

I NEED TO KNOW ABOUT TRANSFUSION DURING SURGERY

Transfusion Fact Sheet Volume 4, Number 17
By Dr Ben Saxon

Why might I need a transfusion during surgery?

You may need a red cell transfusion if you have lost a large amount of blood before or during surgery.

A low red cell count (anaemia) is often due to a lack of iron. This can be treated with iron replacement if the surgery is planned, but sometimes anaemia related to surgery needs to be treated with a red cell transfusion.

A transfusion of platelets, plasma or clotting factors may be needed if any of these components are low or not working properly.

Are there any problems with getting a transfusion?

Transfusions can be life-saving for some patients. But in some cases transfusion creates a higher risk of medical problems. A patient with anaemia has a higher risk of problems with a transfusion than with iron replacement treatment.

Even though a transfusion is very safe, some patients have reactions. Avoiding transfusions avoids this risk.

Are there ways to transfuse less blood during surgery?

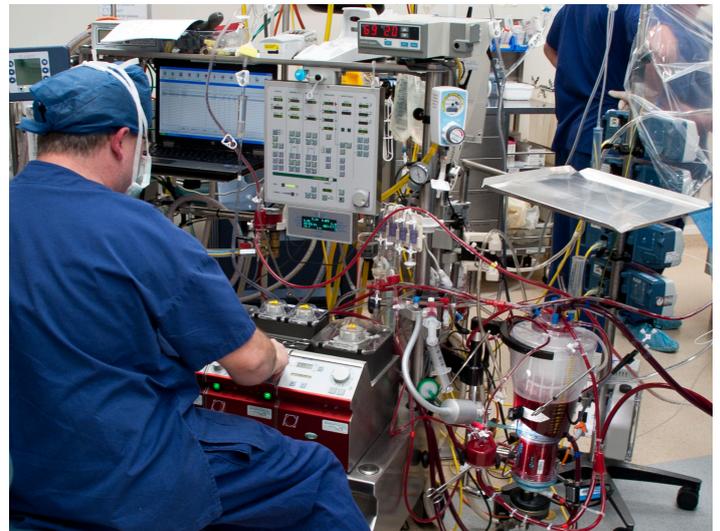
Improved surgical devices and techniques are reducing the use of blood:

- Laparoscopic surgery techniques (key hole surgery) reduce blood loss
- Devices that reduce blood loss (eg staplers, blood vessel sealing equipment)
- Some blood pumping equipment used during cardiac surgery requires less volume to operate
- Sometimes the blood lost during an operation can be collected and given back to the patient (cell salvage).

We also know that patients can tolerate quite low red cell counts after surgery. It can be better for them to build up their own red cell counts rather than to have a transfusion.

Does preoperative anaemia management reduce the chance of needing a transfusion?

Patients who have anaemia before their surgery are more likely to be transfused. Finding the cause of the anaemia and treating it before surgery will reduce the need for a transfusion. It is very important to look for anaemia before surgery.



What exactly is cell salvage?

Cell salvage is a technique used during operations. The patient's own blood is collected, then filtered or washed and reinfused back into the patient. This happens when the surgeon anticipates a large blood loss. By using cell salvage the need for a red cell transfusion may be reduced.

Are there other ways to save blood during surgery?

For a few patients, 500mL of their blood can be taken at the start of surgery, followed by infusion of other fluids to maintain blood volume. The collected blood is then returned to the patient when the surgery is complete.

BLOOD FACT

It takes about ten units of blood to change the entire amount blood in an adult.