

Blood Transfusion (Part I)

Although blood transfusions can save lives, they are not without risks. Blood transfusions can transmit infections such as hepatitis B or C, HIV and other microorganism. Studies also show that blood transfusions during cancer surgery may increase the risk of the disease reoccurring. Some patients may suffer from TRALI (transfusion related acute lung injury) after transfusion. Mismatching blood types, although rare, can also cause death.

One way to reduce the risk of complications occurring as a result of blood transfusion is to avoid blood transfusion if possible. This can be done by lowering the hemoglobin threshold at which blood is transfused (hemoglobin is the protein in red blood cells that carries oxygen from the lungs to the body's tissues and returns carbon dioxide from the tissues to the lungs). The normal hemoglobin level in a healthy body is between 12 and 14 g/dL. Usually, it is unnecessary for patients with a hemoglobin level above 8 g/dL to undergo blood transfusion.

Reducing blood loss during surgery is another way to avoid transfusion. A surgeon's operating skill is critical in reducing blood loss during surgery. Using advanced surgical equipment can also prevent excessive blood loss. There are different techniques that can be used to reduce blood loss. For example, anesthetists can stabilise the blood pressure and body temperature of patients, adjust their posture, or use hemostatic agents to stop bleeding.

(To be continued next week in Part 2)