Case Studies

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Case 4
Case 4 Background

- Elderly patient with Ca required 2 unit red cell transfusion as part of palliative care plan

<table>
<thead>
<tr>
<th>Screen cell</th>
<th>Rh phenotype</th>
<th>Reaction</th>
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<td>1</td>
<td>R1R1</td>
<td>-</td>
</tr>
<tr>
<td>2</td>
<td>R2R2</td>
<td>+</td>
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Group A D positive Known anti-E

2 units E- crossmatch compatible red cells supplied
4 weeks later…

- 2 further units red cells required
- 2 units E- crossmatch compatible red cells supplied

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Group A D positive
Known anti-E

After 150 mL:
Hypotension, sweating, shaking, loin pain, breathlessness
What would you recommend? - Q

1. Discontinue the transfusion completely

2. Continue transfusing but slow down

3. Stop this unit but try 2nd unit
What would you recommend? - A

1. Discontinue the transfusion completely

2. Continue transfusing but slow down

3. Stop this unit but try 2nd unit
Action taken

Transfusion was discontinued completely
Q - Reaction most likely to be:
   (Hypotension, sweating, shaking, loin pain, breathless)

1. Non-haemolytic febrile

2. Anaphylactic

3. Haemolytic

4. TRALI

5. TACO
A - Reaction most likely to be:
(Hypotension, sweating, shaking, loin pain, breathless)

1. Non-haemolytic febrile
2. Anaphylactic
3. Haemolytic
4. TRALI
5. TACO
Initial diagnosis

- Initially thought to be anaphylactic
- Serological investigation also undertaken
Laboratory investigations

- Pre and post transfusion samples

Post transfusion bilirubin: slightly increased at 35µmol/L

Anti-Jk\(^a\) in addition to the anti-E

DAT positive 1+
Eluate non-reactive
Q - Reaction most likely to be:
(Hypotension, sweating, shaking, loin pain, breathless)

1. Non-haemolytic febrile
2. Anaphylactic
3. Haemolytic
4. TRALI
5. TACO
A - Reaction most likely to be:
(Hypotension, sweating, shaking, loin pain, breathless)

1. Non-haemolytic febrile
2. Anaphylactic
3. Haemolytic
4. TRALI
5. TACO
Reaction type?

- Probably acute haemolytic
- Could also have been an element of acute non-haemolytic
- Could have included a mild delayed HTR
Why did this happen?

The antibody screen was positive but a full antibody panel was not undertaken – it was assumed that the antibody was the same because the same results were obtained in the screen.
Why did this happen?

Guidelines are clear that an antibody identification panel should be undertaken every time a sample with a positive antibody screen is tested.
How should this be reported? - Q

1. HTR (acute)
2. ATR
3. IBCT
4. Depends on laboratory policy
How should this be reported? - A

1. HTR (acute)  
   103

2. ATR  
   26

3. IBCT  
   34

4. Depends on laboratory policy  
   8
Laboratory policy was in line with guidelines and this should therefore have been reported as an IBCT.

This was reported as an acute HTR.
Lessons

- An ID panel should always be undertaken each time a sample is tested.
- If an HTR is the result of failure to follow policy this should be reported as an IBCT.
- If reported in the correct category, the most appropriate questions are asked:
  - Root cause more likely to be identified
  - SHOT report will be better informed.