

IPEX Questions



Blood and Transplant

Lot Number N083 3144	Expiry Date 2026.03.12
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Patient X is a 43-year-old female with Iron-deficiency anaemia (IDA) secondary to ongoing menorrhagia. She has been admitted to hospital with fatigue, light-headedness, shortness of breath and haematuria. Two weeks prior to this admission she was transfused 2 units of red cells at the gynaecology department due to symptomatic IDA, where her Hb increased from 48 to 72g/L.

Upon this admission patient X's Hb has fallen to 65g/L, LDH has risen from 210 to 1280U/L, bilirubin levels have risen from 6 to 15mg/L. Haptoglobin levels have decreased to <0.10g/L and a urine dipstick shows presence of blood and protein.

When asked about transfusion history, patient X says she has had a transfusion following childbirth 20 years ago.

You are provided with pre and 14-day post transfusion samples from patient X and samples from the 2 transfused units. Perform a serological investigation on the samples provided.

1. What serological tests should you routinely perform on these samples?
2. What is the probable cause of patient X's symptoms, and which antibody specificities are most commonly associated with this transfusion complication.
3. a) Would you expect the post transfusion DAT to be positive or negative? Explain your answer.
b) Given the result of patient X's post transfusion DAT – what could be the reasoning?
4. If the patient required more blood, what should be selected?