ASSESSING PATIENTS FOR RISK OF TRANSFUSION ASSOCIATED CIRCULATORY OVERLOAD (TACO) PRIOR TO CONVALESCENT PLASMA TRANSFUSIONS

Staff should use this checklist, based on the TACO checklist included in the annual SHOT reports, to perform a formal pre-transfusion risk assessment for Transfusion- associated circulatory overload (TACO) in patients receiving convalescent plasma

This should be undertaken, wherever possible for all patients (especially if older than 50 years or weighing less than 50kg) receiving blood transfusion, including transfusion of convalescent plasma for COVID-19

It is important to note that TACO is the most commonly reported cause of transfusion-related mortality and major morbidity

Wherever risks are identified, appropriate mitigating actions need to be taken promptly- this guidance should be used in conjunction with local transfusion policies. Please consult your local transfusion staff for queries and clarifications

TACO can occur in children and neonates as well, mostly due to errors in calculation of blood component volumes. All staff involved in paediatric and neonatal transfusions must be trained and competent to do so and use weight-based dose calculations for convalescent plasma (as ml/kg and not as bags/units of plasma)

TACO risk assessment and suggested mitigating actions
Step 1: Assessing cardiac risk
Does the patient have a diagnosis of “Heart Failure”, congestive cardiac failure (CCF), severe aortic stenosis, or moderate-severe left ventricular dysfunction?
Is the patient on a regular diuretic?
Does the patient have severe anaemia?
Step 2- Assessing pulmonary risk
Is the patient known to have pulmonary oedema?
Does the patient have any respiratory symptoms of undiagnosed cause?
Step 3: Assessing fluid balance
Is the fluid balance clinically significantly positive?
Is the patient on IV fluids (or has been in the past 24 hours)?
Is there any peripheral oedema?
Does the patient have hypoalbuminaemia?
Does the patient have significant renal impairment?
Does the patient need other blood components?
If ‘yes’ to any of the above questions

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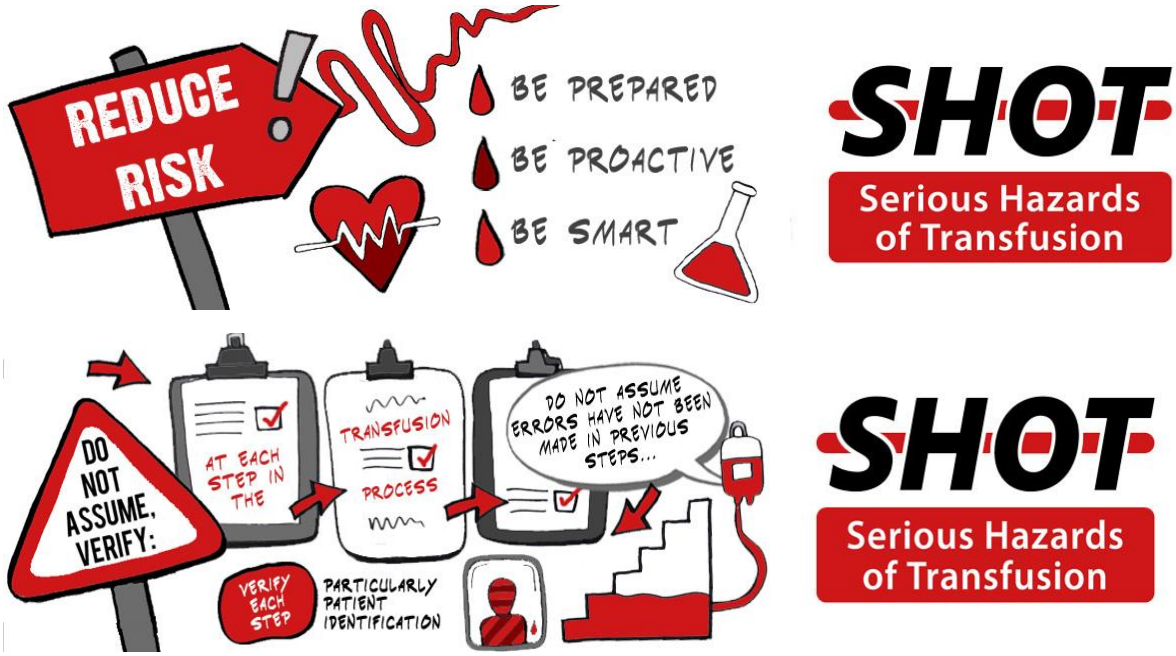
Consider the following mitigating actions
Step 1:
Can the transfusion of convalescent plasma be safely deferred until the issue can be investigated, treated or resolved?
Step 2:
Review the need for transfusion of additional components (do the benefits outweigh the risks?)
Step 3:
Consider slower transfusion rates. Note that once thawed, CP should be transfused as soon as possible. If delay is unavoidable, the component may be stored and should be used within 4 hours if maintained at 20–24 °C or within 24 hours if stored at 2–6 °C
Measure the fluid balance
Consider giving a prophylactic diuretic
Monitor vital signs closely, including O2 saturations
Consider body weight dosing for other additional blood components needed especially for patients with low body weights
Repeat TACO assessment prior to every transfusion episode in every patient
Please note that these mitigating actions help reduce risk of TACO, but TACO can still occur despite these measures and all patients need to be monitored closely as per national guidelines and local policies



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