

HAVING AN AUTOGRAFT OR AUTOLOGOUS STEM CELL TRANSPLANT

WHAT'S IN THIS FACT SHEET?

This is a very brief guide to a type of stem cell transplant called an autologous or autograft transplant. We've provided some information here about who can have this type of transplant, how it works, what the advantages and disadvantages are and the possible side effects. There's also information about where you can get support and further information if you need it.

What is an autologous stem cell transplant?

You need healthy bone marrow and blood cells to live. If you have a condition that affects your bone marrow or blood, then a stem cell transplant could be the best treatment option. For some people, a transplant offers hope of a potential cure.

A bone marrow or stem cell transplant means that doctors will put healthy stem cells into your bloodstream. They make their way to your bone marrow where they begin to grow and make healthy blood cells.

If you are having an autologous or autograft transplant, doctors use your own stem cells that are collected and then put back into your body after you've had chemotherapy.

Who can have an autologous transplant?

An autologous transplant could be a treatment option for you if you have:

Blood cancer - If you have already had chemotherapy but your blood cancer has come back, your doctors may recommend an autologous transplant. If you have myeloma or a type of lymphoma your doctors may suggest an autologous transplant as a 'consolidation treatment.' That will help stop your disease coming back after chemotherapy.

Other cancers - Certain cancers such as germ cell tumours need to be treated with doses of chemotherapy that are so strong it can destroy your immune system. Having an autologous transplant following treatment allows your immune system to recover.

Non-cancerous conditions that affect your immune system - In rare cases, where standard treatments have failed, severe autoimmune diseases such as multiple

sclerosis and Crohn's disease can be treated with an autologous transplant. When you have an autoimmune disease your own cells have started to attack your body. In these cases chemotherapy removes the faulty immune cells and the transplant allows your immune system to be "reset".

WHAT WILL HAPPEN?

Before the transplant

Depending on your disease or condition you might have chemotherapy to prepare for the transplant weeks or months beforehand. If you have blood cancer for example, the chemotherapy will get your condition into remission, this means there is no sign of cancer in your body.

Collecting your stem cells

The timing varies, but weeks or months before your transplant day you will go to hospital to have your own stem cells harvested.

They're normally collected in a process called peripheral blood stem cell collection (PBSC). You'll be connected to a machine which takes blood from one arm, removes the stem cells and returns your blood to the other arm. It's much less common, but sometimes your transplant team may need to collect stem cells directly from your bone marrow during a small operation. Your stem cells are then frozen and stored, to be used on the day of your transplant.

Conditioning therapy

Before your stem cell transplant, your bone marrow and immune system need to be treated and prepared to make way for the new cells. This is done with chemotherapy. You'll normally start your conditioning therapy the day you go into hospital. It can take one day, ten days, or sometimes even longer, depending on your treatment.

Having the transplant

Your transplant normally takes place the day after the conditioning therapy has finished. The transplant involves having your own stem cells that were previously collected, thawed out and passed as a fluid through a thin tube into your blood stream, a bit like having a blood transfusion. The transplant isn't painful and you'll be awake the whole time.

Recovery

You'll probably be in hospital for about two to three weeks after your transplant and you'll need to spend some time in protective isolation. You'll usually be in a single hospital room with precautions taken to protect you from infection. For information about how to cope during this time see our booklet, *Dealing With Isolation*.

It usually takes at least three to six months before your level of activity starts to get back to normal.

We have more information about having a transplant and recovery on our website anthonymolan.org/patientsandfamilies

Are there any specific side effects I should expect?

Having a transplant is a very intensive treatment that has a big physical and emotional impact on your life. Your transplant team will talk to you about the risk of complications and side effects so you can make the best decisions for your care.

Side effects of an autologous transplant vary from person to person and can be short term or long term. They are often caused by the conditioning therapy you have before the transplant, as well as the effect of the transplant itself.

Short term side effects include:

- Need for blood and platelet transfusions
- Increased risk of infections
- Sore mouth (mucositis)
- Liver and kidney problems
- Tiredness
- Diarrhoea and feeling or being sick
- Loss of appetite

It's also common to feel a bit down or anxious during the early stages of recovery. Your transplant team will be monitoring you closely and there will be treatment and support available.

Long term side effects include:

- Increased risk of infection
- Fatigue

We have lots of information about long term recovery after a transplant on our website and in the series of leaflets, *Life After Transplant*.

Where can I get more information and support?

If you or a loved one are affected by a stem cell or bone marrow transplant, there are many ways we can support you.

Need to talk?

The Patient Services team at Anthony Nolan are here for you. Call us on **0303 303 0303** or email patientinfo@anthonymolan.org

Get connected

Find support from other patients and their families by joining our patient and families forum at: anthonymolan.org/patients-and-families/anthony-nolan-patients-families-forum

Find information

Our website has lots of helpful information about what

it's like to go through a transplant. Download or order our booklets for free, and find links to other places where you can get support at:

anthonymolan.org/patientinfo

This publication was reviewed by:

Dr Paul Miller, Medical Officer at Anthony Nolan

Hayley Leonard, Anthony Nolan Post-Transplant Nurse Specialist, the Royal Marsden NHS Foundation Trust, London

At Anthony Nolan we take great care to provide up to date and accurate facts about stem cell transplant. We hope the information here will help you to look after yourself. Each transplant centre will do things differently, so this booklet is just a general guide and isn't intended to replace advice from your doctor and transplant team. Please speak to your transplant team for more details about your own situation, as they will be able to give you personalised, specific advice.

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