16. Near Miss Reporting

Definition

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

The above shortened definition of SHOT Near Miss was suggested at the Near Miss Workshop in November, 2006.

Although human error is commonly an initiating event, a faulty process or system invariably permits or compounds the harm, and should be the focus of improvement, with barriers put in place at each stage of the process to prevent or at least reduce the likelihood of errors occurring. Where human error is a factor it is important to ask why a person acted in a certain way at the time, or made the decision they did, based on information available at the time. Environmental and workplace factors can play a significant contributory role.

The 'risk' of a Near Miss event is the product of its potential severity and its likely occurrence. Unfortunately, the potential severity of many transfusion errors is patient fatality or severe morbidity.

The transfusion process can be conveniently divided up into stages, and there are already some barriers in place to prevent errors at each stage, but it is important to realise that some errors may only be detected in retrospect.

1. The **Pre-testing** phase, where the request is rejected, cancelled or amended due to:

- sample errors, such as missing or incomplete ID, use of addressograph labels, under filled samples, inappropriate sample, no sample
- request errors, where vital information (name, signature of requestor, product requested) is missing from the request
- the inappropriateness of the request in the clinical situation
- the request being made on the basis of an erroneous Hb or coagulation result

Barriers in place to prevent error:

- application of national standards for sample labelling and completion of requests
- national indication codes for appropriate transfusion
- local laboratory procedures for acceptance of requests
- local protocols developed to guide appropriate transfusion
- local training and competency assessment
- maintenance of clean/complete transfusion database
- flags and alerts correctly in place on the database
- quality systems in place in haematology laboratories

2. The **Testing** phase, where:

- despite apparent correct labelling, the blood in the sample has come from a different patient – 'Wrong Blood in Tube'; this is a pre-testing error which only comes to light at the point of testing (if it is noticed that there are previous results available for the patient)
- equipment failure or error leads to an incorrect group recorded for a patient or an incorrect / incomplete compatibility result
- manual result interpretation or transcription leads to an incorrect group recorded for a patient
- an incorrect / inappropriate product / component has been selected by the laboratory for the patient
- the product / component has been mislabelled by the laboratory prior to issue for the patient
- the product / component has been stored inappropriately in the laboratory

Barriers in place to prevent errors:

- national guidance for the selection of components for patient with special requirements
- national guidance for grouping and compatibility testing for patients
- national guidance and legislation for the correct storage of blood products / components
- maintenance of clean/complete transfusion database
- local SOPs for the operation of equipment and action in the event of equipment malfunction
- local SOPs for compatibility testing procedures
- local SOPs for labelling and issuing products / components
- local training and competency assessment

3. The **Collection and Administration** phase, where:

- the wrong product / component is collected from the blood bank
- the product / component is transported to the wrong clinical area
- the product / component is incorrectly / inappropriately transported to the clinical area or receiving hospital
- the product / component is incorrectly / inappropriately stored in the clinical area
- there is a partial failure in the checking / administration / monitoring process at the patient bedside

Barriers in place to prevent errors:

- national/professional guidance on the administration of blood products / components and the monitoring of the transfused patient
- local Trust policy for the checking / administration of products / components for transfusion
- local training and competency assessment

Existing data have already shown where the majority of Near Miss events take place, with around 50% relating to sample labelling, and there seems to be little or no advantage in continuing to collect data which simply adds to the numbers of events reported, as discussed in the report of the SHOT Near Miss survey from 2006.

Many hospitals already collect data routinely on numbers of samples rejected and report regularly via clinical governance mechanisms within their Trusts, with the aim of influencing practice by feedback about performance.

Of greater value may be the origin / root cause of these errors, and this information could be analysed against the background of the introduction of formal competency assessment for clinical staff undertaking venepuncture and the collection and administration of blood products / components. It may be that many are not errors at all in the true sense, but cases of non-compliance with procedure or guidelines.

The value of any usable feedback from a Near Miss scheme is directly related to the amount of information provided for each individual event and the amount of effort each Trust will have to put in to the reporting process.

The first phase of the Near Miss pilot has been run from 1st April, 2008, for a period of 1 month, to obtain some up-to-date denominator data against which to measure the occurrence of WBIT errors, for example.

The second phase of the pilot, looking at the much smaller numbers of errors detected within the laboratory quality system, will run for a longer period, possibly six months, and details of what and how to report will be made available soon.