

The impact of poor haematology sampling and labelling on the decision to transfuse patients

Julie Ball¹, Alison Watt¹, Debbi Poles¹ and Paula H.B. Bolton-Maggs^{1,2},
The SHOT office, Manchester Blood Centre and ²University of Manchester, UK on behalf of the SHOT Steering Group



Background

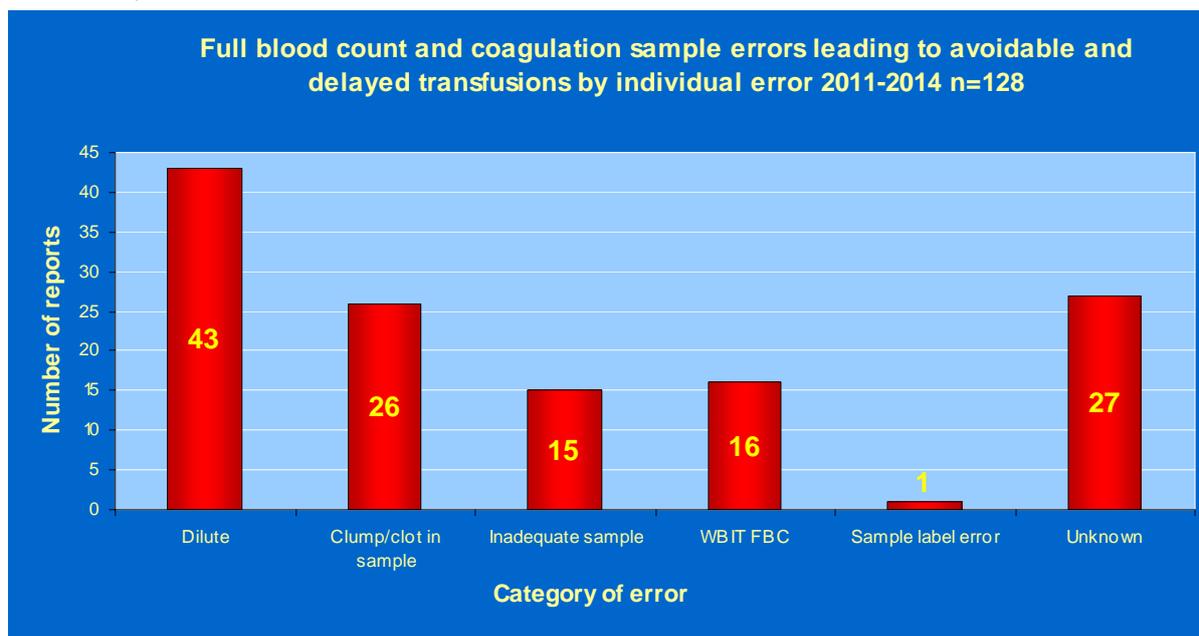
SHOT reports demonstrate that erroneous haematology results (dilute sample, wrong labelling) can result in actual or potential inappropriate or delayed transfusions. Inaccurate coagulation or full blood count (FBC) test results can influence transfusion decisions. Unnecessary exposure to blood components carries risks of serious adverse reactions and transfused patients are subsequently ineligible as blood donors.

Method

SHOT data (from 2011 to 2014) were reviewed to examine the reasons for erroneous results. These included inadequate samples (clotted, dilute, or short), sampling the wrong patient or mislabelling sample with another patient's details (wrong blood in tube (WBIT)), and blood film not reviewed before issuing spurious low platelet counts.

Results

Over a four year period there were 128 reports where errors in FBC/coagulation samples resulted in **inappropriate (n=125) or delayed (n=3) transfusions**. There were a further 24 'near miss' reports (i.e. discovered before transfusion) of which 9 were due to 'WBIT' samples.



Conclusion

All pathology samples must be collected and labelled in accordance with national guidelines. A zero-tolerance approach for sample acceptance is recommended for all pathology specimens and adherence to this standard is associated with fewer 'WBIT' events. Any suspect haematology results must be investigated and not released to the clinical area until confirmed and authorised. Clinicians must be aware of the risks associated with poor venous sampling and labelling and should respond promptly to laboratory requests for repeat samples. Rapid detection of wrong results can also result in recognition that associated samples (e.g. those for biochemistry or transfusion) may also be unreliable.

