

Clinical Guideline

Organisation of Care in Cardiac Rhythm Disorder Patients in Pregnancy

SETTING	South West England and South Wales
GUIDELINE FOR	The cardiac obstetric team
PATIENT GROUP	Pregnant women with pre-existing heart rhythm disorders or those presenting for the first time in pregnancy.

GUIDANCE

Arrhythmia risk is increased in pregnancy, especially in women with pre-existing heart rhythm disease. Some patients required specialist input from a cardiologist with special expertise in electrophysiology (EP). Many patients have co-existing congenital heart disease and care needs to be co-ordinated between the named EP consultant and maternal cardiology consultant.

Heart rhythm issues in pregnancy can be related to either atrial or ventricular tachy- or bradyarrhythmias, pacing issues. Co-existing diagnoses can include arrhythmogenic cardiomyopathy or inherited channelopathies.

Inappropriate sinus tachycardia (IST)

This is not uncommon in pregnancy and usually responds to a beta-blocker, if the patient wishes to take medication. EP advice may be useful to exclude hidden atrial tachycardia and advice should be obtained within two weeks of presentation.

Supraventricular tachycardia (SVT)

This is common in pregnancy and often occurs in patients with no previous history of arrhythmia. Management is usually straightforward and does not require input from an electrophysiologist during pregnancy.

Atrial tachycardia/atrial flutter/atrial fibrillation

This occurs less commonly in pregnancy and EP advice should be sought during pregnancy within two weeks of diagnosis.

Brady-arrhythmia

This is rare in pregnancy and EP advice should be sought urgently.

Single or dual chamber pacemaker or ICD

Management in pregnancy is uncomplicated and does not require EP input. Patients with sinus node disease need to have the lower tracking rate of the pacemaker increased and unipolar diathermy needs to be avoided if a caesarean section is performed. ICDs should not be deactivated during labour.

Ventricular tachycardia (VT)

VT is rare in pregnancy. Patients are at high risk of sustained VT or VF. Urgent EP advice should be sought as soon as the diagnosis is made and a named EP consultant should see the patient during pregnancy (and co-ordinate their care post-partum), in conjunction with the cardiac obstetric medicine team.

Channelopathies, including long QT syndrome/Brugada syndrome/catecholaminergic VT

These are rare disorders of heart rhythm. EP advice should be sought at the time of the patient's first visit to the cardiac antenatal clinic. A named EP consultant should co-ordinate their care post-partum in

conjunction with the cardiac obstetric medicine team.

Arrhythmogenic cardiomyopathy (ACM)

Most commonly affecting the right ventricle (ARVC), this is a rare condition. Urgent EP advice should be sought as soon as the diagnosis is suspected and a named EP consultant should see the patient during pregnancy (and co-ordinate their care post-partum) in conjunction with the cardiac obstetric medicine team.

SUMMARY OF EP REFERRAL REQUIREMENTS

NO ADVICE USUALLY NEEDED	ADVICE WITHIN TWO WEEKS OF PRESENTATION	URGENT ADVICE AND ONGOING MANAGEMENT
SVT	IST	Bradyarrhythmia
Pacemaker/ICD	Atrial tachycardia	VT
	Atrial flutter	Channelopathies
	Atrial fibrillation	ACM/ARVC

RELATED DOCUMENTS

Regional Referral Pathway

REFERENCES

Adamson DL & Nelson-Piercy C. Managing palpitations and arrhythmias during pregnancy. Heart 2007; Dec; 93(12): 1630–1636.

Regitz-Zagrosek V et al. ESC Guidelines on the management of cardiovascular diseases during pregnancy. European Heart Journal 2011; 32: 3147–3197.

Enriquez AD et al. Contemporary Management of Arrhythmias During Pregnancy. Circulation: Arrhythmia and Electrophysiology 2014;7:961-967.

SAFETY

Careful management with an experienced multi-disciplinary team is advised with an individual care plan for each woman

QUERIES

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