

YourHeart

You have been given this information sheet because you either had Anthracycline chemotherapy or radiation to your chest and this information is important for you to know.

Using anthracyclines and radiation to treat some cancers has resulted in significantly increased cure rates. However these therapies can also affect the heart, either during treatment or up to many years after treatment has finished.

Like some of the other potential late effects you might have read about, it is dependent on the total dose (how much) and the frequency (how often) of the treatment you received, as well as the age you were at the time.

WHAT ARE THE CHEMOTHERAPY DRUGS THAT CAN AFFECT MY HEART?

Anthracyclines are a group of chemotherapy medicines that are used to treat a variety of cancers. The ones most commonly used in children's cancer treatment are;

- Doxorubicin
- Idarubicin
- Epirubicin
- Daunorubicin
- Mitozantrone

HOW DO THE ANTHRACYCLINE DRUGS AFFECT MY HEART?

Anthracyclines can cause damage to the muscle cells of the left ventricle. Over time, this can lead to thinning of the outside wall or muscle of the left ventricle, resulting in a stiff, inflexible left ventricle. The medical term for this condition is cardiomyopathy (cardio = heart, myo = muscle, pathy = weak or abnormal)

Cardiomyopathy makes it harder for your heart to pump blood and deliver it to the rest of your body. If diagnosed, it can be treated successfully with medication.

From studies to-date, we know that patients treated with moderate to high dosages of anthracyclines are at higher risk. Chest radiation together with an anthracycline further increases the risk. In addition, females and survivors treated at a younger age (before 5 years old) are generally more likely to have problems than males or survivors treated at an older age.

HOW DOES RADIATION TO THE CHEST AFFECT MY HEART?

Most people who have radiation to the chest will not have a problem, but for some, high dose radiation can damage the heart muscle, heart valves or the coronary arteries. Damage to the lining of the blood vessels (become stiff & roughed up) can lead to the formation of blood clots or blockage of the vessels.

HOW WILL I KNOW IF MY HEART IS AFFECTED?

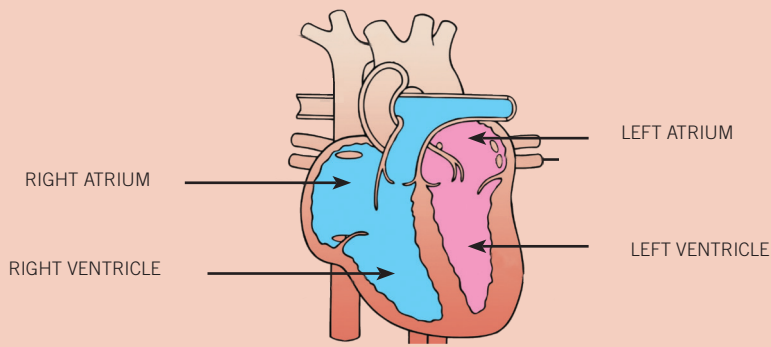
An Echocardiogram is an ultrasound (scan) of the heart and it can detect any problems including cardiomyopathy caused by anthracyclines. You may have already had one or more echocardiograms. If you are at higher risk of problems you may have an echocardiogram every few years until you are an adult. If you only had a low dose of anthracyclines or radiation you may only need one or two. If the scan shows you have a problem, a referral will be made to a cardiologist who will then monitor your heart and if necessary, offer you medication that helps improve the function of the heart muscle.

REMEMBER... EVERYONE IS DIFFERENT AND YOUR ONCOLOGIST IS THE BEST PERSON TO TALK TO ABOUT YOUR INDIVIDUAL RISK



WHAT?

HOW?



THE HEART

WHAT CAN I DO TO STAY HEALTHY?

As people get older, their risk of heart disease increases regardless of what treatment they might have received. Taking care of yourself by keeping fit, having a healthy diet, not gaining excessive weight, and having regular health checks (especially after discharge from your LEAP clinic) are all very important ways of reducing your risk of heart disease.

- Make sure your healthcare provider knows the treatment you had, so he/she can monitor your heart health (remember to give them a copy of your Health Passport).
- While regular exercise is great for you and your heart, check with your LEAP Team or GP before you start any isometric exercise e.g. heavy weight lifting/ power lifting. Weight lifting with high repetition, low weights is usually okay.
- Recreational drugs like cocaine can cause life-threatening tachycardia (rapid heart rate) and irregular heartbeat, especially if a heart has been damaged by anthracyclines or radiation – DON'T do it!
- Smoking increases the risks of heart attack. DON'T smoke!

THE ANTHRACYCLINE DRUGS I HAD WERE;

THE RADIATION DOSE I HAD TO MY CHEST WAS;

LIKE MORE INFORMATION?

The following websites may be useful

www.survivorshipguidelines.org/pdf/HeartHealth.pdf

www.heartfoundation.org.nz

<https://ltfu.stjude.org/newsletters.html>

www.kidshealth.org.nz/tags/long-term-follow-childhood-cancer

WHAT WAS MY TREATMENT?

MORE INFORMATION VISIT...

IF YOU EXPERIENCE ANY SYMPTOMS THAT CONCERN YOU, SEE YOUR DOCTOR PROMPTLY.