**Policy Statement** This document provides clear direction for nursing and medical staff in relation to the administration of Fresh Frozen Plasma to adult patients. The document supports staff in meeting the requirements of National Safety and Quality Health Service Standard 7 – Blood and Blood Products and is aligned to the National Guidelines for the Administration of Blood Products – Australian and New Zealand Society of Blood Transfusion Ltd., Royal College of Nursing Australia 2nd Edition, December 2011.

**Policy Outcomes**
Patient safety is enhanced and risk reduced when practice is in accordance with the National Guidelines. Fresh Frozen Plasma is separated from whole blood and is frozen within 18 hours of collection – it contains all coagulation factors and may be used:

- for patients with a coagulopathy who are bleeding or at risk of bleeding where specific therapy, e.g. Vitamin K concentrate, is not appropriate or available.
- for use in massive transfusion, cardiac bypass, liver disease or acute DIC (disseminated intravascular coagulation) to replace labile coagulation factors.
- to correct Warfarin overdose/supratherapeutic INR in the presence of potentially life-threatening bleeding.

**Definitions**
SNP: Sullivan Nicolaides Pathology
FFP: Fresh Frozen Plasma

**Procedure**

**Consent**
It is the responsibility of a Medical Officer to ensure informed consent of the patient prior to any therapeutic procedure that is invasive and involves risk of serious injury (such as blood product transfusions) as per policy CS 20.11 Clinical Consent to Treatment by a Medical Officer.

If the treating medical officer is unable to consent the patient (e.g. in surgery or out of the hospital), either the interns or the CCU medical officer is required to consent the patient after a verbal order has been obtained and documented from the patient’s treating medical officer.

Evidence of the consent process is to be recorded on the MR 18 Blood and Blood Products Transfusion Consent Form. This covers the current patient admission only, with the exception of Oncology where the consent is ongoing for 12 months (a new consent is required 12 months from the start date)

If consent is refused this must be documented in the progress notes.

**Prescription Form**
Prescribing a FFP transfusion is the responsibility of the medical officer. An SNP request form is to be completed.

All FFP transfusions are to be prescribed on the MR 155 Intravenous Therapy order form.

Nursing personnel notify SNP of request by phone.

**Fresh Frozen Plasma is to be thawed by SNP staff – do not thaw on clinical units.**

Once thawed, use immediately or store at 2 – 6 degrees Celsius in SNP laboratory – the thawed expiry that is used corporately by SNP is 24 hrs – thawed plasma will be discarded by SNP after this time.
Plasma should be ABO group compatible with the recipient’s red cells – matching for RhD type is not necessary. Volume depends on clinical situation, patient size and laboratory tests – generally 10 – 15 mls/kg.

**Patient Preparation**

FFP transfusions must only take place between 0700 and 1900 hours. This ensures enough trained staff are available so the patient can be readily observed and emergency support is available.

**Exemption:** Patient is **actively bleeding or needing emergency platelet transfusion** on the order of a Medical Officer

1. Explain the procedure
2. Inform the patient of the indication/s for the FFP transfusion
3. Educate about adverse reactions
4. Identify allergies and relevant past history from patient and/or medical record
5. Assess patient for any pre-existing fever, rash, itching or other signs which may later be confused with a transfusion reaction
6. Ensure written consent for the FFP transfusion has been obtained by a medical officer on the **MR15 Patient Consent to Treatment or Investigation** or **MR 18 Blood and Blood Products Transfusion Consent**

**Checking the FFP**

- The FFP **must** be checked at the patient’s bedside immediately prior to administration by two qualified members of staff holding current registration: RN and 2nd RN/IV endorsed EN
- The staff member spiking/hanging the FFP pack must be one of the two staff members who have undertaken the FFP pack and patient identity check.
- ALL patients having an FFP transfusion must have an identification wristband in-situ that includes the patient’s name, date of birth and UR number. **No ID band = NO TRANSFUSION**

**Patient and Blood Component Identification Procedure**

1. Establish positive identification of the patient by asking them to state their full name and date of birth, ensuring that the details provided (including UR number) are identical to those on:
   - The patient’s identification wristband
   - SNP Compatibility and Administration record.
   - Label on the unit of FFP

   *In the unconscious/confused patient, the wristband must be used to verify the patient’s identity. It is also important to verify the patient’s identity with a carer/spouse/parent if available.*

2. Cross check the following FFP details against the patient label attached to the unit and the SNP Compatibility and Administration record.
   - Blood product type is the same on the prescription, on the product and on the patient compatibility label
• Blood group and donation number on the patient compatibility label are identical to that on the pack label
• FFP pack has not past its pack expiry date and time – note the pack may have 2 expiry dates and times – one from the time of freezing and one from the time of thawing – carefully check both dates and times – SNP will clearly indicate the thawed expiry date and time on the tag near the label.
• Special requirements on the prescription are met e.g. irradiation, CMV negative
• FFP pack has no signs of leakage or damaged packaging, no clots, unusual discolouration or turbidity which may indicate bacterial contamination.

If there are any discrepancies with the above steps DO NOT PROCEED. Seek advice from Team Leader and/or SNP Transfusion Lab to rectify the problem.

Transfusion Procedure

1. Baseline observations attended and documented and are within normal limits
2. Check that the blood component has been prescribed as above
3. FFP collected from SNP when ready to be administered – start transfusion as soon as possible after thawing.
4. Bedside check as above
5. Prime a new, sterile standard IV giving set with an inline 170-200 micron filter with normal saline. (can be administered safely via an IV infusion pump)
6. Close the roller clamp.
7. Replace the normal saline with the bag of FFP. Open the roller clamp on the giving set, allowing the contents to flow to the patient at a prescribed rate/drop per minutes.
8. If more than one pack is prescribed, replace it with the next full one until all packs have been given.
9. Each FFP pack is typically given over 30 minutes in a stable, non-bleeding patient and needs to be completed within 4 hours of removal from approved controlled storage.
10. All lines that contained blood product are flushed with Normal Saline and changed on completion of the transfusion
12. If clinically indicated an accurate Fluid Balance Chart is maintained
13. Documentation in the progress notes start and finish times of each pack and that the transfusion was competed without incident

Monitoring the Patient

Commence ALL transfusions slowly, unless administering in an emergency.

Record temperature, pulse, respiration and blood pressure 15 minutes after the commencement and on completion of each pack – the patient must be observed closely for the first 15 minutes of each pack.

Use clinical judgement to determine if the patient requires more frequent monitoring of vital signs e.g. in the case of an unstable underlying condition or the patient shows signs of a transfusion reaction.

Visually observe the patient at least every 15 minutes throughout the entire transfusion for signs of transfusion reaction. A reaction can occur at any stage during a transfusion.
Used FFP bags need to be stored in a clean plastic bag in the specimen fridge on each unit and discarded after 24 hours (SNP collectors will assist staff by notifying them if used bags are in the specimen fridge)

**Documentation**
Ensure that all documentation relating to the transfusion is complete. This includes all of the following:

1. Vital signs taken throughout the entire transfusion documented on the general observation chart.
2. Administration start/completion times of each unit.
3. Document the volume in mls discarded (if applicable)
4. Signatures of staff checking and administering the FFP pack.
5. Donation/batch number of the FFP pack signed as administered on the SNP compatibility and administration form.
6. Patient tolerance/outcome of the procedure.
7. In the event of any type of transfusion reaction complete a RISK MAN.

**Immediate Management of a Transfusion Reaction**
Monitor the patient closely during and after the transfusion for signs of reaction – bacterial contamination of platelets should be considered if a significant transfusion reaction occurs – notify SNP urgently.

1. **STOP** administration immediately and maintain IV access. (keep the suspected pack and attached administration set for investigation)
2. **ASSESS** vital signs and stabilise patient.
3. **CHECK** all labels, forms and patient identification to determine whether the unit was intended for the recipient.
4. **NOTIFY** medical officer promptly. **If** patient meets criteria activate RAPID RESPONSE/CODE BLUE.
5. **ADMINISTER** instructions given by the medical officer to treat the reaction.
6. **REMAIN** with the patient until the reaction has resolved.
7. **ASK** the medical officer if they wish to order the FFP to be investigated.
8. **DOCUMENT** the transfusion reaction and associated management in the patient’s medical record.
9. **RISK MAN**

**FFP for Investigation**
FFP are analysed at the discretion of the treating medical officer.

1. The medical officer must complete an S&N request form requesting suspected FFP be analysed.
2. Nursing personnel send suspected unit pack attached administration set, and appropriate specimens as requested by S&N.
3. Ensure not to contaminate the suspected pack and attached administration set as this may impact on any microbiological testing.

**Reviewed by:**
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References

ACSQHC. National Specifications for Patient Identification Bands (2008)

Australian Red Cross Blood Service. Blood Component Information 2009


Blood Component Information, Australian Red Cross Blood Service, March 2015