Anti-D Ig Errors
Case studies

2022 – 2024

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Omission of anti-D Ig administration in a D-mismatched renal transplant

- *A D-negative patient of childbearing potential received a D-mismatched renal transplant (D-positive donor)*
- *The renal registrar did not complete the requirement for anti-D Ig in the patient's admission booklet*
- *This requirement was not identified by the renal or the surgical teams involved in the patient's care*
- *During the incident investigation, it was stated that the transplant nurse identified the need for anti-D Ig and this was communicated to the ward staff verbally*
- *There was no evidence of this communication in the patient's notes and no request was made to the blood transfusion laboratory*
- *The omission of anti-D Ig was identified when anti-D was detected in the patient's plasma one-month post transplant*

Delay in administering anti-D Ig

- *A woman was discharged from the labour ward following a vaginal bleed at 20+1 weeks gestation, without receiving anti-D Ig, or being advised by staff about the need for anti-D Ig*
- *No follow up was arranged. Discharge had been recommended by the consultant overseeing the care*
- *A fetomaternal haemorrhage (FMH) test had been requested but the results were not followed up by staff discharging the patient*
- *Anti-D Ig was available after the woman was discharged*
- *The plan of care and information given to the woman was not questioned by the midwife on duty, who was a new member of staff*
- *The failure to administer anti-D Ig was identified by laboratory staff who checked the blood refrigerator at 72 hours*
- *The woman was contacted by the community midwife to explain that anti-D Ig was indicated but declined to attend until the routine appointment which would have been 14 days after the potentially sensitising event (PSE)*
- *Following further discussion with a haematologist, the woman agreed to come in the next day, 6 days after the PSE to receive anti-D Ig*

D-negative mother of D-negative baby erroneously given anti-D Ig

- *A woman with a predicted D-negative fetus had a potentially sensitising event (PSE)*
- *Anti-D Ig was issued despite the cell-free fetal deoxyribonucleic acid (cffDNA) result being available*
- *Following birth an order was placed in the clinical computer system for a Kleihauer, cord bloods and anti-D Ig*
- *The system flagged a warning stating the fetus was D-negative and asking if anti-D Ig was required*
- *The midwife on duty instructed a registered nurse caring for the woman to administer anti-D Ig*
- *The anti-D Ig that had been issued for the antenatal PSE was used*
- *Neither healthcare professional had noted the earlier error or heeded the warning on the IT system*

Unfamiliarity with managing large FMH and misinterpretation of instruction

- *A large fetomaternal haemorrhage (FMH) of 44mL was detected following birth and 1500IU anti-D Ig was given in the first instance*
- *Upon confirmation of the FMH volume by the reference laboratory, 6500IU was advised, to be given intravenously (IV)*
- *The staff were not familiar with administering anti-D Ig IV and did not escalate this*
- *The midwife misinterpreted the instruction to give anti-D Ig within 72 hours, as to give after 72 hours, and placed the anti-D Ig in the ward refrigerator which was not temperature controlled*
- *The midwife documented their interpretation into the electronic patient record, and this was copied and pasted in the record across multiple shifts by other staff*
- *The error was detected by the charge nurse after finding the anti-D Ig in the ward refrigerator, more than 72 hours after it was due to have been administered*
- *Consultation with the reference laboratory led to a reduced dose being administered IV, after the 72-hour window had elapsed.*

Incorrect decision to omit anti-D Ig

- *During a major haemorrhage protocol activation, an adult therapeutic dose of D-positive platelets was transfused to a D-negative mother*
- *The baby's sample tested D-negative at delivery*
- *The clinical team returned the anti-D Ig because the baby was D-negative, failing to recognise the need for anti-D Ig following the transfusion of D-positive platelets*

Incorrect dose of anti-D Ig following cell salvage

- *A dose of 500IU anti-D Ig was given to a mother post delivery*
- *The laboratory was not informed that cell salvage products had been re-infused and that a 1500IU dose should have been provided*

Failure to attend appointment and no follow up

- *A D-negative mother did not receive routine antenatal anti-D Ig prophylaxis (RAADP) at 28 weeks in the community setting*
- *The mother did not attend the clinic appointment at 28 weeks, and this was not followed up by the clinical team*
- *The omission was noticed later in the pregnancy by the laboratory team*
- *The incident was reviewed, and improvement actions identified*
- *It was agreed that the community clinic would be included in the hospital patient booking system so that non-compliance could be managed electronically by sending reminders to both mother and clinic staff*

Discharge prior to administration leading to delay

- *A D-negative patient had a termination of pregnancy at 12+1 weeks*
- *Anti-D Ig was issued but not administered before the patient was discharged*
- *The ward staff realised the patient required the anti-D Ig and arranged for it to be administered 2 days after the procedure*
- *The patient then informed the clinical team that they had a positive lateral flow COVID-19 test and so were unable to attend for the appointment*
- *Confirmatory COVID-19 PCR testing was negative 2 days later and the patient attended for the anti-D Ig injection, 4 days post procedure*