Administration of convalescent plasma in adults

Important: administration to be undertaken by trained and competent, regulated and registered healthcare professionals

Key points:

1. Correct patient and unit of plasma– positive patient identification
2. Correct administration set
3. Observations, and documentation, as per hospital policy

1) Documentation and monitoring

All bedside transfusion checks must be completed as per local policy, including:

- Consent and prescription completed
- Check component integrity and expiry
- Cross check tag, unit label, prescription, and positive patient identification - ID band and verbal response.
- The patient must be kept under close observation throughout the transfusion
- These patients must be risk assessed for transfusion associated circulatory overload TACO), using a checklist wherever possible (see SHOT TACO checklist).

2) Selection and use of administration sets:

- CE-marked blood transfusion set. (170-200µm integral mesh filter).
- The administration set should be changed at least every 12 h (or per manufacturer's instructions).
- Peripheral IV, central IV or intraosseous access suitable.
- All devices/ equipment must be certified for use with blood components and used in accordance with manufacturer's instructions.
- Routine administration rate per unit is 10–20 mL/kg/h (approximately 30 mins), complete before stipulated expiry time or within 4 hrs of removal from temp controlled storage.

3) The following must be recorded for each unit transfused:

- Date & time commenced and completed
- Donation number and Volume administered
- Observations (check local policy); min requirements P, T, BP and RR:
  - Up to 1 hour before the transfusion.
  - 15 mins after commencement.
  - Within 1 hour after completion.
- Additional (SaO2, urine output and fluid balance) and increased frequency of observations may be required according to the patient's condition e.g. risk of TACO identified.
- Any symptoms or complications.
- Final fate (traceability) of component (a requirement by law)
- **See overleaf for the management of transfusion reactions**.

Management of Transfusion Reactions

Immediate Actions

- Inform medical staff immediately.
- Pause (discontinue if severe) the transfusion.
- Assess and maintain ABC.
- Maintain venous access.
- Confirm positive patient ID & check compatibility of component.

Additional Actions

Perform & monitor patient observations:

- Temperature.
- Pulse & Respiration.
- Blood Pressure.
- Urine output.
- O2 saturations.
- Review & monitor fluid balance.

- Retain component bag & administration set.
- Inform your transfusion practitioner and/or transfusion laboratory.
- Document in patient notes.
- Consider additional actions as per local policy.

Dependent on the type and severity of the reaction, it may be appropriate to continue the transfusion (slow rate if required); guidance is available from your local transfusion team.

The patient will require close monitoring for any further deterioration.

Suggested Investigations

- Full Blood Count (FBC).
- Coagulation Screen (including fibrinogen).
- Urea and Electrolytes.
- Liver Function Tests (including bilirubin).
- LDH & Haptoglobin.
- Repeat Group and Screen.
- Blood Cultures for the patient.
- Urine test for presence of Haemoglobin.

Others you may consider depending on symptoms and reaction type.

- Glucose.
- Blood gases.
- Chest X-Ray.
- IgA level.
- Mast cell tryptase.
- Component bag blood culture (in discussion with NHSBT).

Tinegate, H. et al. 2012. Guideline on the investigation and management of acute transfusion reactions Prepared by the BCSH Blood Transfusion Task Force.