21. Near Miss Reporting

Definition

A Near Miss event refers to any error that, if undetected, could result in the determination of a wrong blood group or transfusion of an incorrect component, but that was recognised before transfusion took place.

Near Miss events have long been recognised as a good indicator of strengths and weaknesses within areas seemingly as disparate as the aircraft industry and blood transfusion, but where the common aim is to constantly strive to improve safety. Near Misses often have the same root cause as actual transfusion accidents, but their relatively higher frequency allows systems to be analysed in more detail and deficiencies corrected before accidents occur.

The potential for an error to have a serious consequence depends on many factors, including the effectiveness of checks or barriers built into the process. Earlier SHOT annual reports have demonstrated that in many instances several errors may contribute to a 'wrong blood' event, and minor errors that evade the checks and barriers may play a significant part in a serious outcome for the patient.

Previous SHOT data have shown that around 50% of all Near Miss events, where an incorrect component was recognised before transfusion took place, occur at the sampling stage.

In last year's annual report SHOT described phase 1 of a pilot study in which reporters were asked to submit data on sample errors detected during the 'booking in' process. This study showed that on average 3.8% samples received in transfusion laboratories are rejected because of a labelling error, though this ranged from 0.4% to more than 13% of samples received.

This type of error is not reportable to SHOT as a Near Miss event, but needs to be monitored and trended at a local level.

In phase 2 of the pilot study, reporters were asked to submit data on samples that appeared to be correctly labelled but that were found to be incorrect in some way during testing in the laboratory. These 'Wrong Blood In Tube' errors have the potential to result in issue of ABO-incompatible blood components to the patient, especially if there is no historical record available on laboratory computer systems, and are reportable as Near Miss events.

It is pleasing to see that check procedures put in place as part of the laboratory Quality Management System have been successful in screening out some of these errors, and there have been some examples of good laboratory practice in identifying 'out of the ordinary' requests that uncovered serious errors. However, the percentage of sample errors attributed to medical staff (45%) seems disproportionately high, and it would be instructive to obtain denominator data as to what proportion of all samples are taken by which group of staff.

This would be an intensive and difficult data-gathering exercise for reporters already fully committed to national and local audit activities, but even in the absence of the denominator data it should be noted that the figures obtained are comparable with previous SHOT annual reports.

What is clear from the pilot study is the need for training and adherence to policies for venepuncture and sample labelling among all staff groups, including doctors.

In 2009, there were 797 reports submitted under the heading of Near Miss, but as in previous years there has not been the resource within the SHOT team to analyse these effectively.

The introduction of the new SHOT web-based reporting system in January 2010 allows the reporting of the whole range of Near Miss events, including WBIT errors, component selection and handling errors, and collection and pre-administration errors, and this coupled with two new members of the SHOT team should make the analysis of these reports much more straightforward.