

Annual SHOT Report 2014 – Supplementary Information

Chapter 28: Cell Salvage (CS)

DATA SUMMARY							
Total number of cases: n=16							
Implicated components				Mortality/morbidity			
Red cells			16	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	0		
Granulocytes			0	Potential for major morbidity (<i>Anti-D or K only</i>)	0		
Anti-D Ig			0				
Multiple components			0				
Unknown			0				
Gender		Age		Emergency vs. routine and core hours vs. out of core hours	Where transfusion took place		
Male	6	≥ 18 years	9	Emergency	1	Emergency Department	0
Female	9	16 years to <18 years	0	Urgent	0	Theatre	0
Not known	1	1 year to <16 years	0	Routine	8	ITU/NNU/HDU/Recovery	0
		>28 days to <1 year	0	Not known	7	Wards	0
		Birth to ≤28 days	0			Delivery Ward	0
		Not known	7	In core hours	2	Postnatal	0
				Out of core hours	0	Medical Assessment Unit	0
				Not known/Not applicable	14	Community	0
						Outpatient/day unit	0
						Hospice	0
						Antenatal Clinic	0
						Other	0
						Unknown	16

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

Cell Salvage and Autologous Transfusion (CS) - Previous Recommendations

Year first made	Action	Recommendation
2013	Hospital Transfusion Committees (HTC), Hospital Transfusion Teams (HTT)	Ensure that all cell salvage users in your institution are made aware of this complication and the simple measures that need to be taken should it occur
2013	HTTs, Operating Department Practitioners, Cell Salvage Operators	Ensure all cases of serious reactions are reported to SHOT via the hospital transfusion team
2013	Cell Salvage Operators, HTTs	Consider where a machine failure occurs, which is not due to operator error, these are reported to the Medicines and Healthcare products Regulatory Agency (MHRA) under the Medical Devices reporting scheme
2012	Hospital Transfusion Committee, Hospital Transfusion Teams	All organisations should develop a robust system for reporting all adverse incidents/reactions during the use of autologous blood techniques, preferably reporting to the hospital transfusion committee and onward to SHOT
2011	HTTs, Cell Salvage Teams; Anaesthetists	All intraoperative cell salvage (ICS) and postoperative cell salvage (PCS) related adverse events and reactions should be reported to SHOT. Hospital Transfusion Teams (HTT) should develop a process to ensure all these events are reported to SHOT
2011	HTTs, Cell Salvage Teams; Anaesthetists	Training and competency for cell salvage operators should be in place in all organisations where cell salvage is undertaken
2011	HTTs, Cell Salvage Teams; Anaesthetists	Replacement of coagulation factors is essential when reinfusing large volumes of salvaged red cells
2011	HTTs, Cell Salvage Teams; Anaesthetists	The use of the UK Cell Salvage Action Group label is recommended for both ICS and PCS red cells for reinfusion allowing all necessary patient information and collection information to be documented (These

		labels are supplied by the manufacturers of both intra and postoperative systems)
2010	Cell salvage practitioners, blood conservation coordinators, HTCs	All ICS- and PCS-related adverse events and reactions should be reported to SHOT
2008	Cell salvage leads /HTT	All cell salvage operators must undertake initial and regular update training and be assessed as competent There should be documented evidence of competence in the form of a training record. Competency-assessment workbooks are available for both ICS and PCS at www.transfusionguidelines.org.uk
2008	Cell salvage leads /HTT	All ICS and PCS related adverse events should be reported to SHOT.
2008	Cell salvage leads /HTT	Monitoring of patients is as important for the reinfusion of red cells collected by ICS or PCS as it is for allogeneic red cells.
2008	Cell salvage leads /HTT	Cell salvage machines are classified as Medical Devices, so all adverse events attributable to machine errors and failures should be reported to the MHRA as well as SHOT.