



SINGLE UNIT TRANSFUSIONS OF BLOOD IN THE UK

Objective

To determine the <u>frequency</u> of single unit blood transfusions in the UK, and to assess whether <u>there</u> is <u>adherence</u> to best practice.

Background

Blood transfusion can be an important part of treatment of disease and in some instances is life saving. However it is not without risk. Today, even with the most sophisticated self-deferral schemes and screening test procedures, infections are still occasionally transmitted. Other adverse effects include acute intravascular haemolysis of the transfused cells, due to ABO mismatch, anaphylactic reactions due to plasma, or less severe reactions caused by white cell antibodies. Pulmonary aedema may result from circulatory overload. Delayed complications include the development of red cell antibodies and post-transfusion purpura.

Experts have advised for many years that, except in specified circumstances, such as small circulatory blood volume e.g. in children, it is bad clinical practice to transfuse less than 2 units of blood. This is because the risk involved is avoidable, and it is a waste of a valuable human resource. This teaching has been transmitted to medical students and house staff over the years, but it would appear that some unnecessary single unit transfusions are still given. Neither the Department nor the NBTS hold the relevant information.

Information Sought

Data is required on the number of single unit transfusions over a chosen period, say 1 year, occurring in the UK. In each case the reason for transfusion needs to be known to allow objective assessment of whether this procedure was justified. It would also be helpful to know if the individual clinicians were aware why single unit transfusion is usually not recommended. It is suggested that this information would probably only be available at hospital or even ward level.

Conclusion

The survey would be useful in assessing how often unnecessary single unit transfusion occurs and whether some further action is necessary to reduce this practice. The findings of such a survey might be transmitted to the Clinical Standards Advisory Group and clinicians involved in medical audit would also find the information helpful.