

# **2019 Annual SHOT Report – Supplementary information**

# **Chapter 19: Uncommon Complications of Transfusion**

Additional cases not included in the full 2019 Annual SHOT Report:

## Case 19.4: Severe back pain in a paediatric patient

A paediatric patient <10 years old, known to have hereditary spherocytosis was admitted with a viral illness and anaemia, and developed severe back pain 1 hour after commencing a red cell transfusion. They were given paracetamol and antihistamine, and the transfusion was temporarily stopped with full recovery. There was no evidence of haemolysis.

#### Case 19.5: Unexplained symptoms in an elderly patient

A patient in her 70s, was diagnosed with bowel cancer with anaemia pre procedure. Halfway through the third unit she complained of headache, slight rise in temperature (0.5°C) and raised veins all over her hands and feet with stable vitals. She recovered soon after cessation of the transfusion.

## Case 19.6: Loin pain during platelet transfusion

A patient in her 80s with myelodysplastic syndrome on a chronic transfusion programme received a routine human leucocyte antigen (HLA)-matched platelet transfusion, and experienced loin pain with no other symptoms 20 minutes into the transfusion. The patient remained stable. The transfusion was stopped, hydrocortisone and paracetamol were given, and the pain quickly subsided.

## Case 19.7: Mild reaction with anti-C3b/anti-C3d

A mild febrile-type (temperature rise of 1.7°C) non haemolytic reaction in a male patient in his 70s following an out-of-hours urgent transfusion for pancytopenia with epistaxis. This case has been included here as a learning point - red cells had been electronically issued but post-transfusion investigations showed the patient's direct antiglobulin test (DAT) to be positive with Anti-C3b/C3d. At the time of the transfusion the laboratory was not aware of the reaction with anti-C3b/anti-C3d as this is not routinely part of electronic issue.

## Case 19.8: Multiple symptoms and pain

A patient in her 30s, admitted with neutropenic sepsis while on treatment for metastatic breast cancer, developed chills, shivering, tachycardia and pain in the peripherally inserted central catheter (PICC) line where the transfusion was started. A full antibody screen was done with a negative result, and there was no serological evidence of a transfusion reaction.



#### Case 19.9: Severe pain during red cell exchange transfusion

A patient with sickle cell anaemia in his 20s, developed a severe headache and pain in his right elbow during unit five of an eight-unit red cell exchange. The procedure was stopped, and investigations including cultures were all negative.

## Case 19.10: Tachycardia, hypertension and feeling cold

A patient in his 70s with underlying cardiac disease underwent percutaneous cardiac intervention. One hour after starting a red cell transfusion for a haemoglobin of 56g/L, the patient complained of feeling very cold with documented tachycardia and hypertension. The transfusion was stopped and discarded; and the patient was managed with supportive measures and recovered.

#### Case 19.11: Pyrexia, tachycardia and hypertension

A patient in his 50s undergoing aortic valvular replacement, had bleeding into the chest drains post-surgery. During a transfusion of red blood cells, the patient experienced a pyrexia, tachycardia and hypertension.

#### Case 19.12: Recurring chest pain during transfusion

A patient in her 40s admitted for breast reconstruction (flap) developed chest pains after the blood transfusion was started, and recurred when transfusion was restarted after pausing. Gram positive cocci was grown from the bag.

#### Case 19.13: Tachycardia, chest pain and anxiety during platelet transfusion

A patient in her 70s being treated for acute myeloid leukaemia (AML) with neutropenic sepsis developed tachycardia, chest pain and anxiety following transfusion of HLA/human platelet antigen (HPA)-matched platelets. No rash or wheeze was noted, and the patient recovered within 30 minutes of additional chlorpheniramine and hydrocortisone post reaction.

#### Case 19.14: Vomiting, blood pressure rise, and tachycardia during transfusion

A patient in her 90s was admitted following a fall with fractured humerus, with co-existing chronic kidney disease and heart failure. The patient developed vomiting, a rise in blood pressure (BP) from 180/79 to 203/93 and tachycardia 2 hours into the blood transfusion (150mL red cells transfused). She recovered with paracetamol, ondansetron and omeprazole.

#### Case 19.15: Multiple symptoms and pain during transfusion

A patient in his 80s was admitted with a fractured neck of femur. He had no pre-existing cardiac/lung disease but had renal impairment. He developed shortness of breath, anxiety, restlessness and pain in the chest, loin and abdomen during transfusion associated with tachycardia and hypertension. He improved with oxygen therapy and nebulisers, had a normal chest X-ray, negative cultures and no evidence of haemolysis.