

11 FRESH BLOOD COMPONENTS

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11.4 Fresh Frozen Plasma
Section 11
Transfusion Medicine Protocols
Women's & Newborn Health Services
Perth Western Australia

11.4 FRESH FROZEN PLASMA (FFP)

DESCRIPTION

- FFP is separated from whole blood and frozen within 18 hours of collection. FFP contains all coagulation factors including Factor VIIIc >0.7 IU/mL.
- Volume 150-300mL.
- Paediatric FFP volume 75-150mL.

INDICATIONS

- Reversal of warfarin in presence of life-threatening bleeding. Use in addition to vitamin-K-dependent concentrates.
- TTP
- Bleeding or abnormal coagulation in:
 - Acute DIC.
 - Massive transfusion or cardiac bypass.
 - Liver disease.
 - Coagulation inhibitor deficiencies.

CONTRAINDICATIONS

Not generally considered appropriate:

- When coagulopathy can be corrected more effectively with specific therapy such as Vitamin K, cryoprecipitate, Factor VIII or other specific factor concentrate.
- For volume replacement when other volume expanders can be used.
- For plasma exchange procedures.

SHELF LIFE AND STORAGE

- 1 year at below -25°C in a Blood bank monitored freezer.
- Thawed at below 41°C in a monitored Blood Bank thawing bath for immediate infusion.
- Transfuse immediately after thawing and complete within 4 hours.

ORDERING

Telephone order to Blood Bank or by completed Transfusion request form. ABO compatibility required.

DOSE AND ADMINISTRATION

Dose depends on clinical situation. The suggested therapeutic dose is 10-15mL/kg.

- FFP may be administered by Gravity or Plum A+ Pump using an approved blood administration set with 170-200 micron filter designed to remove large aggregates formed during storage. Sets should be used and primed according to the manufacturer's instructions.
- The PLUM A+ line B or secondary infusion line contains a 200 micron filter which is appropriate for use with fresh blood products.
- For neonates and infants, special paediatric giving sets or screen filters for administration by syringe may be used provided they incorporate a 170-200 micron filter.
- Commence infusion within 30 minutes of removing from controlled 2- 6°C storage.
- Sets should be used and primed according to the manufacturer's instructions.
- Transfusion may be as fast as tolerated and FFP is usually infused over 30-60 minutes
- As for all fresh blood products - Transfusion must be COMPLETE within 4 hours.

PATIENT MONITORING

Severe reactions are most likely to occur within the first 15 minutes and patients MUST be closely observed during this period. It is preferable that the patient be located in an area where they can be closely observed by clinical staff throughout the transfusion.

Take observations as for all fresh blood products

- Baseline TPR and BP
- TPR and BP at 15 minutes and then hourly until completion.
- TPR and BP on completion.

Patients must be monitored and any suspected problem must be dealt with quickly and efficiently. If you suspect a transfusion reaction:

- **STOP** the transfusion
- Inform Medical Officer
- CODE BLUE if necessary
- Inform the Blood Bank
- Check Patient ID, labels and blood packs for discrepancies
- Monitor vital signs every 15 minutes until stable.
- **Refer to Section 10 The Management and Reporting of Adverse Events**

DOCUMENTATION

A record should be kept in the patient's history of the following

- The date of infusion
- Patients observations and general condition during the infusion
- Amount given
- The bag sticker should be placed on the Transfusion Medicine Record sheet KEMH MR735 and the start and stop times and checking signatures should be completed in the relevant boxes.

FOR FULL INFORMATION ON ADMINISTRATION, PATIENT MONITORING AND DOCUMENTATION PLEASE SEE SECTION 7, SECTION 8 AND SECTION 9