

HAVING A HAPLOIDENTICAL STEM CELL TRANSPLANT

WHAT'S IN THIS FACT SHEET?

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

What is a 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 new, healthy stem cells into your bloodstream. They make their way to your bone marrow where they begin to grow and make healthy blood cells.

Haploidentical transplants

When you decide to undergo a stem cell transplant every effort is made to identify a matching donor, however this is not always possible. One alternative is to have a haploidentical transplant from a relative whose tissue type is a half-match to your own. For more information about how we test for a match read our leaflet, *The Little Guide for Transplant Patients*.

Biological parents are always a half-match for their children, and vice versa. Siblings have a one in two chance of being a half-match. Almost all people have at least one potential haploidentical match in their family.

Haploidentical transplants are becoming more common because they can help find a donor quickly and doctors researching this type of transplant have found that they can be a good alternative to other types. If you have acute myeloid leukaemia (AML), acute lymphocytic leukaemia (ALL) or myelodysplastic syndrome (MDS), then a haploidentical transplant is more likely to be a treatment option for you. Unfortunately they aren't available in every hospital, so talk to your transplant team about availability in your area.

WHAT WILL HAPPEN?

To your relative

If your relative is a suitable match and is happy to donate, then your transplant centre will arrange a 'donor assessment' and medical screening to make sure they are fit and well enough to donate. This is voluntary and it's up to them whether they want to donate. You can find out more information in our booklet, *Donating to Your Relative*.

To you

You will have 'conditioning therapy' to prepare your bone marrow and immune system for the new cells. This is done with chemotherapy, sometimes in combination with a type of radiotherapy called total body irradiation (TBI). This also gets rid of any remaining abnormal cells if you have them.

Having the transplant

Your transplant normally takes place the day after the conditioning therapy has finished. The transplant itself involves having the donor stem cells passed as a small bag of liquid through a thin tube into your blood stream, just like having a blood transfusion. The transplant isn't painful and you'll be awake the whole time.

The way you have a haploidentical transplant may vary, you might have:

- Different types of conditioning therapy
- Extra chemotherapy after the transplant
- Extra infusions of white blood cells called lymphocytes, before or after the transplant

Your transplant team should give you more information about this, but you can always ask if you're unsure.

Recovery

You'll probably be in hospital for about three to four weeks and after your transplant you'll need to spend some time in protective isolation. This usually means that you'll be in a single room with the door closed. For more information about how to cope during this time see our booklet, *Dealing With Isolation*.

It usually takes at least six months to a year 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 a haploidentical 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)

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/anthonymolan-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

- 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
- Graft versus host disease (GvHD)

When you've had a stem cell transplant, there are still small differences between your new developing immune system and other cells in your body. As a result, your growing immune system may harm some of the cells in your own body because it sees them as 'different'. This is called graft versus host disease. It can affect different parts of your body but commonly affects your skin, gut and liver. It can be short or long term; mild or severe. Your transplant team will be monitoring you closely for signs of GvHD and will offer you treatment that can help.

Find out more by reading our leaflet, *Life After Transplant: The Essential Guide to Graft versus Host Disease*. For more information on the long term effects of a transplant, visit our website or read our booklet, *The Seven Steps: The Next Steps*.

where you can get support at:
anthonymolan.org/patientinfo

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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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