

Infective endocarditis in children with congenital heart disease

Information for patients, parents and guardians

We have written this factsheet to give you more information about infective endocarditis, specifically in children with congenital heart disease. It explains what infective endocarditis is, the symptoms to be aware of and how to reduce your child's risk of getting infective endocarditis. We hope it will help to answer some of the questions you may have. If you have any further questions or concerns, please speak to a member of your child's healthcare team.

What is infective endocarditis?

Infective endocarditis, also called bacterial endocarditis, is a rare but serious and potentially life-threatening infection that affects the inner lining of the heart chambers and valves (the endocardium).

What causes infective endocarditis?

Infective endocarditis is most commonly caused by certain bacteria (germs) entering the bloodstream and travelling to the heart. If the bacteria settle on abnormal or damaged heart valves, implanted or prosthetic heart valves, or other damaged heart tissue, they can damage or even destroy the heart valves.

Bacteria can enter the bloodstream through:

- the mouth (via daily activities such as tooth brushing or chewing food)
- a pre-existing infection in the body
- medical and dental equipment (such as needles and tubes)

What are the symptoms?

The initial symptoms of infective endocarditis are similar to flu and include:

- fever, chills or a temperature
- sweating (particularly night sweats)
- muscular aches and pains, or weakness
- headaches
- unexplained tiredness
- unexplained weight loss

Who is at risk of infective endocarditis?

Children with congenital heart disease (a range of birth defects that affect the normal way the heart works) are at higher risk of getting infective endocarditis. Because of this increased risk, we advise you to:

- take your child to their GP if they experience any of the symptoms above for more than a week
- let your child's doctor know if your child is to undergo any invasive treatments or procedures (they may require antibiotics as a precaution to prevent an infection)

How can I help reduce my child's risk of getting infective endocarditis?

It is not possible to prevent all bacteria from getting into your child's bloodstream, but there are some things you can do to reduce their risk of getting infective endocarditis.

Mouth and dental hygiene

Poor mouth and dental hygiene can increase your child's chance of getting infective endocarditis. To help reduce this risk, your child should:

- have regular dental check-ups
- brush their teeth twice a day for two minutes with fluoride toothpaste (for more information about what toothpaste your child should use, please visit: www.nhs.uk/conditions/fluoride)

Playing a two minute tooth brushing song is a great way to encourage younger children to brush their teeth correctly. A good example is the Blippi teeth brushing song:

www.youtube.com/watch?v=Ku-ForS6G3I

If your child has a mechanical or tissue heart valve, or they have previously had infective endocarditis, they will require an antibiotic if they have any major dental work. If you are unsure whether this applies to your child, please speak to your child's consultant or contact our cardiac nurse specialist team for advice.



Piercings and tattoos

Children with congenital heart disease should avoid having body piercings (particularly nose or mouth piercings) and tattoos, as these increase their risk of getting infective endocarditis. If older children have already had these done, keep an eye out for any signs of infection. If you are concerned that your child's skin looks infected, contact your GP straight away.

How is infective endocarditis treated?

Children with infective endocarditis can usually be treated with a course of antibiotics and an extended stay in hospital. They will need to be admitted to hospital so the antibiotics can be given through a drip in their arm (intravenously). However, if the infection is not caught early and complications develop, your child may need surgery to repair the damage to their heart.

Contact us

If you have any questions or concerns, or are worried about your child, please contact your local GP or our cardiac nurse specialist team on **023 8120 4659** (Monday to Friday, 9am to 5pm).

Useful links

www.nice.org.uk/guidance/cg64/ifp/chapter/infective-endocarditis

www.chfed.org.uk/how-we-help/information-service/heart-conditions/infective-endocarditis

www.nhs.uk/conditions/endocarditis

www.bhf.org.uk/informationsupport/conditions/endocarditis

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