Yorkshire and Humber
Congenital Heart Disease
Operational Delivery Network

Contraceptive options for women with Congenital Heart Disease

Guideline Detail:
Board Approval Date: September 2019, update September 2021
Next Review Date: September 2024
Contents

Summary of Guideline:

Providing appropriate contraceptive advice to women of child bearing age reduces risks to women with CHD and prevents unplanned pregnancies. Timely information should be given to all patients to empower them to make choices about their health.

Aims:

To support healthcare professionals provide women of child-bearing age with CHD with evidence based contraception advice.

Objectives:

To provide evidence-based recommendations for appropriate contraception advice to women with CHD to prevent unplanned pregnancies.

Background:

Pregnancy in women with CHD increases haemodynamic stress on the cardiovascular system and can precipitate cardiac complications including heart failure, arrhythmias and thromboembolic events. Unplanned pregnancy should be avoided in women with CHD, as it may expose the fetus to potentially teratogenic drugs and the mother to the risks of pregnancy. Providing women with CHD with appropriate contraceptive advice reduces the risk to the woman and the fetus, preventing unplanned pregnancies. Careful and timely consideration of contraception options for this group is therefore critical and should include consideration of the complexity of; the original CHD lesion, any residual or recurrent lesions, functional class, ventricular and valvular function, cyanosis, previous cardiac events and comorbidities and the efficacy of the method of the contraception.

Management:

The following contraception options need to be considered:

Combined hormonal contraception (CHC), which contains both oestrogen and progestogen. It comes in a variety of forms, such as vaginal ring, transdermal patch and oral medication. CHC carries an increased risk of thrombosis and hypertension.

Avoid in
Cyanotic heart disease
Mechanical valves
Tissue tricuspid valve replacement
Pulmonary hypertension
Fontan circulation
Pulmonary AV malformations
Previous coronary arteritis (Kawasaki's disease)
Systemic ventricular dysfunction (EF < 30%)
Hypertension (e.g. repaired coarctation)
Previous thromboembolism
Atrial arrhythmia
Potential reversal of left to right shunt (e.g. un-operated ASD)

Progesterone only contraception (POC) does not carry the same thrombotic and hypertensive risks as CHC and is therefore a useful option for patients with CHD. Long-acting reversible contraception options include the levonorgestrel intrauterine system, progestogen implant and depot injection. These choices offer reliable and safe contraception for people with CHD and do not require daily administration. Oral high dose POC is as effective as the CHC.

Non-hormonal contraception (IUD) offers another option for long acting reversible contraception for patients with CHD. The copper IUD can be associated with heavier vaginal bleeding, and this could be exacerbated with CHD patients on anticoagulation, such as those with mechanical prosthetic valves. The insertion of both hormonal and copper IUD may cause a vasovagal

response so this should be undertaken in hospital rather than a community setting

Audit and Monitoring Compliance:

Clinical letters to GP and patients will be reviewed to ensure appropriate contraceptive advice is provided. Audit results will be presented to the Network education meeting, which will agree actions arising from the recommendations, and monitor the progress of the actions.

Conflicts of Interests:

None.

Provenance:

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Target patient group: Women with CHD
Target professional group: Specialist Nurses, Cardiologists, GP

Evidence Base:

References and Evidence levels:

C. Expert consensus.

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https://www.nhs.uk/conditions/contraception/

https://www.fpa.org.uk/