Background

Although it is a fractionated blood product rather than a labile blood component, adverse events associated with anti-D immunoglobulin are included in the annual SHOT report as they provide a useful insight into process errors which may be applied to transfusion as a whole.

Numbers of Anti-D reports have progressively increased over the last 11 years, reflecting an increased awareness of the need to report this type of event.

Results

Who made the errors?

- Midwives 153 (78%)
- Laboratory 38 (20%)
- Medical staff 5 (2%)

Omission or late administration n = 127
- Primary error made by midwife in 118 cases
- 25 cases in the community and 102 in hospital.

Anti-D given to RhD positive patients n = 27
- Primary error made by midwives (7), Laboratory (18), medical staff (2)

Anti-D given to patients with immune anti-D n = 20
- Primary error made in laboratory (7) and clinical area (13)

Anti-D given to mothers of RhD negative infants n = 6
- laboratory errors (3) and midwife errors (3)

Anti-D given to the wrong patient n = 9
- All were clinical errors due to misidentification of the patient in the clinical area

Wrong dose of anti-D given n = 6
- 4/6 were laboratory errors
- 2/6 were clinical errors, all issues from remote batch stock

Handling & storage errors n = 1
- 1 clinical error, issuing expired anti-D from remote batch stocks

Commentary

Many of the cases involve:

- Failure to follow basic clinical and laboratory protocols
- Transcription errors
- Testing errors
- Ignoring / overriding hazard flags on IT systems
- Failure of communication
- Lack of knowledge and understanding of the principles of anti-D prophylaxis

Recommendations

- Administer anti-D if there is doubt as to RhD type or as to whether detectable anti-D is immune or prophylactic (BCSH guidelines)
- RhD typing should be performed by routine laboratory methodology – emergency manual techniques may not be as robust
- Follow Department of Health guidance regarding patient ID, recording and traceability
- Obstetricians, midwives and laboratory staff must be familiar with national guidance relating to Routine Antenatal Anti-D Prophylaxis (RAADP)
- There must be representation from midwives and obstetricians on hospital transfusion committees, with the aim of producing joint local protocols based on established national guidance
- There should be clinical follow-up and retesting in 6 months of patients in whom anti-D administration has been delayed or omitted