Annual SHOT Report 2017 – Supplementary information

Chapter 14: Errors Related to Anti-D Immunoglobulin (Ig)

Additional case studies not included in the main 2017 Annual SHOT Report

Omission or late administration of anti-D Ig

Case 14.12: Midwife fails to check blood group result of a woman who informs her she is 'Rhesus Positive'

A woman was admitted to hospital at 19/40 following a potentially sensitising event (PSE). She informed the midwife that she was 'Rhesus Positive' but the midwife failed to check the blood grouping results and did not request any anti-D Ig. The woman then later received an appointment to attend clinic for routine antenatal anti-D prophylaxis (RAADP) at 28/40 and was told that her blood group was AB D-negative, she should therefore have been given anti-D Ig following the PSE at 19/40.

Case 14.13: Failure to identify the need for anti-D Ig prophylaxis on multiple occasions throughout pregnancy

A woman was admitted to hospital in labour at 40+7/40. The midwife checked her notes and noticed that the woman was D-negative but had not received any RAADP at all throughout her pregnancy. On review it was noted that the woman had been seen on 7 different occasions by 5 hospital-based midwives and once by a community midwife but none of them had realised that she required anti-D Ig and she had therefore not been offered RAADP.

Case 14.14: Failure to give anti-D Ig following the transfusion of a unit of D-positive platelets to a D-negative woman

During the activation of a massive haemorrhage protocol (MHP) for a postpartum haemorrhage a patient with D-negative blood group was issued and transfused with D-positive platelets. Anti-D Ig was issued by the hospital transfusion laboratory for the patient however the requirement for the administration of anti-D Ig was not communicated to the clinical area. Additionally, there was no documentation in the laboratory communication book to alert the laboratory staff that this required following up.

Case 14.15: Late administration of anti-D Ig following a PSE

A woman had a scan at 15/40 following a PSE. She did not know that she was D-negative and should have attended earlier for anti-D Ig. In this organisation the community midwives check booking blood results but do not discuss them with the women until their 16/40 appointment. As a result of the woman not knowing her booking blood results anti-D Ig was not given until 10 days following the PSE.

Case 14.16: Late administration of anti-D Ig due to misinterpretation of results

A midwife misread results on the electronic patient record. They looked at the results for Kleihauer test and the direct antiglobulin test (DAT) which were both recorded as 'negative'. The midwife misinterpreted this result as they thought this meant that the blood group of the baby was D-negative and therefore anti-D Ig was not needed. The error was noticed and anti-D Ig was administered 10 days post delivery.

Case 14.17: Delay in administration of anti-D Ig over a holiday weekend

A transfusion sample was received for a D-negative woman following a PSE which occurred over a holiday weekend. An appointment for the woman to attend the early pregnancy assessment unit was made for 3 days later as it was not open during the holiday period. The woman attended this appointment and a sample was taken for Kleihauer testing. Anti-D Ig was administered the following day, more than 72 hours after the PSE, and she was discharged back to the care of the midwifery team. The blood group and Kleihauer samples were not taken at the time the PSE originally occurred thus creating a longer than acceptable timescale between PSE and anti-D Ig administration.

Case 14.18: Anti-D Ig administration overlooked at delivery due to major obstetric haemorrhage (MOH)

A D-negative woman delivered a D-positive baby by caesarean section (c/s) at 27/40. The woman had had a cell free fetal deoxyribonucleic acid (cffDNA) test performed and the results predicted the baby to be D-positive. No prophylactic anti-D Ig was administered post delivery and no samples were sent to the hospital transfusion laboratory for fetomaternal haemorrhage (FMH) testing post delivery. The baby was subsequently tested and confirmed to be D-positive. The transfusion laboratory was made aware when a midwife telephoned as she could not find any evidence of prophylaxis having been given. Anti-D Ig prophylaxis was overlooked at time of delivery due to urgency of clinical situation; the woman had placenta accreta, and was having an emergency c/s at 27/40 that led to a MOH.

Handling and storage errors related to anti-D Ig

Case 14.19: Anti-D Ig administered intramuscularly (IM) to a patient with severe thrombocytopenia

Anti-D Ig was administered IM to a patient with idiopathic thrombocytopenic purpura (ITP) in antenatal clinic despite this route of administration being contraindicated.

Anti-D Ig given to D-positive women

Case 14.20: Administration of anti-D Ig prior to checking blood group

A woman underwent an external cephalic version (ECV) procedure to turn a breech baby. The midwife asked the consultant what the woman's blood group was and was told 'RhD-negative' so the midwife gave an anti-D Ig injection. The blood group of the woman was not checked using her clinical record. Anti-D Ig is not issued by the blood transfusion laboratory in this organisation so there was no check performed when it was issued. The woman was subsequently found to be D-positive.

Case 14.21: Anti-D Ig administered following a wrong blood in tube (WBIT) sample

A woman's booking sample group was reported as O D-negative. An appointment was made for anti-D Ig clinic at 28/40 and anti-D Ig was administered. Her 28/40 group and screen sample result was O D-positive. A repeat sample was checked which confirmed that the woman's booking sample was a WBIT that had resulted in her inappropriately receiving anti-D Ig.

Anti-D Ig given to a woman with a known immune anti-D

Case 14.22: Failure to check historical records results in anti-D Ig being administered to a woman with known immune anti-D

An incorrect decision was taken by a consultant obstetrician to administer RAADP to a D-positive woman. In a busy clinic she did not see the woman but was giving advice to several trainees about other women and was also herself seeing other women. She reported that her error was due to the number of patients and skill mix of staff at the clinic. If she had looked closer she would not have prescribed anti-D Ig but did not have the time to check. The patient was known to have immune anti-D from records dated February 2008 (2nd pregnancy). The woman has had 2 miscarriages since and this is now her 5th pregnancy. The woman underwent a caesarean section at 34/40 due to poor fetal growth and increased fluid levels. No anti-D Ig was given post delivery.