

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 paediatric oncology are:

- Doxorubicin
- Daunorubicin
- Epirubicin
- Idarubicin
- Mitozantrone

HOW DO THE ANTHRACYCLINE DRUGS AFFECT MY HEART?

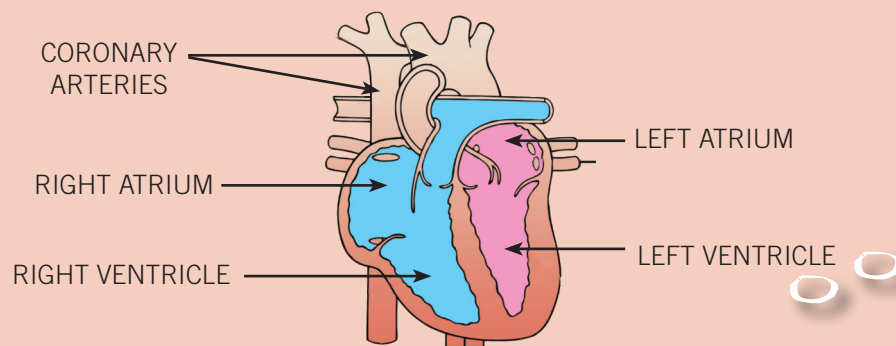
Anthracyclines can cause damage to the muscle cells of the left ventricle. Over time, this can lead to thinning of the outside wall or muscle of the left ventricle, resulting in a stiff, inflexible left ventricle. The medical term for this condition is cardiomyopathy (cardio = heart, myo = muscle, pathy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



WHAT?

HOW?



THE HEART

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?

Keeping healthy is important for everyone whether they have had cancer or not, especially as they get older.

It is essential that you have a good GP who knows your health history and who you trust. It is recommended that you have a routine health check at least once a year especially once you have been discharged from the long term follow-up clinic.

Diet and exercise are important to keeping healthy and it is often easier to eat well and exercise when going to school and living at home. But when you leave home and start living independently e.g. going flatting, it is often becomes more difficult.

If you make healthy choices now they will have a positive effect on your health for the rest of your life.

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

POSSIBLE SIGNS AND SYMPTOMS OF A HEART PROBLEM

While symptoms vary widely they can include:

- Chest pain (generally a smothering feeling).
- Irregular heartbeat.
- Shortness of breath, especially at night when lying flat.
- Increased shortness of breath or difficulties in breathing during exercise.
- Increased fatigue.
- Swelling of the ankles.

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

PREGNANCY

IF YOU ARE A FEMALE THEN THIS SECTION IS VERY IMPORTANT FOR YOU TO READ.

During pregnancy and labour the heart needs to work much harder. The blood volume increases by 30-50% and the cardiac output (volume pumped by the heart every minute) by up to 30-40%. The size of the heart increases to cope with the additional demand on it. Even if your heart has been fine, this is a time where problems could develop.

If you had anthracyclines or high dose chest irradiation, make sure your maternity carers know what treatment you had received and have a copy of your Health Passport.

Most young women do not have any problems but your heart should be monitored during pregnancy.

CURRENT RECOMMENDATIONS ARE:

- Include a medical doctor (Obstetrician or GP) in your care either instead of, or together with, a midwife. Your GP or LEAP team can refer you to the local hospital maternity service where specialized obstetric care is free.
- An echocardiogram (heart scan) is recommended during the first 3 months of your pregnancy, then at 24 and 32 weeks. If there is a problem, you may be advised to have your baby by caesarean section.
- A hospital birth may be advised rather than a home birth.
- Even if your heart is fine during your first pregnancy, monitoring of your heart is still important during subsequent pregnancies.

WHAT CAN I DO TO STAY HEALTHY?

- Taking care of yourself by keeping fit, having a healthy diet, not gaining excessive weight, and having regular health checks (especially after discharge from 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 good 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 in a heart damaged by anthracyclines or radiation – DON'T do it!
- Smoking increases the risks of heart attack. DON'T smoke!

IMPORTANT
FOR GIRLS



MAKE SURE YOUR
MATERNITY CARERS KNOW
WHAT TREATMENT YOU
HAD RECEIVED AND HAS
A COPY OF YOUR HEALTH
PASSPORT.

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.acco.org/information/lateeffectsheart.aspx

www.survivorshipguidelines.org/pdf/HeartHealth.pdf

www.heartfoundation.org.nz



WHAT WAS MY
TREATMENT?



MORE
INFORMATION
VISIT...