Paediatric haematology

Allogeneic bone marrow harvest

A guide for families

Introduction

Your doctor has decided that your child needs to have an allogeneic bone marrow harvest. This leaflet will explain what the procedure involves and help answer some of the questions you may have. It is not meant to replace the consultation between you and your medical team but aims to help you understand more about your discussions.

What is an allogeneic bone marrow harvest?

An allogeneic bone marrow harvest is a collection of your child's bone marrow and is used to replace the blood production of your child who requires a bone marrow transplant (BMT).

Why does my child need an allogeneic bone marrow harvest?

Your child is due to have a bone marrow transplant to replace their blood production; the donor child will have their bone marrow collected

It is sometimes collected in advance of your child's transplant and stored in the stem cell laboratory for use later. However, it is most often collected seven days after your affected child has been admitted for a bone marrow transplant and they have completed the conditioning phase (chemotherapy). It is infused on the same day that it is collected and given via the Hickman® line, like a blood transfusion.

What does the autologous bone marrow harvest involve?

The bone marrow harvest is performed under general anaesthesia meaning your child will be asleep for the procedure. The doctor will insert a hollow needle into both sides of the hip bones. Two doctors will be performing the procedure at the same time and therefore there will be two operation sites (aspiration sites) where bone marrow is collected. The amount of bone marrow collected is based on the recipient's weight and is calculated to provide a sufficient cell dose that will ensure good engraftment of donor cells in the recipient.

In cases where there is a significant weight difference between the donor and recipient, it may be necessary to perform two separate bone marrow harvests with a 12-week gap to enable sufficient recovery of iron stores. We will make all attempts to avoid the need for a blood transfusion in the donor child but will be given if necessary. The donor child will require iron supplements for six weeks.

What happens after the procedure?

Your child will be able to recover from the procedure on the children's haematology day unit and will then be transferred for an overnight stay to one of the inpatient wards at St Mary's Hospital.

The aspiration sites will have a dressing and will be checked by the nurses for any ooze or bleeding. The nurses will change the dressings before your child is discharged from the hospital. Following a review by the medical team, your child will be allowed to go home the following day.

An appointment will then be made for you to attend clinic with your child's consultant to review the aspiration sites and ensure they have fully healed. You will also discuss the results from blood tests taken in the week before the consultation. Your child will be discharged from the clinic if the aspiration sites have fully healed, and your child's iron stores have returned to normal.

When your child goes home

The aspiration sites may feel uncomfortable for a day or two afterwards, and your child will need paracetamol. This should be given according to the instructions. The dressings may fall off by themselves, if not they can be soaked off in the bath or shower three days after the procedure.

Your child should be able to return to school five days after the procedure, but they should avoid any contact sports for approximately two weeks. Younger children should also avoid any rough and tumble play for at least two weeks.

You should call our named nurse or the day-care unit if the following occurs:

- the aspirations sites bleed or ooze a lot of fluid
- the biopsy site is still painful five days after the procedure and is not eased by paracetamol
- a redness or warmth around the site or a temperature develops, indicating an infection

Who do I contact for more information?

BMT coordinators: 077 6699 1070

Paediatric haematology day care unit: 020 3312 5095 / 020 3312 5096

Additional patient information is available on our website:



How do I make a comment about my visit?

We aim to provide the best possible service and staff will be happy to answer any of the questions you may have. If you have any **suggestions** or **comments** about your visit, please either speak to a member of staff or contact the patient advice and liaison service (**PALS**) on **020 3313 0088** (Charing Cross, Hammersmith and Queen Charlotte's & Chelsea hospitals), or **020 3312 7777** (St Mary's and Western Eye hospitals). You can also email PALS at **imperial.pals@nhs.net.** The PALS team will listen to your concerns, suggestions or queries and is often able to help solve problems on your behalf.

Alternatively, you may wish to complain by contacting our complaints department:

Complaints department Fourth floor Salton House St Mary's Hospital Praed Street London W2 1NY

Email: ICHC-tr.Complaints@nhs.net

Telephone: 020 3312 1337 / 1349

Alternative formats

This leaflet can be provided on request in large print or easy read, as a sound recording, in Braille or in alternative languages. Please email the communications team: imperial.patient.information@nhs.net

Wi-fi

Wi-fi is available at our Trust. For more information visit our website: www.imperial.nhs.uk

Paediatric haematology Published: January 2024 Review date: January 2027 Reference no: 910 © Imperial College Healthcare NHS Trust