Haemoglobin Disorders: Updated Cumulative Summary of Events

28

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Category	Sickle cell disease (SCD)						Total 6 years	Outcome
	2010	2011	2012	2013	2014	**2015**		
HTR	4	5	7	16	11	**11**	**54**	2 deaths, 24 MM
SRNM	3	6	7	7	6	**9**	**38**	1 alloimmunisation
ATR	4	3	2	2	1	**4**	**16**	Minor morbidity
NM	2	2	0	1	6	**2**	**13**	
ADU	0	1	1	2	0	**4**	**8**	2 deaths
TACO	0	1	0	0	1	**0**	**2**	1 MM
TAD	0	1	0	0	0	**0**	**1**	
TTI	0	0	1	0	0	**0**	**1**	Parvovirus
IBCT	0	0	0	0	0	**3**	**3**	2 ABO-incompatible 1 D-positive to D-negative female

Category	Beta thalassaemia major						Total 6 years	Outcome
	2010	2011	2012	2013	2014	**2015**		
HTR	0	0	0	0	1	**2**	**3**	1 MM
SRNM*	0	2	2	1	1	**1**	**7**	
ATR	6	3	3	2	2	**2**	**18**	Minor morbidity
NM	0	0	1	0	0	**1**	**2**	
ADU	0	0	0	0	1	**0**	**1**	
TACO	0	0	0	0	1	**0**	**1**	
IBCT	0	0	2	0	1	**1**	**4**	3 ABO-incompatible transfusions

(MM=major morbidity; ATR=acute transfusion reactions; HTR=haemolytic transfusion reactions; TACO=transfusion-associated circulatory overload; TAD=transfusion-associated dyspnoea; ADU=avoidable, delayed or under transfusion; SRNM=specific requirements not met; NM=near miss events; IBCT=incorrect blood component transfused; TTI=transfusion-transmitted infection NS=not specified whether the case was sickle cell disease or thalassaemia)

Note: These numbers do not include 2 additional cases of transfusion errors to patients with other haemoglobin disorders: a woman with HbC disease was transfused for menorrhagia in 2014 where the laboratory was not informed about the haemoglobinopathy, and in 2012 another woman with HbH disease did not receive CMV-screened blood because the clinicians did not inform the laboratory that she was pregnant

In 2015 there were two reports of severe pain during transfusion in patients with beta thalassaemia major

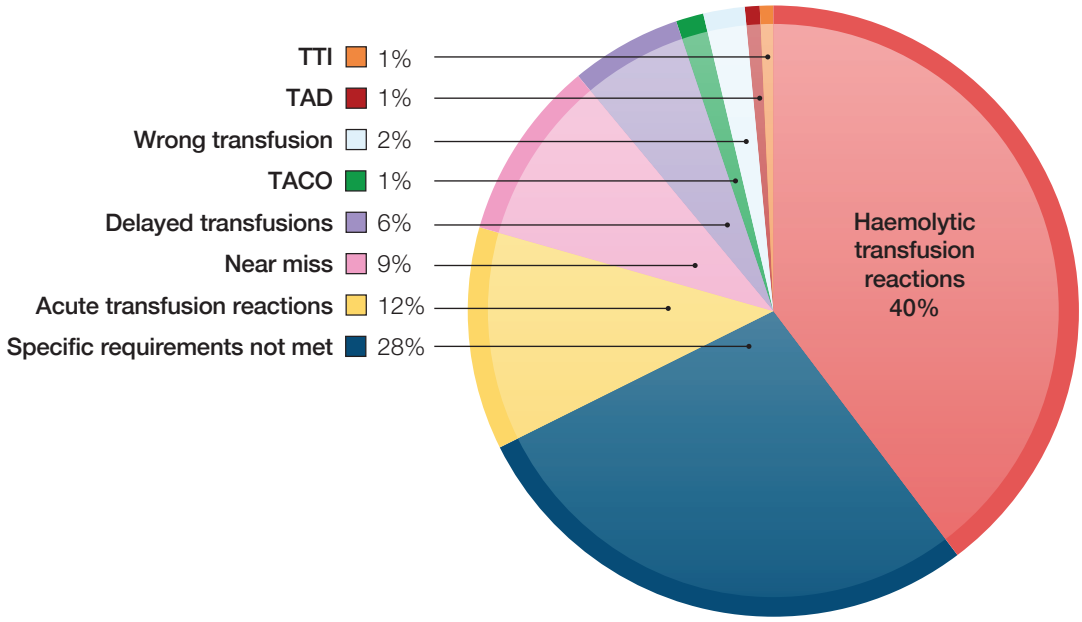
Table 28.1: Adverse clinical incidents in haemoglobinopathy patients – cumulative data for 6 years (2010–2015) (Excluding alloimmunisation, handling and storage and right blood right patient errors as there were no clinical adverse outcomes.)

As in previous years, patients with SCD were more likely to have adverse reactions than those with beta thalassaemia. The most serious complications result from haemolytic transfusion reactions. Eleven were reported in SCD in 2015, 2 acute, and 9 delayed, all these with features of hyperhaemolysis. It is worrying that within the total of 7 ABO-incompatible red cell transfusions in 2015, three of them occurred in haemoglobinopathy patients, which is a patient group that should have a well-known transfusion history.

Please continue to report cases of suspected hyperhaemolysis. There is need for further study of this complication. An advisory panel is available through National Health Service Blood and Transplant. Further information is available in the Annual SHOT Report 2014, page 158.

Figure 28.1 Cumulative data for adverse events in haemoglobin disorders 2010 to 2015

Sickle cell disease: n=136



Thalassaemia: n=36