Statement on the risk assessment of pregnant women with heart disease during the COVID 19 pandemic

Background and scope

Public Health England have included pregnant women with ‘significant heart disease’ in the group defined on medical grounds as extremely vulnerable from COVID 19 and advised that they should be shielded for at least 12 weeks.

The UK maternal cardiology society represents health care professionals involved in the care of women with heart disease in pregnancy and has produced this guidance to assist clinicians in individual risk assessment. This advice is based on a consensus of expert professional opinion in the absence of specific evidence.

Which women are in the higher risk group?

We regard a pregnant woman with one or more of the following to have ‘significant heart disease’:

- Impaired left ventricular function of any cause
- A systemic right ventricle (ccTGA, Senning/Mustard surgery for TGA) even if well-functioning
- Hypertrophic cardiomyopathy with abnormal systolic or diastolic function and/or outflow tract obstruction
- Hypertensive heart disease with LV hypertrophy
- Fontan circulation
- Pulmonary arterial hypertension of any cause
- Cyanotic conditions ie saturation in air < 92%
- Moderate or severe valvar (subvalvar/supravalvar) stenosis
- Severe valvar regurgitation (and moderate if symptomatic)
Symptomatic coronary artery disease

Women are generally not at increased risk over that of pregnancy itself if they have:

- Normal function of both ventricles
- Mild valve disease
- A well-functioning replacement heart valve*
- Repaired coarctation with normal haemodynamics
- Restrictive ventricular septal defect
- Atrial septal defect (closed or unclosed) with normal right ventricular function and no pulmonary hypertension

Therefore this lower risk group includes conditions such as:

- Repaired AVSD if normal ventricles, only mild residual valve disease, no LV outflow tract obstruction
- Repaired Tetralogy of Fallot with normal ventricles and no significant valvar abnormality
- Marfan syndrome with mild stable aortic root dilatation only

But they also need to consider coexistent non cardiac conditions which may put them in the vulnerable group regardless of their cardiac condition.

*Women with a well-functioning mechanical heart valve are higher risk in pregnancy because of thromboembolic complication and the need for management of their anticoagulation but not necessarily increased cardiac risk if none of the above in bold apply. They therefore do not need shielding on this basis and it is extremely important that they continue to receive specialist care in some form to manage their thromboembolic risk.

Additional considerations

There may be women in the higher risk group who still require face to face clinical assessment in pregnancy and an individual risk/benefit decision should be taken about clinical appointments while maintaining shielding for all other aspects of life. Clearly number of visits, time within the hospital and exposure to different staff members should be minimised.

For all women the importance of continued engagement with antenatal care, however provided, should be emphasised.

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