

Heart issues

Health information after cancer treatment as a child or teenager

The purpose of this factsheet is to tell you about long-term side effects (called 'late effects') that can happen after having cancer treatment. They can happen soon after treatment has finished or later in life. The medical team at the hospital where you received your treatment or your long-term follow-up team will be able to help you with specific information about which late effects are relevant to you.

Certain drugs and radiotherapy (radiation) to the chest may have effects on your heart after treatment is finished. Damage may affect the heart muscle, the coronary arteries supplying the heart, the pericardium (lining of the heart), the system that controls heart rhythm and the heart valves.

Who is at risk?

The common treatments used to treat cancer in young people that are known to damage the heart include:

- Certain chemotherapy drugs such as:
 - doxorubicin
 - daunorubicin
 - epirubicin
 - idarubicin
 - mitozantrone
 - high dose cyclophosphamide
- Radiotherapy to the chest including radiotherapy from the chin to the upper abdomen, mediastinum (central part of the chest), lung, whole or upper abdomen, left kidney region (left upper abdomen), thoracic spine or total body irradiation (TBI).

Other factors may also increase the risk of heart problems after chemotherapy or radiation therapy. These include:

- smoking
- being overweight or obese
- high blood pressure
- high cholesterol or lipids in the blood
- eating a diet high in fat
- diabetes

- family history of heart problems
- having an inactive (sedentary) lifestyle

How do we monitor heart issues?

It is important that you lead a healthy lifestyle following treatment. You may require routine surveillance monitoring in order to check your heart. This is usually an echocardiogram (ultrasound) although other tests may be needed. These tests will be done at intervals depending on a number of factors including your previous treatments, general health and lifestyle. If any sign of heart damage is identified you may be referred on to a heart specialist (cardiologist) for further tests.

How will I know if I have heart damage?

Some people have no symptoms, even when their heart has been affected by their cancer treatment. It is therefore important that you attend for regular monitoring.

Symptoms caused by heart problems include:

- chest pain
- irregular heartbeat
- dizziness or fainting
- shortness of breath when resting or unexpectedly during exercise
- increased tiredness or fatigue
- swelling of the ankles

If you get symptoms like this you must see your doctor and let your clinical team know.

What happens during pregnancy?

Pregnancy may be a time of extra stress on the heart. If you are considering becoming pregnant, or are already pregnant, make sure your maternity doctors know what treatment you received. You will need regular ultrasounds of your heart (echocardiograms) during pregnancy and perhaps special monitoring during labour. If you are thinking of having a family please discuss this at an early stage with your clinical team.

What can I do?

To keep your heart healthy you should:

- **regular exercise** is good for you. However, if you are at higher risk of heart damage (see above), it is important to check with your clinical team before you start any high intensity exercise (e.g. long distance running, climbing and bodybuilding) as it may be advisable to see a cardiologist first.

- having a **healthy, balanced diet** which is low in fat and salt but high in fibre will help to keep your heart healthy.
- maintain a **healthy weight** and **blood pressure**.
- **smoking** increases the risks of heart disease (as well as cancer). Therefore **DON'T** smoke.
- avoid excess **alcohol** intake, especially binge drinking.
- **recreational drug use** can increase the risks to your heart and should be avoided.
- visit your **dentist** regularly as poor dental health increases the risk of infection in the blood stream which can affect the heart valves.

Where can I find out more information?

The British Heart Foundation

www.bhf.org.uk/heart-health/preventing-heart-disease



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Written by CCLG Late Effects Group, a national network of experts who specialise in looking after young cancer survivors, in conjunction with the CCLG Information Advisory Group, comprising multiprofessional experts in the field of children's cancer. If you have any comments on this factsheet, please contact us. CCLG publications on a variety of topics related to children's cancer are available to order or download free of charge from our website.

Children's Cancer and Leukaemia Group (CCLG) is a leading national charity and expert voice for all childhood cancers.

Each week in the UK and Ireland, more than 30 children are diagnosed with cancer. Our network of dedicated professional members work together in treatment, care and research to help shape a future where all children with cancer survive and live happy, healthy and independent lives.

We fund and support innovative world-class research and collaborate, both nationally and internationally, to drive forward improvements in childhood cancer. Our award-winning information resources help lessen the anxiety, stress and loneliness commonly felt by families, giving support throughout the cancer journey.

Our work is funded by donations. If you would like to help, text 'CCLG' to 70300 to donate £3. You may be charged for one text message at your network's standard or charity rate. CCLG (registered charity numbers 1182637 and SC049948) will receive 100% of your donation.