National Comparative Audit of Blood Transfusion

The National Comparative Audit of Blood Transfusion programme comprises a series of audits of the safe and appropriate use of blood. It is operated by NHS Blood and Transplant in collaboration with the Clinical Standards Department of the Royal College of Physicians. All hospitals in England and North Wales are invited to participate in the audits, and hospitals in South Wales, Northern Ireland and Scotland are invited to participate through the blood services in those countries.

During 2011/12 NHS Fife has taken part in 2 audits:-

Audit of Use of Blood in Medical Patients Parts 1 and 2

NHS Fife submitted data in part 1 for 45 cases. Our median pre-transfusion Hb was 8.8 (overall Scottish median 7.9) and our median post-transfusion Hb was 10(overall Scottish median 9.8). The reason cited for transfusion in 38% of the cases was anaemia and 7% was blood loss. 57% of patients who were transfused due to anaemia in NHS Fife were transfused out with the threshold set out in the audit (Appendix 1)

Audit of Use of Blood in Medical Patients Part 2 involved looking more closely at cases in part 1 that were suggestive of avoidable transfusions. The numbers were too small to make meaningful regional comparisons so a national report was produced. There is growing evidence to suggest that a restrictive approach to transfusion is neutral or beneficial compared to a liberal approach in many clinical circumstances. This audit suggested that a restrictive approach to transfusion is not being applied to the majority of medical patients.

Audit of Blood Sampling, Collection and Labelling

During June, July and Aug 2012 details regarding who took the sample, where it was taken and why it was rejected were recorded in 221 sites across the UK. Each week 3 rejected samples on each site were followed up in more detail by interviewing the person who had taken the sample to determine exactly why the error had been made. Most labs including NHS Fife had a zero tolerance policy in place whereby if it was not correct the first time the sample was automatically rejected. NHS Fife had a rejection rate of 6% compared to the national average of 3%.

Future Audits

January 2014 we hope to take part in the National Comparative Audit of patient Information and consent for blood transfusion.

Kirsty Dalrymple
NHS Fife Transfusion Practitioner   Oct 2013
Appropriate red cell use in medical patients with anaemia

- Pre transfusion Hb
  - ≤ 11 g/dl & Radiotherapy
    - ≤ 9 g/dl & > 65 years & (with marrow failure or with chemotherapy)
      - ≤ 9.5 g/dl & Thalassaemia major
    - ≤ 8 g/dl & > 65 years with no marrow failure and no chemotherapy
      - ≤ 8 g/dl & any age with comorbidity
        - ≤ 8 g/dl & ≤ 65 years & (with marrow failure or with chemotherapy)
    - ≤ 7 g/dl & ≤ 65 years & no comorbidity & no bone marrow failure & no chemotherapy

Likely to be inappropriate - however consider symptoms and signs of anaemia

Yes

If all these are NO then

Likely to be appropriate - however consider potentially reversible causes of anaemia:

- Haematocrit deficiency
- Renal anaemia
- Autoimmune haemolytic anaemia
- Review RBC indices, haematocrits, blood film, direct antiglobulin test and renal function

Yes

Yes

Yes

Yes

Yes

Yes

Yes