9 Adverse Events Related to Anti-D Immunoglobulin (Ig) n=350

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Key SHOT messages

- SHOT's key message about anti-D Ig is to encourage consistency of practice within hospitals, with robust policy formulated as a partnership between obstetricians, midwives and the laboratory, regardless of which professional guideline may influence the finer detail

Themes in this year's reports show:

- Misunderstanding of national guidance, specifically that anti-D Ig should be offered for sensitising events, regardless of whether the woman has received routine antenatal anti-D Ig prophylaxis (RAADP) (and vice versa), and that diagnosis and delivery of intrauterine deaths (IUD) should be treated as separate sensitising events as they may be some days apart
- There persists a culture of transcribing blood grouping results onto maternity notes and care plans, often incorrectly, resulting in omission or inappropriate administration of anti-D Ig
- Failure to consult computer records before issuing anti-D Ig from the laboratory
- Putting the onus on the woman to return for anti-D Ig when she is variously frightened, traumatised, too ill, or has her hands full with a new baby, instead of issuing it at presentation is inappropriate. Putting the blame for failure onto the woman for not complying does not improve an inadequate system
- Comments such as 'nobody would take responsibility for dealing with this issue' denote a poor system
- Community midwives often do not have access to the electronic patient record, and therefore do not see the most recent or updated reports related to D status or antibody titres, relying instead on what may be outdated versions in the hand-held notes
- Poor (and largely unsubstantiated) advice that there is no point in administering anti-D Ig once 10 days have passed since a sensitising event has become common practice. Evidence from 1975 indicates that administration up to 2 weeks may be beneficial (see Chapter 21 in Web Edition)

A total of 350 case reports were reviewed this year, of which 271 (77.4%) related to the omission or late administration of anti-D Ig. This is a continuing worrying situation, putting a significant number of women at risk of potential sensitisation to the D antigen with associated mortality and morbidity in affected neonates.

There was one case where immune anti-D was wrongly assumed to be present due to prophylaxis and so the pregnancy continued unmonitored, resulting in a severe case of haemolytic disease of the fetus and newborn (HDFN) requiring exchange transfusion, during which the baby died.

Case 9.1: Assumption coupled with poor handover leads to unmonitored pregnancy

A biomedical scientist (BMS) tested a woman's sample and found anti-D to be present. A message was left for the next shift to ask maternity whether anti-D Ig had been administered. The message was misinterpreted as meaning that the detectable anti-D was prophylactic, and the pregnancy continued unmonitored, along with further prophylaxis. The baby was born extremely jaundiced, requiring immediate exchange transfusion, but developed complications leading to death (see Case 1 in the Error Reports: Human Factors section).

There were 3 cases where a woman developed an immune anti-D following delay or omission of prophylaxis during the current pregnancy.

It is disappointing to read a comment from one case, that 'The onus on checking reports from the reference laboratory should be on clinical staff', when the hospital laboratory has such an important role to play in interpreting and conveying often complicated messaging to clinical colleagues whose concerns are 'Should I be worried by this?', or 'Do I need to do anything because of this report?'

There is however one excellent example of implementation of good practice following reported errors, and this is to be applauded:

Case 9.2: Laboratory report misinterpreted

Anti-D Ig was issued for routine prophylaxis at 28 weeks from clinical stock, after midwives misinterpreted 'Antibody Screen Negative' as 'D negative'. The laboratory has changed the wording on their grouping reports to; 'No antibodies detected' in an attempt to stop this happening again.

Full details of Anti-D Ig Errors are available in the full chapter, Chapter 21, in the 2015 Annual SHOT Report: Web Edition.