Anti-D

.....at the sharp end

Presented by
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SHOT annual Meeting
7th July 2008
Anti-D now a separate chapter, instead of part of IBCT

- “Any reaction due to anti-D when administered, or any serious adverse event relating to the prescription or administration of anti-D which has the potential to cause harm to the mother or foetus immediately or in the future.”
Reporting Categories

• Omission or late administration of anti-D immunoglobulin.

• Inappropriate administration of anti-D immunoglobulin to;
  – a D positive patient.
  – a patient who already has immune anti-D.
  – a mother of a D negative infant.
  – a different patient from the patient it was issued for.

• An incorrect dose of anti-D immunoglobulin according to local policy.

• Administration of expired, or otherwise out of temperature control, anti-D immunoglobulin
<table>
<thead>
<tr>
<th>Type of event</th>
<th>Cases</th>
<th>Number of-</th>
<th>Primary (All) Errors</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Midwife / Nurse</td>
</tr>
<tr>
<td>Omission or late administration of anti-D Ig</td>
<td>24</td>
<td>22 (24)</td>
<td>2</td>
</tr>
<tr>
<td>Anti-D Ig given to D positive patient</td>
<td>17</td>
<td>3 (5)</td>
<td>11</td>
</tr>
<tr>
<td>Anti-D Ig given to patient with immune anti-D</td>
<td>6</td>
<td>(1)</td>
<td>2</td>
</tr>
<tr>
<td><em>(In 4 reported cases, there was no actual error involved)</em></td>
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<td></td>
<td></td>
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<tr>
<td>Anti-D Ig given to mother of D negative infant</td>
<td>6</td>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Anti-D given to wrong patient</td>
<td>6</td>
<td>5 (5)</td>
<td>-</td>
</tr>
<tr>
<td>Wrong dose of anti-D given</td>
<td>2</td>
<td>(2)</td>
<td>2</td>
</tr>
<tr>
<td>Anti-D Ig expired or out of temperature control</td>
<td>1</td>
<td>(1)</td>
<td>1</td>
</tr>
<tr>
<td>Other <em>(anti-D Ig administered instead of anti-Tetanus globulin)</em></td>
<td>1</td>
<td></td>
<td>-</td>
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<tr>
<td><strong>Total cases</strong></td>
<td><strong>63</strong></td>
<td><strong>30 (38)</strong></td>
<td><strong>24</strong></td>
</tr>
<tr>
<td><strong>Total errors; Primary / (All)</strong></td>
<td></td>
<td><strong>59 (67)</strong></td>
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</table>
Laboratory errors accounted for 24 (36%) of the reported errors in this section.

- Two errors, where anti-D was issued to mothers of D negative babies, were by laboratory staff who did not regularly work in transfusion.

- In 6 cases, historical results or hazard flags in the LIMS should have prevented the issue of anti-D, but these were ignored or overridden by the BMS on duty at the time of request.

- There were 3 cases where the wrong dose, according to local policy, or an expired vial of anti-D was issued, and these were compounded by failure to detect the error at the bedside prior to administration.
Case 10

- Mother and cord samples were correctly tested, both as D negative. The BMS then incorrectly transcribed the maternal result onto the request card as D positive.

- When the ward telephoned the laboratory to ask for the results, a second BMS assumed that the D positive result belonged to the cord, and issued anti-D on that basis.
Case 4

- 28 week sample had detectable anti-D

- *Erroneously reported as ‘post-injection’ of anti-D where there was no record of previous anti-D administration*

- *Further anti-D administered later in the pregnancy*
Case 22

• **BMS misread manual cord test as D Pos**

• **Failed to follow laboratory SOP to carry out confirmatory testing**

• **Issued anti-D to mother of D negative baby**
Case 26

- **M&C request received from a patient with known anti-C+D, but did not specify this on the form**

- **BMS ignored antibody hazard flag on laboratory IT system and issued anti-D**
Many of the cases involve failure to follow basic clinical and laboratory protocols and highlight the need for education to all staff groups around a subject where there is evidently variation in practice and lack of understanding.

An Anti-D Working Group with multidisciplinary representation has been formed to take this forward.