

TRANSFUSION REACTIONS IN GENERAL HOSPITAL CELJE IN NINE YEARS PERIOD, FROM 2015 TO 2023

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Introduction:

In General hospital Celje (GHC) all the activities of collecting and processing of blood components is going on in Transfusion center from 1949 and transfusion of blood components to the patients as well. In all these years the transfusion reactions at patients were monitored.

Aims:

Our aim was to analyze the data of transfusion reactions collected in GHC in the period from 2015 to 2023. In these years all patients were treated with 100% in-line leucocyte depleted RBC and from the beginning of 2023 with pathogen inactivated platelets.

Methods:

The data kept in Transfusion center in the period from 2015 to 2023 were analyzed.

Results:

In the nine years period 80. 582 units of red blood cells, platelets and fresh frozen plasma were transfused to the patients. 104 transfusion reactions were noticed in total; 61 or 58,6 % of them were Febrile non hemolytic transfusion reactions (FNHTR); 23 or 22,1 % of them were Allergic reactions; the two most common.

Table 1: Number of transfused units and transfusion reactions on RBC, PLT and FFP from 2015 to 2023

Year	2015	2016	2017	2018	2019	2020	2021	2022	2023	Total
Num. of transfused RBC, PLT, FFP units	9138	8506	9120	8955	9225	9129	8695	9045	8769	80582
Num. of all reactions on RBC, PLT, FFP	8	14	6	9	9	7	13	13	25	104

Table 2: Number and type of transfusion reactions on RBC, PLT and FFP from 2015 to 2023

Year	HAEMOLYTIC TR.R.	GVHD	TRALI	TACO	POST TRANSF. PURPURA	ALLERGIC./ ANAPHYLACTIC.R.	NHTR	BACTERIAL./ VIRAL INF.	HYPOTENSIVE R.	OTHER	TOTAL
2015						2	6				8
2016				2		2	10				14
2017			1	2			3				6
2018						3	6				9
2019	1			1		2	4		1		9
2020						1	5			1	7
2021						1	10		1	1	13
2022	2			4		3	3		1		13
2023				1*= +NHTR		9	14			1	25
All reactions 2015-2023	3	0	1	10	0	23	61	0	3	3	104
% of Reactions of all transfused units	2,9	0	0,9	9,6	0	22,1	58,6	0	2,9	2,9	100

Conclusions:

After our analysis we consulted 104 reactions appear on 80 582 transfused units and RBC are the most frequent transfusions in GHC. So do the transfusion reactions on RBC; the FNHTR 61 (58,6 %) and Allergic 23 (22,1 %) were highest among them. The quantity of reported reactions has changed through the years, but the sensitivity for noticing and reporting from clinicians to Transfusion center is even better every year, after systematic educational program of transfusion medicine in GHC was started.