Case 20

Two units of FFP were requested and thawed, but were not labelled. They were collected from the laboratory by a porter and delivered to ICU. Two nurses 'checked' the FFP and set up the first unit. The BMS then discovered the labels on the bench and recalled the FFP. The first unit was taken down, a spigot was inserted and it was returned to the laboratory. The BMS attached the labels and returned the FFP to the ICU where the transfusion was re-commenced.

Learning points

- The need for every satellite refrigerator should be carefully risk assessed and reviewed regularly. Clear protocols establishing the responsibilities of the laboratory and nursing staff must be implemented.
- Transfusion laboratory stock control procedures should ensure that expired units are cleared from issue locations.
- Nurses giving blood must be familiar with current guidelines on the handling of blood components.
- Competency training for ward staff must reiterate the requirement for red cells to ONLY be stored in monitored blood refrigerators and must highlight the differences between a blood refrigerator and a normal ward refrigerator.
- Pre-transfusion checking procedures must include checking of the expiry date of the component and noting any end-date for suitability provided by the laboratory.

7 Adverse events relating to anti-D immunoglobulin (Ig) (n=87)

Eighty-seven events were related to anti-D immunoglobulin administration (c.f. 67 in 2004) and are summarised in table 11 below.

Table 11

Primary errors in cases involving anti-D Ig administration

Type of event	Number
Omission or late administration of anti-D Ig Clinical error in 20 (7/15 in community) Laboratory error in 7 (2 also clinical errors)	27
Anti-D Ig given to D positive patient All clinical errors (7/23 in community, 2 also laboratory error)	23
Anti-D Ig given to patient with immune anti-D Clinical error in 4 (2/4 in community) Laboratory error in 3 (1 also clinical error)	7
Anti-D Ig given to patient with weak D antigen [1] All laboratory errors	6
Anti-D Ig given to mother of D negative infant Laboratory error in 4 (1 also clinical error) Clinical error in 3	7
Anti-D Ig given to wrong patient All clinical errors in hospitals	6
Expired anti-D Ig given All clinical errors (8/9 in community)	9
Other[2] (1 in laboratory, 1 clinical error)	2
Total cases	**87**
Total errors	***93***

[1] These events should probably be regarded as limitations of available technology and not errors.

[2] One patient given 10 x correct dose issued by laboratory, 1 given IV preparation because of incorrect ward protocol.

For the first time, cases were reported in which misinterpretation of the antibody investigation at booking resulted in severe haemolytic disease of the fetus, resulting in an intrauterine death in one case (case 21) and severe morbidity requiring exchange transfusion in another (case 22). In a further case (case 23) no routine antenatal serology was done. This case has not been included in the numerical analysis as it does not fulfil the criteria for IBCT.

Case 21

Anti-D was detected at booking and a repeat sample requested by the laboratory. This was not sent; the GP interpreted the results as normal, and entered the patient on the routine antenatal anti-D prophylaxis (RAADP) programme. The reference laboratory did quantitation on the 28 week sample and found the anti-D level to be 141iu/mL. They alerted the Fetal Medicine Unit who attempted to contact the GP, but in the meantime the patient was admitted with an intrauterine death.

Case 22

Anti-D was detected at booking but assumed by the laboratory to be due to prophylactic anti-D Ig given to cover amniocentesis. No quantification or follow-up was carried out. In fact the patient had been found to have immune anti-D in 1994, but the laboratory computer records prior to 1995 were not accessible and the clinical staff had not looked up the notes of the previous pregnancy. No quantification was done during pregnancy - at delivery the infant had severe haemolytic disease of the newborn (HDN) and required exchange transfusion.

Case 23 (not included in numbers)

A patient delivered an infant with severe HDN. No samples had been taken during pregnancy. A historic group O D negative was recorded in the notes.

Learning points

- Training and competency assessment of BMSs in antenatal serology testing and the indications for issue of anti-D Ig must be comprehensive.
- There is an urgent need for education of primary care staff in the basic principles of antenatal serology and current relevant guidelines.