

Annual SHOT Report 2015 – Supplementary Information

Chapter 24: Transfusion-Related Acute Lung Injury (TRALI)

Additional Tables – not included in the main 2015 report

Table 1: Patient characteristics and component details

Case number	Sex/age	Diagnosis	Reason transfused	Transfused components				Implicated component (concordant antibody)	Interval between transfusion and symptoms
				RBC	Plt	FFP	Cryo/other		
1	M/60	Myeloma/ pneumonia	R6 Chronic anaemia	1	0	0	0	RBC	0-2h
2	M/46	Alcoholic liver disease/ varices	R1 Acute bleed	6	0	0	0	RBC, Cryo	0-2h
3	F/10	AML	P2 To prevent bleeding	0	1 (aph)	0	0	nil	2-6h
4	F/34	Metastatic malignancy	P3 pre procedure	0	1 (pool)	0	0	nil	0-2h
5	M/24	AML	R5 post chemotherapy	1	0	0	0	nil	2-6h
6	M/49	Alcoholic liver disease, encephalopathy, hepatorenal syndrome	P2 to prevent bleeding	0	1 (pool)	0	0	PLT	0-2h
7	M/48	AML	R5 post chemotherapy	2	0	0	0	nil	0-2h
8	M/73	GI bleed	R1 acute bleed	4	1 (aph)	4	0	nil	2-6h
9	M/57	Acute coronary syndrome	R6 chronic anaemia	3	0	0	0	nil	6-12h
10	M/70	MDS	R6 chronic anaemia	1	0	0	0	nil	3h

Table 2: Clinical characteristics and radiological features of cases reported as TRALI

TRALI case number	TRALI probability	Other risk factors	Symptoms/signs					
			Fever or rigors	Reduced blood pressure	Dyspnoea or tachypnoea	Signs of fluid overload	Reduced pO2	Chest X ray
1	Probable	Pneumonia	Y	Y	Y	N	Y	Bilateral infiltrates
2	Possible	Aspiration pneumonia, fluid overload	N	Y	Y	Y	Y	Left sided shadow with air bronchogram
3	Unlikely	Sepsis, pneumonia	Y	N	Y	N	Y	Bilateral shadowing L>R, ?pneumonitis
4	Unlikely	Renal failure, sepsis	N	Y	Y	N	Y	Bilateral infiltrates
5	Unlikely	Sepsis	N	N	Y	N	Y	Hazy bilateral shadowing, nodules on CT chest
6	Possible	Fluid overload, hepatorenal syndrome	Y	N	Y	Y	Y	Bilateral infiltrates
7	Unlikely	Sepsis, pneumonia, allogeneic transplant	Y	N	Y	N	Y	Diffuse air space opacity bilateral
8	Unlikely	Fluid overload	N	N	Y	N	Y	Diffuse patchy shadowing
9	Unlikely	Cardiac event	N	N	N	N	N	Bilateral shadowing
10	Unlikely	Asbestosis	N	N	Y	N	Y	New bilateral haze, in addition to previous features of asbestosis

Table 3: Treatment, outcomes, investigation results and likelihood of case being TRALI

TRALI case number	TREATMENT				TRALI INVESTIGATION RESULTS			Reason given by reporter for suspecting TRALI	Likelihood of case being TRALI
	Treatment	ITU admission	Ventilation (number of days)	Outcome (imputability)	Donors	Patient	White Cell cross match		
1	Ventilation	Y	7	Death, transfusion probably contributory	HLA A2	nil	nil	timing of reaction	Probable
2	Diuretics, ventilation	Y	5	Death transfusion possibly contributory	RBC: HLA B44,Cw5,DR4,DQ7,DQ8 0 . 2 cryo donors: HLA A01,A03: HLA DR53 ; HNA2 in 1 cryo donor.	nil	nil	timing	Possible
3	Diuretics, oxygen	N	0	Full recovery	Negative	nil	nil	timing	Unlikely
4	Diuretics	N (already on ITU)	2	Full recovery	Negative	nil	nil	timing	Unlikely
5	Diuretics, bronchodilators, CPAP	N	0	Full recovery	Negative	nil	nil	timing, poor response to diuretic	Unlikely
6	Steroid	N	0	Death Transfusion possibly contributory	HLA Cw12	nil	nil	timing	Possible
7	CPAP	Y	0	Death Transfusion possibly contributory	Negative	nil	nil	timing, negative fluid balance	Unlikely
8	CPAP	N	0	Full recovery	Negative	nil	nil	timing, no other explanation for deterioration	Unlikely
9	No specific treatment	N	0	Death unrelated to transfusion	Negative	nil	nil	timing	Unlikely
10	Steroid, diuretic	N	0	Full recovery	Negative	nil	nil	timing	Unlikely