A SNAPSHOT RECORDING OF TRANSFUSION PRACTICES (AND REACTIONS) IN TWO ONCOLOGY HOSPITALS

A Argyrou[1], D Moschandreou[2], M Tserga[1], A Spiliopoulos[2], S Nikolopoulou[1], G Giannopoulou[2], E Grouzi[2], A Gafou[1]
[1]Transfusion Service, General and Oncology Hospital of Kifisia "Oi Agioi Anargyroi", Athens, Greece
[2]Transfusion Service, General and Oncology Hospital of Athens, "Saint Savvas", Athens, Greece

INTRODUCTION: Passive surveillance is a common method of haemovigilance based on the recognition of relevant symptoms and their reporting by clinicians. Febrile nonhemolytic transfusion reactions (FNHTRs) are reported to occur in 1–3% of transfusions according to international literature, although there are concerns about under-reporting even in countries with highly developed Haemovigilance Systems. Under-reporting is also noted for septic febrile reactions, which pose a particular threat to neutropenic patients undergoing chemotherapy treatment.

AIM: Analysis of recording practices of febrile/septic transfusion reactions in patient records at two oncology hospitals.

SCOPE: In this study, we retrospectively evaluated the records of patients who received blood component transfusions at two oncology hospitals over the course of one week. Specifically, we reviewed both medical and nursing charts to document each transfusion episode, including details such as transfusion prescription, number of units transfused, premedication of the patient with antipyretic drugs or other relevant treatments, and any febrile reactions occurring during or within 4 hours of the transfusion (according to the ISBT definition). Additionally, we examined reaction reporting documents submitted to the Hospital Blood Bank (HBB) during the corresponding period. Results are summarized in the table below.

HOSPITAL	A (N/%)	B(N/%)	Total (%)
N of patients	24	30	54
N of transfusions	47	61	108
RBC units	35	43	78 (72%)
-prestorage leucodepleted units	-1/35 (2,8%)	-37/43 (86%)	-38 (49%)
Platelet units (therapeutic dose)	0	9	9 (8%)
FFP units	12	9	21(19%)
Medical prescription of the transfusion	33/47 (70%)	61/61 (100%)	94 (87%)
Vital signs of the patient			
✓Pre-transfusion	27	17	44 (40%)
✓During transfusion	15	61	76 (70%)
✓Post-transfusion	24	16	40 (37%)
Premedication (antipyretics, antihistamine drugs)	16 (66%)	17 (28%)	33 (31%)
Recording of symptoms	0	0	0
Reports of reaction	0	0	0

CONCLUSIONS:

1. No febrile reactions related to transfusion were recorded in the patients' records, and there were also no reports of transfusion reactions to the HBBs. This may be attributed to under-recording of patients' vital signs as well as patient premedication, particularly in Hospital A. It is worth noting that Hospital B primarily issues pre-storage leukodepleted RBC units.
2. Snapshot surveillance of febrile/septic reactions as a clinical audit complements haemovigilance practices, especially in the absence of more rigorous measures to mitigate such reactions (such as universal leukodepletion/ pathogen inactivation or active surveillance of platelet contamination via culture).
3. Implementation of corrective and preventive actions to enhance patient safety should be facilitated through the Hospital Transfusion Committee, particularly addressing issues like transfusion prescription, premedication, and vital sign recording in Hospital A. Continuous education of clinical and HBB personnel on best practices for preventing, managing, documenting, and reporting febrile reactions should be emphasized to enhance transfusion safety in both hospitals.