14 AUTOLOGOUS PRE DEPOSIT BLOOD DONATION

CONSIDERATIONS

The Australian Health Minister’s Advisory Council (AHMAC) Committee [2000] found that autologous blood donation has limited use and that it should not be encouraged for most people in the community. There is now a very low risk of infections occurring from the general blood supply.

It concluded that:
- The first goal is to prevent bleeding.
- The second goal is to manage any bleeding without giving a blood transfusion.
- When less than two units of blood are needed – use a blood alternative where possible.
- If more than two units are needed – use red cells from donated blood, or pre-donated blood where requested.
- Use of autologous blood collection is generally restricted to elective surgery where there is a reasonable chance of transfusion. It is not indicated for procedures that would not normally require crossmatched blood.

Autologous blood collection is performed at the ARCBS Donor Centre on Wellington Street or at one of the regional ARCBS centres.

The patient must be in good health to tolerate phlebotomy and meet all the ARCBS donor selection criteria, including:
- Hb of 110g/L.
- Weight of 45Kg (<45Kg refer to ARCBS Medical Officer).
- Age 18 to 70. Age 16 and 17 with parental consent (Age 15 and below, or > 71, refer to ARCBS Medical Officer).

Autologous collection is contraindicated in a wide variety of medical conditions such as cardiac, cerebrovascular and respiratory diseases and where the patient is known to be infectious. Blood donation during pregnancy and while breastfeeding is also generally contraindicated and would rarely be considered medically appropriate.

Refer all queries for consideration by the ARCBS Medical Officer. Autologous blood should only be infused when it is clinically indicated.

RISKS

Autologous blood collection is not 100% safe. It carries some of the same risks of allogeneic blood e.g. bacterial contamination; incorrect collection, storage and transportation; and clerical/human errors, including incorrect infusion. The risk of clerical error may be increased.
PROCEDURE

- **Considerations for Autologous Collection** should be reviewed by the requesting doctor and the case should be discussed with the Consultant Haematologist at ARCBS Wellington Street, if Autologous Collection is still considered appropriate.
- The requesting doctor must assess the patient to make sure that he or she will tolerate the pre-deposit schedule. Normally, a maximum of 4 units can be collected.
- Informed consent must be documented and requires the doctor to discuss *The risks and benefits of autologous transfusion* with the patient (or legal guardian). It should be understood that allogeneic blood or blood products may still be needed and any blood not used by the patient will be discarded.
- All autologous blood is tested for hepatitis B and C, HIV, HTLV and syphilis. If a unit fails initial screening the ARCBS will notify the requesting doctor and suspend collections pending results of supplementary testing. If this is completed in time, falsely reactive units can be issued at the requesting doctor’s request. However, units confirmed as positive for a viral marker will be discarded.

DOCUMENTATION

- The doctor must complete the following forms:
  - ARCBS Autologous Request Form (available from Blood Bank)
  - A Transfusion Medicine Request Form for Autologous Donation
  - Pathology Request Form for Full Blood Count
  - Transfusion Medicine form detailing an accurate date of elective surgery and specifying the number of autologous units to be donated.
- The patient must sign the statement of consent on the ARCBS form.
- The patient is required to bring all forms to the Haematology Department for sample collection.
- In general, ARCBS will arrange collection between 5 and 35 days in advance of the anticipated date of surgery. Units of packed red cells can be stored for a maximum of 42 days and whole blood for a maximum of 35 days.
- Oral iron therapy and dietary advice should be offered to the patient.
- The patient must contact the ARCBS Autologous Clerk (Telephone: 9421-2857 or 9325-3333 Extension 857) to make appointments for blood donation at the ARCBS donor centre, Wellington Street, Perth, or at one of the metropolitan or regional collection centres.
- The Blood Bank will fax the completed ARCBS request form to ARCBS for processing.

REFERENCES


ANZSBT Guidelines for Autologous Blood Collection April 2002 References

ARCBS Directed Donations Information Document 2010

ASBT NHMRC Clinical Practice Guidelines on the use of Blood Components September 2001