

Annual SHOT Report 2014 – Supplementary Information

Chapter 25: Anti-D Ig Incidents

DATA SUMMARY

Total number of cases: n=359

Implicated components		Mortality/morbidity	
Red cells	0	Deaths <i>definitely</i> due to transfusion	0
Fresh Frozen Plasma	0	Deaths <i>probably/likely</i> due to transfusion	0
Platelets	0	Deaths <i>possibly</i> due to transfusion	0
Cryoprecipitate	0	Major morbidity	4
Granulocytes	0	Potential for major morbidity (<i>Anti-D or K only</i>)	270
Anti-D Ig	359		
Multiple components	0		
Unknown	0		
Gender	Age	Emergency vs. routine and core hours vs. out of core hours	Where transfusion took place
Male 0	≥ 18 years 350	Emergency 0	Emergency Department 0
Female 359	16 years to <18 years 7	Urgent 0	Theatre 0
Not known 0	1 year to <16 years 2	Routine 0	ITU/NNU/HDU/Recovery 0
	>28 days to <1 year 0	Not known 359	Wards 295
	Birth to ≤28 days 0	In core hours 0	Delivery Ward 0
	Not known 0	Out of core hours 0	Postnatal 0
		Not known/Not applicable 359	Medical Assessment Unit 0
			Community 64
			Outpatient/day unit 0
			Hospice 0
			Antenatal Clinic 0
			Other 0
			Unknown 0

(ITU=Intensive therapy unit; NNU=Neonatal unit; HDU=High dependency unit)

Adverse Events Related to Anti-D Immunoglobulin - Previous Recommendations

Year first made	Action	Recommendation
2013	Hospital Transfusion Laboratories, Hospital Transfusion Committees, Trust/Health Board Chief Executive Officers (CEOs), Royal College of Obstetrics and Gynaecologists and Royal College of Midwives	There must be robust systems in place to identify woman eligible for anti-D Ig prophylaxis and to communicate this information effectively to relevant care teams
2013	Hospital Transfusion Laboratories, Hospital Transfusion Committees, Trust/Health Board Chief Executive Officers (CEOs), Royal College of Obstetrics and Gynaecologists and Royal College of Midwives	Anti-D Ig must be made readily available for administration to women when they present with potentially sensitising events, rather than putting the onus on them to return for the injection at a later date
2012	Obstetric Departments, Community Midwifery Teams, Hospital Transfusion Teams	Current blood grouping and antibody screen results must be referred to when making decisions whether to issue or administer anti-D Ig
2012	Obstetric Departments, Community Midwifery Teams, Hospital Transfusion Teams	SHOT recommends the use of a flowchart or checklist reflecting national guidance to aid decision making and ensure that an appropriate dose of anti-D Ig is issued and administered
2012	Obstetric Departments, Community Midwifery Teams, Hospital Transfusion Teams	Reporters should inform the SHOT office when they find a case of a woman who has developed a new immune anti-D that is detected during pregnancy, at delivery, or in a subsequent pregnancy, and a questionnaire will be provided

2011	Hospital Transfusion Laboratories, Hospital Transfusion Committees Trust/ Hospital/Health Board Chief Executive Officers (CEOs)	All organisations involved in the issue and administration of anti-D Ig must ensure that their systems are robust with respect to issue, receipt and recording, and should audit their systems with a view to increasing the safety and security of the process
2011	Hospital Transfusion Laboratories, Hospital Transfusion Committees Trust/ Hospital/Health Board Chief Executive Officers (CEOs)	Kleihauer tests that suggest a transplacental haemorrhage of >2mL, or that give equivocal results, should be referred for flow cytometry at the earliest opportunity Laboratories performing Kleihauer screening must participate in external quality assessment schemes
2010	Royal College of Midwives, Royal College of Obstetricians and Gynaecologists, Royal College of General Practitioners	All healthcare professionals involved in the issue and administration of anti-D Ig must complete the anti-D modules in the Learn Blood Transfusion e-learning programme.
2010	HTCs	If there is any doubt as to the true RhD status of a patient, or whether anti-D detected in an antibody screen is of immune or prophylactic origin, and these questions cannot be quickly resolved, then prophylactic anti-D Ig should be administered rather than place the patient at risk by withholding it.
2009	HTCs	Trusts must ensure that there is representation from midwives and obstetricians on hospital transfusion committees, with the aim of jointly drawing up straightforward local protocols for the request, issue and use of anti-D based on well-established national guidance.
2009	HTCs, Trust CEOs	Cases of late administration, omission, or inappropriate administration of anti-D immunoglobulin must be the subject of internal follow-up within trusts via established governance mechanisms.
2008	HTCs	Trusts should ensure that robust systems under overall control of the hospital transfusion laboratory are in place, to ensure that anti-D Ig is issued on a named patient basis, to ensure appropriate use and to meet traceability requirements.
2007	Consultant haematologists with responsibility for	D-typing should be performed by the routine methodology available in the hospital transfusion laboratory, not by emergency techniques which may not be as robust.

	transfusion, HTC, HTTs	
2007	NBTC, NHSBT Appropriate Use of Blood Group, IBMS, BBTS, BCSH, Royal Colleges of Midwives, O&G, GPs	Obstetricians and midwives must be familiar with the national guidance for routine antenatal anti-D prophylaxis and the rationale behind it. National guidance regarding all anti-D prophylaxis should be standardised. There is a need for clear and unambiguous advice to ensure that all hospitals are able to develop local guidelines that reflect national consensus.
2007	Trust CEOs, consultant haematologists with responsibility for transfusion, HTCs, HTTs	There should be clinical follow up and retesting in six months of patients in whom anti-D administration has been delayed or omitted. The outcome should be reported to SHOT as well as internally within the Trust.