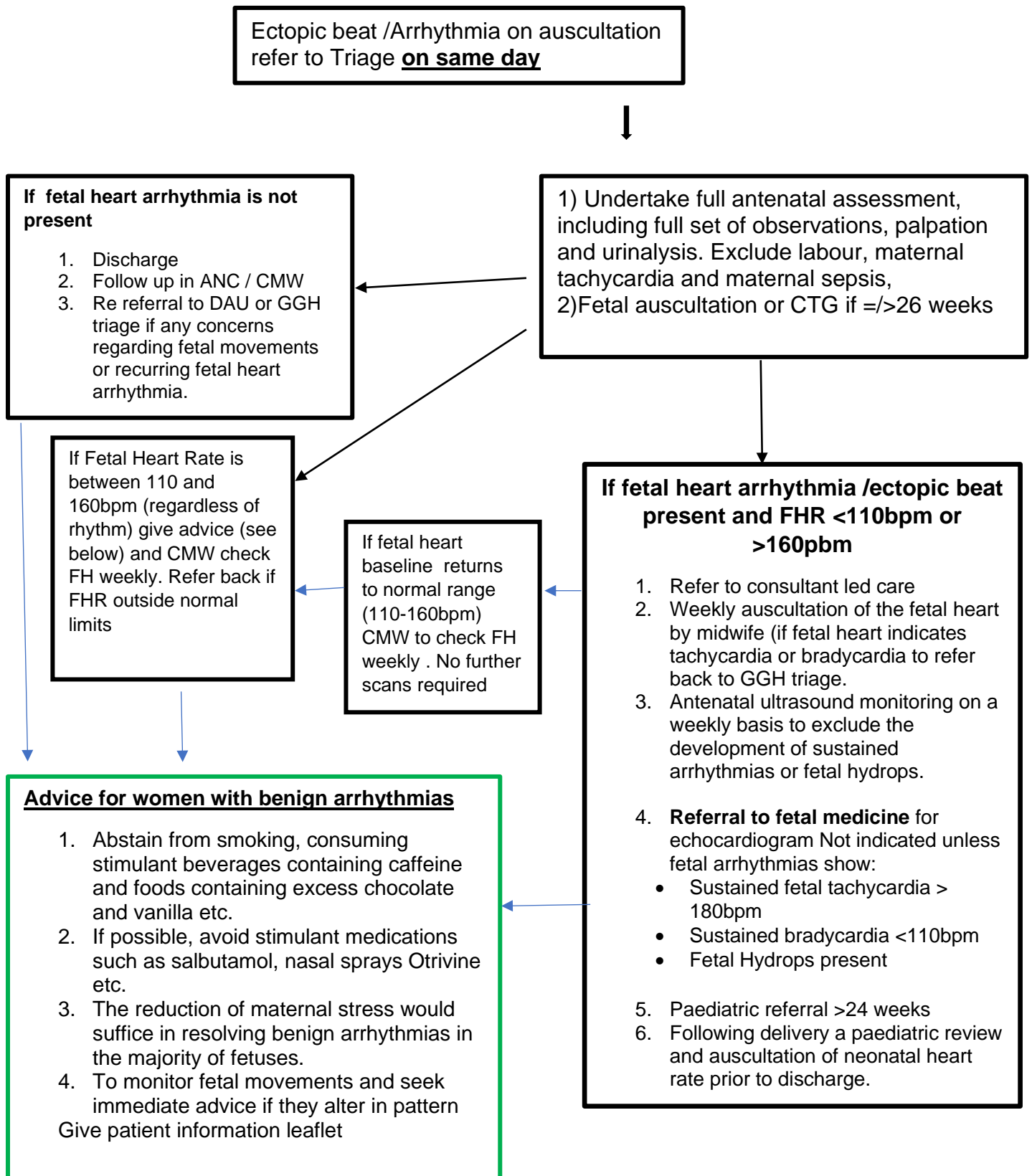
\*Tachyarrhythmia's are diagnosed when the Fetal Heart Rate is persistently above 180bpm.

## Consultant Care

- If a woman is under midwife led care only refer for consultant led care if referred to Fetal Medicine Unit or arrhythmia/ ectopic beats continues to 36 weeks gestation
- If fetal heart arrhythmia /ectopics continue until 36 weeks CMW to arrange a CTG and consultant antenatal clinic appointment (on same day) for 36 weeks gestation to discuss intrapartum care.
- If referred to Fetal Medicine Unit a consultant clinic appointment should be arranged at next available date

Note: If CTG is performed for clinical indication e.g. Altered fetal movements, Antepartum bleeding and the CTG is impossible to interpret then delivery by Caesarean may be required. However physiological "stress" of labour may precipitate conversion to a normal.

# Flow Chart for Initial Antenatal Management of Suspected Fetal Arrhythmias/ectopic beats



## When to stop Surveillance

Surveillance of an ectopic or irregular fetal heartbeat can stop once there is one ultrasound scan or FH auscultation where the ectopic fetal heartbeat is **no longer found**.

The community midwife should auscultate the week after and if no longer heard return to normal antenatal surveillance of the pregnancy.

**NOTE:** If the ectopic fetal heartbeat or irregularity is heard again then refer back to the flow chart.

## Advice from Fetal Medicine University Hospital Wales

“On the basis of ectopic beats or irregular heart rate we would not recommend a routine cardiac referral, but an obstetric heart rate check twice weekly, once by the community midwife and once by antenatal ultrasound monitoring on a weekly basis”..

- Simple reassurance and advice should be given to women.
- Abstain from smoking.
- Avoid Consuming excess amount of calcium containing foods (milk products).
- Avoid Stimulant beverages (Excess caffeine, tea, coffee, hot chocolate, coke, energy drinks) and food (excess vanilla, chocolate etc.).
- Avoiding stimulant medications if possible (Ephedrine, Salbutamol, nasal sprays, Otrivine etc.)
- Reduction of maternal stress would suffice in resolving these benign ectopic beats in the majority of cases.
- Women should be advised to monitor fetal movements if concerned. Inform woman to contact hospital immediately if fetal movement is significantly reduced or altered pattern.
- We would advise that patients with irregular heart rate in their fetus should be simply reassured and weekly obstetric ultrasound be performed, just to make sure that there is no emerging sustained bradycardia (less the 110 bpm) or tachycardia (more than 180 bpm) or development of fetal hydrops.
- In such cases where there is genuine obstetric concern about the wellbeing of the fetus or the mother and, in the case of sustained arrhythmia, we would strongly recommend that the individual consultant should ring the on-call paediatric cardiologist to discuss the best type of action, investigation and recommendation.

Uzun, Orhan & Goynumer, Gokhan & Sen, Cihat & Beattie, Robert. (2015)

## References

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Uzan, Beattie & Amin. Fetal Heart Irregularities, Antenatal Management of.  
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## Appendix 1 – Patient Information Leaflet

### **What is an Irregular fetal heartbeat, ectopic or arrhythmia?**

Occasionally when your midwife listens to your baby's heartbeat she may hear an irregular beat or rhythm. This is commonly caused by extra beats. These beats are called ectopic beats, which are of no significance to your baby and are caused by the hearts immaturity.

### **Why do they occur?**

A small area of baby's heart sends out electrical impulses, which regulate a normal heart rate. These impulses spread throughout the heart muscle and cause it to contract in a regular rhythm. However, sometimes another area of the heart sends out an extra electrical impulse, which will cause an extra heartbeat. The heart then rests while the heart muscle gets back to a normal rhythm. This can make your baby's heart sound irregular. An irregular heartbeat is not associated with any abnormalities in the way a baby's heart is formed. We would expect it to settle as pregnancy progresses, but it occasionally persists until birth.

### **What will happen during my pregnancy?**

Your midwife will listen to your baby's heart rate when you attend for your antenatal Appointments. It is very rare but occasionally your baby's heartbeat may develop a continuous fast rhythm. This is called tachycardia\*. If this happens you may then be scanned weekly whilst the ectopic beat or irregularity is noted or the heart rhythm returns to a normal rate.

### **Can I do anything to help stop this?**

Cutting down on your intake of tea, coffee and Cola/energy drinks is advisable as the caffeine content in these drinks can stimulate the electrical activity of the baby's heart. You can also reduce your intake of chocolate and vanilla. Some medications can contribute to the heartbeat such as salbutamol for asthma. We also advise you avoid undue stress if you can and stop smoking. Please ask to speak to midwife about details of how to contact our Smoking Cessation Team if you need any help to stop smoking, or if you would like to discuss any stress that you are feeling. Please do not stop using your salbutamol if you need it for your asthma.

### **What will happen at birth and when baby is born?**

Rarely, if the heart rate remains very irregular during labour, it can be difficult to monitor the baby for signs of distress and a Caesarean section may be advised. For most cases this is not a problem and a normal (vaginal) delivery is possible. This is usually a condition that has no significance for baby in future life. The paediatrician will listen to your baby's heartbeat before you are discharged from hospital and perform further tests if necessary. You will be advised to keep an eye on the pattern of your baby's movements and if you are concerned to contact the hospital.

\*If your baby's heartbeat remains at a fast rhythm (tachycardia) for a long period of time it could rarely damage baby's heart or other organs. Your obstetrician may recommend a referral to a fetal medicine specialist if this occurs.