

# **SHOT Cautionary Tales**

# No 1. Transfusion of Damaged Components (April 2025)

#### Sharing learning from events reported to SHOT across the transfusion pathway

### Background



Concerning practice has been identified, where a blood component pack was unintentionally damaged, but the transfusion of that component continued



This poses risk of contamination (microbiological and others)

This topic is being highlighted following a pattern of deviations from safe practices, and repeated incidents reported within a short timeframe

# **Case Descriptions**

#### Note: The patients in the cases below did not suffer any adverse clinical consequences. Appropriate escalation, investigation and corrective actions have been taken locally.

#### Case 1: Leaking platelet pack plugged with finger during transfusion

When hanging a unit of platelets for routine transfusion, two nurses noticed the pack was leaking. With the intention of avoiding wastage, the nurse took turns with a supernumerary student nurse to block the holes with their gloved fingers whilst the transfusion completed for approximately 30 minutes. The patient was informed that the pack was leaking and that was why the nurses were holding it. The empty unit was returned to the laboratory post-transfusion to identify the source of the leakage, which was found to be a second port being opened.

#### Case 2: Non-sterile clamp used to seal pierced blood component during an emergency

During an emergency transfusion for an upper gastrointestinal bleed, a unit of fresh frozen plasma was administered which had been pierced during initial spiking. A non-sterile clamp was used to seal the puncture, and the second port was used for administration. The giving set was also noted to be leaking during transfusion, and this was replaced with a non-blood giving set. The decision to continue with the transfusion was made by the doctor considering the emergency situation.

#### Case 3: Surgical tape used to cover leaking platelet pack

During the administration of platelets in the emergency department, a bank staff member accidentally punctured a hole in the pack with the giving set. Instead of discarding the platelets, they placed a piece of surgical tape over the hole to avoid the 'platelets dripping on the floor' and continued with the transfusion.





## **Contributory Factors from Case Descriptions**

An intention to reduce component wastage in emergency situations Staff who did not routinely carry out transfusions (including bank and agency staff) Staff working without transfusion competency (including bank and agency staff) Knowledge gaps regarding the impact of transfusing components from damaged packs

## **Key Learning Points**



Transfusion of blood from damaged component packs exposes patients to increased risks of contamination and compromises patient safety.



**In the clinical area:** As per BSH guidance, 2018: The component pack should be inspected for any signs of leakage or damaged packaging. Inspect the blood component for unusual colour, turbidity or clumping of the contents. If a defect is found or damage occurs at any point in the transfusion pathway, then contact the transfusion laboratory for advice. The component must not be transfused until there has been an investigation, and any discrepancies resolved.



**In the laboratory:** Any damaged packs returned to the laboratory should be quarantined and appropriate investigations initiated. Promptly supply appropriate alternative component to the clinical area.

Check all blood components for pack integrity and appearance upon receipt from blood services, and prior to issue

# **Suggested Actions**

Review local documentation to ensure there are clear procedures for the following available to all staff groups:

- 1. The cessation of transfusion in case of damage
- 2. Return of damaged components to the laboratory
- 3. Inclusion of sterile practice requirements within transfusion policy and within transfusion training programme to share lessons learnt from any such events locally

### **Further Resources**

Robinson, S. et al., 2018. The administration of blood components: a British Society for Haematology Guideline.

Transfusion Medicine, 28(1), pp. 3-21. doi: <u>https://doi.org/10.1111/tme.12481</u>

Blood Transfusion E-learning: https://www.e-lfh.org.uk/programmes/blood-transfusion/

Pre-administration Blood Component Checking Process Video: <u>https://www.youtube.com/watch?v=63zio\_3abfo</u>

SHOT Safe Transfusion checklist Safe transfusion practice : Transfusion checklist - Serious Hazards of

#### Transfusion

Please also check your local infection control policies

