Reports of transfusion reactions reclassified by the Norwegian Haemovigilance Group

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Introduction

In January 2021 we introduced a new electronic form for reports to the Norwegian Haemovigilance System. To make reporting easier we decided to use the same general classification as already used by the compulsory reporting and learning system in all Norwegian hospitals. In addition, we have specific classification, like type of blood component, infectious agents, antibodies etc.

Incidents that are transfusion reactions are classified according to definitions developed by ISBT-WP on haemovigilance in partnership with other professional associations (AABB, IHN).

The general classification used include location (eight choices), type of event (22 transfusion reactions puss wrong blood transfused), preventability (5), outcome (seriousness) (6), worst possible outcome in similar cases (6), and frequency of similar events in the reporter's department (6). For each category only one choice is possible.

When received by the National Haemovigilance Group the report is evaluated by a specialist in transfusion medicine. The report can be accepted as submitted, reclassified and/or discussed with two other specialists before inclusion in the haemovigilance database. Reclassification is primarily based on information in text describing the event, but if necessary additional information is requested from the reporter.

Materials and methods

To evaluate the new electronic form and the general classification done by the reporters and the need for reclassification by the National Haemovigilance Group we studied all reports on transfusion reactions received between January 14th

2021 and January 21st 2022 that had been included in the haemovigilance database.

Results

We received 157 reports of transfusion reactions/complications. 110 (70%) of these had been reclassified.

Location of the transfusion reaction was never reclassified.

Frequency of similar events in the reporter's department were reclassified once.

Preventability was reclassified in 49 reports. 33 of these were reclassified to "not preventable – certain". 11 were reclassified from preventable to not preventable and five from not preventable to preventable. 18 was reclassified from "Other".

Outcome was reclassified in 29 reports. In 20 reports the severity was increased. In 13 of these from "no harm" to some degree of harm. In three reports it was decreased. Six were reclassified from "Other".

Worst possible outcome in similar cases was reclassified in 55 reports. In 35 reports the severity was increased and in four reports it was decreased. 16 were reclassified from “Other”.

Type of event was reclassified 53 times. In 41 cases it was because the reaction was classified as “Wrong blood transfused resulting in a transfusion reaction” instead of a specific transfusion reaction. Three were reclassified from TRALI to TACO and five cases the transfusion reaction was reclassified as “Unclassifiable Complication of Transfusion”.

Discussion

Correct classification of serious adverse reactions is important for analysis of haemovigilance reports. Therefore, the use of common definitions is important both at local and national level. In our system the reporter must classify the adverse reaction, but the classification is also evaluated by at least one transfusion medicine specialist working with haemovigilance at the national level.

Of 157 reports seventy percent had been reclassified by experienced specialists. This indicates that the new classification is complicated for the reporters.

The reason for the large number reclassified from “Wrong blood transfused resulting in a transfusion reaction” is probably due to the use of pull-down menus in the reporting form, where “Wrong blood transfused resulting in a transfusion reaction” appear before the list of transfusion reactions.

Location and Frequency of similar events were reclassified only once because this information is difficult for others to check.

That 13 cases of transfusion reactions were originally classified as “no harm” indicates that opinion differ on grade of severity.

We have “other” as a choice in all categories. This is because not all incidents fall into one of the predetermined choices. “Other” is, however, used by the reporter more frequently than intended, and appear to be easier to use than having to decide among the proper choices.

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