Adverse reaction	Risk per unit transfused (unless specified)
Bacteria: sepsis (platelets)	1:100,000
Haemolytic reactions: Acute Delayed	 1:12,000 to 77,000 1:4,000 to 9,000
Anaphylaxis – IgA deficiency	1:20,000 to 170,000
Fluid overload / cardiac failure	Up to 1% of patients receiving transfusion
TRAI (Transfusion related acute lung injury)	1:5,000 to 10,000
Transfusion – associated graft vs host disease	Rare

Autologous blood

Patients sometimes ask if they can give their own blood before surgery, to be used instead of donor blood. Although autologous collection and transfusion may sound risk-free, it is not. Collection of your own blood before surgery is therefore not always recommended, except in special situations.

Re infusion

During your operation a Reinfusion drain may be inserted by your Surgeon. Any blood loss collected may need to be reinfused. And if required will be given to you within 6 hours post operatively. For further information please speak with your surgeon.

Giving your consent

You should make sure you understand the reasons, risks and benefits when you are asked to give your consent for a transfusion. If you have any objections it is extremely important to discuss them with your treating doctor.

When you have a blood transfusion

When you are ready to receive your blood transfusion, you will be asked to confirm you identity. This is for your safety because if the wrong blood (meant for someone else) is given to you, it can cause serious medical problems. Staff will follow strict checking procedures before and during each transfusion. If you feel unwell during a transfusion, you should tell staff immediately.

Blood transfusion checklist

- ☐ Do you understand why you need a blood transfusion
- ☐ Have the risks of transfusion been explained?
- ☐ Have altenatives been discussed?
- ☐ Have all your questions been answered?

References

ARCBS *Blood Component Information Booklet* 2009.

ARCBS *Blood Transfusion: Answers to some common questions for you and your family*, May 2008.

NHMRC *Blood Who Needs It?* July 2005.

This hospital is a no smoking facility

Kareena
Private Hospital
Part of Ramsay Health Care

86 Kareena Road
Caringbah NSW 2229
Ph: 02 9717 0000
kareenaprivate.com.au

October 2016

Patient Information

Blood & Blood Product Transfusions

Kareena
Private Hospital
Part of Ramsay Health Care

Why am I having a blood and/or blood products transfusion?

Your doctor has recommended that you have a transfusion of blood or blood products. Blood is collected from suitable volunteer donors and is screened by the Australian Red Cross Blood Service.

- A transfusion is necessary to replace a part of your blood.
- A transfusion is given to either:
  - Replace red blood cells or treat or prevent anaemia, improve oxygen transport and relieve symptoms of dizziness, tiredness or shortness of breath; or
  - To give you platelets to help stop or prevent bleeding; or
  - To give a plasma product to stop, treat or prevent bleeding.

Anti D immunoglobulin

If you are pregnant and have a Rhesus negative blood group, your obstetrician will discuss with you the benefits of receiving Anti D as a preventative of Rhesus disease in your newborn.

Transfusions

Transfusions are given to you intravenously, via a needle in your vein. Usually, it is a component of blood which is given. You will be closely observed for any reactions. You will also be regularly checked to determine whether you need another blood transfusion.

What are the risks of having a blood or blood products (fresh) transfusion?

Most common reactions to the blood or blood products that are being transfused are a high temperature, rash, itching and hives and feeling a bit unwell.

Rare risks are having too much blood/fluids making you short of breath, haemolysis, the abnormal breakdown of red blood cells, the growth of antibiodies which may complicate future transfusions. If these complications develop in women they can potentially cause problems for all current and future unborn babies.

Other rare complications include lung injury causing shortness of breath and the spread of viral or other infectious germs from the blood of donors. Very rarely, these above reactions can cause severe harm or death.

Other relevant treatment options you may have

In some situations there may be other choices to a blood transfusion and these include: fluid replacement with saline or other artificial compounds, iron supplements or stimulation of your marrow with a red cell growth hormone (erythropoietin).

You should discuss these options with your doctor as they may not be suitable for everybody.

Risks of transmission of infection through blood transfusions

In terms of transfusion transmitted infectious risks, Australia has one of the safest blood supplies in the world.

Every donor:

- Is a volunteer and must meet strict selection criteria;
- Answers a comprehensive questionnaire about their health and lifestyle;
- Undergoes a personal interview by trained staff and signs a declaration.

Every blood donation:

- Is screened for syphilis, hepatitis B & C, HIV and HTLV (hepatitis C & HIV using both antibody & nucleic acid testing that detects viral matter directly);
- Only blood that is negative for all these tests is released for use.

Australian residual Risk Estimates for transfusion transmitted infection

The following information outlines risk of transfusion transmitted infection calculated on Australian Red Cross Blood Service (ARCBS) data from 1 Jan 2006 – 31 Dec 2007.

Infection	Estimate of residual risk with tested blood per unit
Hepatitis B	Approximately 1 in 1.9 million
Hepatitis C	Less than 1 in 3.2 million
HIV	Less than 1 in 35.2 million
HTVL 1 & 2	Less than 1 in 14.7 million
Malaria	1 in 4.9 million to 1 in 10.2 million
CMV3	Important in certain patient groups (see below)
Variant CID	Possible. Not yet reported in Australia (see below)

There have been no reported cases of transmission by transfusion of classical CJD and retrospective studies suggest the possibility of transmission is remote.

To date, no Australian has been infected with variant CJD. In the UK, there have been a small number of reported cases of putative transmission since 2004. In Australia, as a precaution, people who have spent cumulative periods of 6 months in the UK between 1 January 1980 and 31 December 1996 and/or had a transfusion in the UK between 1 January 1980 and the present time are not accepted as blood donors.

These risks are very small compared to risks of everyday living (eg chance of being killed in a road accident is about 1:10,000). The most common types of reactions are not serious and include headache, mild fever, itching and hives. ABO incompatibility remains one of the most fatal complications of blood transfusion and most are due to avoidable errors (such as sample/patient identification errors). Other associated risks with transfusion – based on overseas estimates – are outlined in the table overleaf.