

Perioperative Blood Conservation Program

Information about how blood conservation may reduce or avoid the need for a blood transfusion during or after surgery

A program of the Ministry of Health and Long-Term Care (MOHLTC)



Patient Education



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Toronto General
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What is blood management or blood conservation?

Blood management or blood conservation aims to reduce or avoid the need for a blood transfusion during or after your surgery. Your surgeon and the Blood Conservation team will assess your need for a transfusion. They may suggest using one, or a combination of treatments to improve your own blood supply before surgery.

Why is blood conservation necessary?

Blood conservation:

- May reduce your length of stay in hospital
- May improve your surgical recovery time
- May reduce your exposure to viruses and infection from receiving blood
- Preserves the existing hospital blood supply
- Patients know their options to a blood transfusion

Why is my blood so important and how does it affect my body?

Your blood is made up of many different parts. One important part is the **red blood cell** or **RBC**. The RBCs carry oxygen to all your organs and tissues.

The oxygen is released by an iron-rich protein called **hemoglobin** (Hgb) and is found inside the RBCs. Good levels of hemoglobin may also help you to avoid a blood transfusion during your hospital stay.

How do I know if my hemoglobin levels in my body are good?

Your surgeon may order a blood test called a complete blood count (CBC). This test will determine the level of RBC's and hemoglobin in your blood.

Normal hemoglobin levels for adults vary, but in general:

- Male: 140 g/L to 180 g/L
- Female: 120 g/L to 160 g/L

For information about hemoglobin ranges visit the Canadian Blood Services website at www.blood.ca.

What happens if my test shows my levels are low?

If your blood test shows that your hemoglobin levels are low, this is called **anemia**. If you are anemic before surgery, this may increase your chance of receiving a blood transfusion during your hospital stay.

Your doctor will assess your anemia and decide if you need more testing and treatment.

Will I need a blood transfusion during my surgery?

You may need a blood transfusion during, or possibly after your surgery to replace any of your blood that was lost during the procedure.

How much blood will I lose during my surgery?

The amount of blood that you may lose will depend upon the type of surgery you are having. Your doctor will decide if a blood transfusion is needed during and/or after your surgery.

What can be done to decrease my need for a blood transfusion?

The health care team, which may include the surgeon and/or anesthesiologist, and the Blood Conservation Coordinator will work with you to plan the best way to try to avoid a blood transfusion during your hospital stay. Please know that it is not always possible to avoid having a blood transfusion.

There are some safe and effective options that you can do before surgery to enhance your own blood supply, and possibly decrease the amount of blood loss during surgery.

Some of these options are:

- eating an iron-rich diet
- taking oral Iron supplements
- intravenous (IV) Iron supplement
- taking a medication called “Erythropoietin” (EPO) which is given by an injection. EPO helps the body to produce more RBCs and increase hemoglobin.

Your surgeon or anesthesiologist can talk to you about other options that may be possible to reduce blood loss during surgery, but this depends on the type of surgery you are having

Who can I call for more information or to make an appointment with a Blood Conservation Coordinator?

For help or more information, please contact the ONTraC Blood Conservation Coordinator at your hospital.

Toronto General Hospital or at Princess Margaret Cancer

Phone: 416 340 4800 ext. 6102

Toronto Western Hospital

Phone: 416 603 5164

The Ministry of Health & Long-Term Care (MOHLTC) supports blood management or blood conservation. ONTraC is a provincial Blood Conservation Program developed by the Ministry of Health.



www.ontracprogram.com

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