

Advice about Covid-19 for children with congenital heart disease: 22nd June 2020

General background

Infection with SARS-CoV-2 appears to take a milder course in children than in adults: most infected children present with mild symptoms or are asymptomatic, and very few develop severe or life threatening disease.

Deaths in children due to COVID-19 have been extremely rare: mortality seems to be consistent at around 0.01% (similar to the incidence seen every year with seasonal influenza).

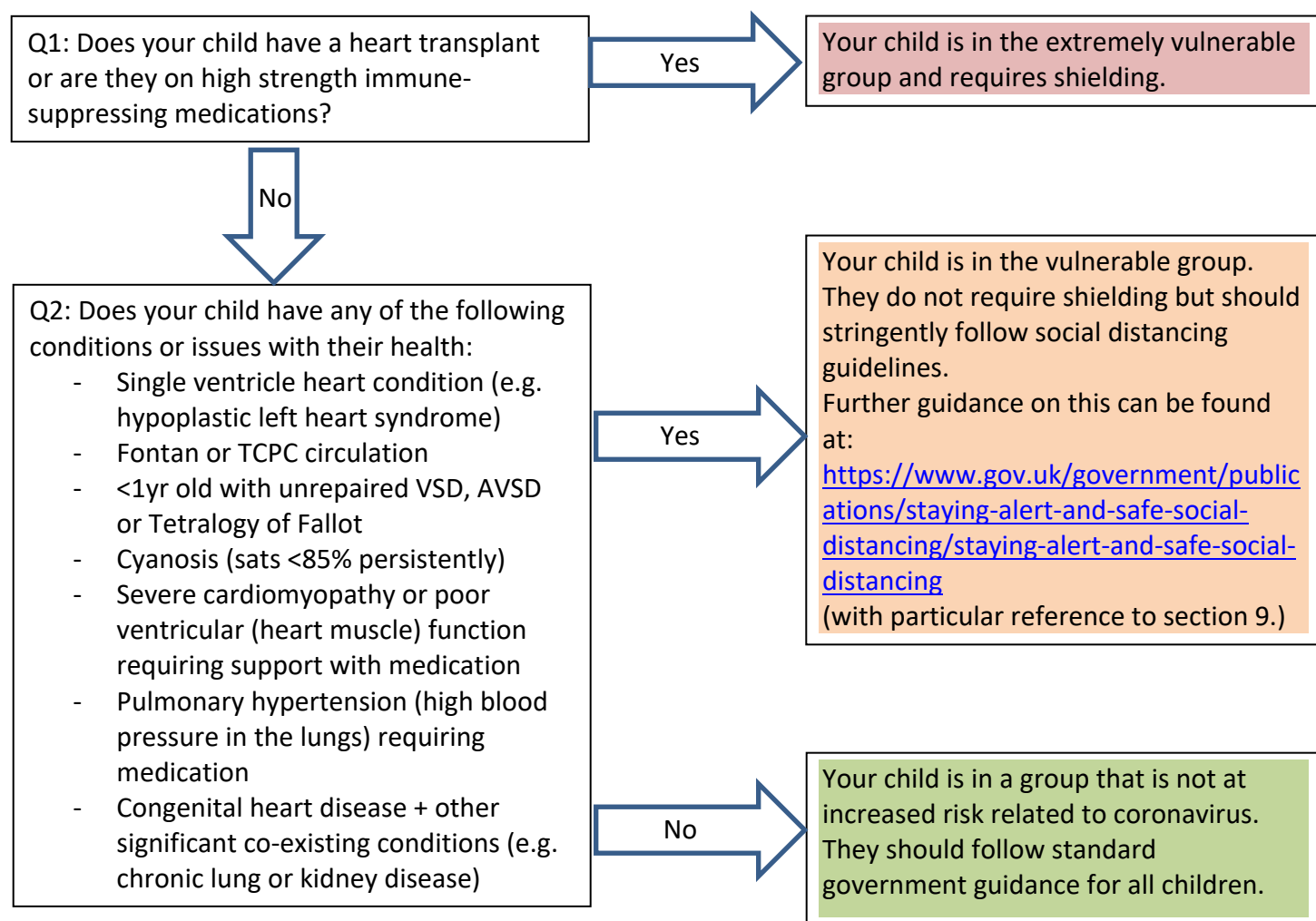
Emerging evidence suggests that children may be less likely to acquire the disease. This is supported in countries that have undertaken widespread community testing, where significantly lower case numbers in children than adults have been found.

Further information on this can be found at:

<https://www.rcpch.ac.uk/resources/covid-19-research-evidence-summaries>

Risk groups in children with congenital heart disease

The British Congenital Cardiac Association has issued guidance about different risk groups for children with congenital heart disease. This is summarized in the flow diagram below (full guidance at www.bcca-uk.org):



Guidance for children with arrhythmias

No arrhythmia (abnormal heart rhythm) conditions have been identified as a criteria for the vulnerable/extremely vulnerable risk category.

There is specific guidance for children with Brugada syndrome* (an inherited heart rhythm problem) from the Association of Inherited Cardiac Conditions (https://theaicc.org/?page_id=649).

Guidance for returning to nursery/school/college

The Royal College of Paediatrics and Child Health has issued a statement about return to school which gives the following advice:

- Children in the extremely vulnerable group should remain shielded and not return to school.
- Vulnerable children are, on the balance of probabilities, more likely to benefit from returning to school when their year group does so.
Other members of the household can attend school or work if necessary.
- All other children should also attend school when their year group returns.

Our team of consultants in Southampton is in agreement with this guidance.

The full statement can be found at: <https://www.rcpch.ac.uk/resources/covid-19-talking-children-families-about-returning-school-guiding-principles>

Further FAQs

ACE Inhibitors or angiotensin receptor II antagonists: Many patients with congenital heart disease or heart failure may be on ACE inhibitors (e.g. captopril, lisinopril, enalapril) or angiotensin receptor II antagonists (e.g. losartan). The British Cardiovascular Society, British Society for Heart Failure and European Society of Cardiology Council on Hypertension have said that there is no clinical or scientific evidence to suggest that treatment with an ACE inhibitor should be discontinued because of COVID-19. Stopping these medications may cause worsening of their heart condition.

Removal of the Thymus: The thymus gland is routinely removed during cardiac surgery needing a midline incision (scar in the middle of the chest). There is no evidence that this constitutes an additional risk for infection.

Experts at the Royal College of Paediatrics and Child Health recommend that parents treat symptoms of fever or pain related to COVID-19 with either paracetamol or ibuprofen.

<https://www.bcca-uk.org/pages/default.asp>

<https://www.rcpch.ac.uk/resources/anti-inflammatory-medicines-covid-19-advice-parents-carers>

If you have further questions that have not been answered by this information sheet, please contact the secretary of your child's consultant or our paediatric cardiac liaison nurses (02381204659)

*All patients with Brugada syndrome should self-treat with paracetamol immediately if they develop signs of fever and self-isolate. If patients with Brugada syndrome without an ICD, develop a high fever (>38.5C) despite paracetamol, they should contact 111 by phone, stating their condition, and may need to attend A+E Assessment should include an ECG and monitoring for arrhythmia. If an ECG shows the type 1 Brugada ECG pattern, then the patient will need to be observed until fever and/or the ECG pattern resolves. If all ECGs show no sign of the type 1 ECG pattern, then they can go home to self-isolate. Patients with fever who have an ICD can isolate at home and follow guidance provided by 111.