

NATIONAL TRANSFUSION AUDIT - JOINT RCP/ NBS

Presented by

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on behalf of RCP/ NBS Audit Working Group



1. Prospective audit of 40 episodes of transfusion - based on BCSH guidelines for Administration of Blood ...1999 (Transfusion Medicine)

- Wearing of wristband
- Monitoring of patients during transfusion
- Documentation of transfusion

2. Audit of hospitals' Transfusion Policy covering these

Participation

- All hospitals in England invited to take part (NHS and private)
 - **Wales**
 - **Northern Ireland**
- } Hospitals nominated by Rational Blood Committee for Wales and NI Blood Transfusion Service - later participation: results later than England
- **Scotland - not participated (recent similar audit)**
 - **Auditors in each hospital trained using ‘dummy’ notes**
 - **Audited while transfusion in progress**

Results

(England 2002-April 2003)

- **71% NHS Trust were represented (58% of all NHS hospitals - cf: 74% started)**
- **11% Private hospitals (more started later)**
- **Each hospital's own results fed back within 2 weeks of completion (automated)**
- **Comparative report November 03**

A. Wristband worn during transfusion?

- **90% of patients did**
- **10% did not - of these, 10% unconscious (52 patients)**
 - 14% (1 in 7) all unconscious patients had no wristband
- **Commonest locations of patients without wristbands**
 - Paediatrics/ SCBU
 - Oncology
 - ITU/ CCU
 - Haematology
- **Relies on patient able to state full name and DOB**

B. Observations During Transfusion

- Excluded patients known/ assumed to be on continuous monitoring
- **Pre-transfusion obs (P, BP, T)**
 - None in 23% of all patients
 - None in 10% of unconscious patients
 - Therefore no baseline to judge change indicating reaction

- **Obs within 30 minutes of starting transfusion (at 15 minutes recommended)**

- None within 30 minutes in 47% all patients
- None within 1 hour in 28%
- None during whole unit in 17%
- In unconscious patients
 - None within 30 minutes in 48%
 - None within 1 hour in 26%

- ***Lost opportunity to detect transfusion reaction early, stop transfusion and manage reaction***
- **Post-Transfusion obs**
 - In all patients - none done in 39%
 - Late reactions not detected - as symptoms occur - may not relate them to transfusion

• **Acute transfusion reactions**

- Wrong blood (ABO incompatible) - 1 in 30,000
- Bacterial infection (red cells) severe - 1 in 500,000
- Allergic - 1 in 3,293 red cell units
 - severe/ anaphylactic - 1 in 57,000 red cell units (Domer, 2003)
- 10,000 units of blood used per day in England
- Combination of no wristband **and** no obs within 30 minutes
 - 4% of all patients
 - 8% of unconscious patients
 - Risk of wrong blood and not detected early

C. Signing of Compatibility Form/ Prescription Sheet

- **To indicate blood actually transfused and patient ID checks done before transfused**
- **One or other signed in 98%**
- **Start time recorded in 94%**
- **Stop time in 24% (relating late reactions to transfusion may be difficult)**

Questionnaire of Transfusion Policies/1

- **56% of NHS hospitals and 46% of private hospitals replied**
- **All those who replied had policies**
 - 99% had policies on adequate labelling of x-match samples
 - 96% specified either that wristbands should be worn by all patients being transfused, or specified asking the patient to state their full name and DOB as an acceptable alternative
 - 99% had a policy requiring pre-transfusion obs
 - 94% had a policy requiring obs around 15 minutes into the transfusion

Questionnaire of Transfusion Policies/2

- **Multiple defences and safety-nets against adverse outcomes in transfusion eg: wrong blood**
- **Many risk models, but if holes in each - risk increases**
 - No wristband
 - Unconscious
 - No obs
 - Side room/ bay alone etc

Conclusions

- **Where organisation of transfusion episodes in terms of either policies or processes in practice appears poor - Trusts need to investigate, as there is increased risk of transfusion incidents**

References

- **Domer RE, Horltge GA, Allergic Transfusion Reactions. Arch Pathology Laboratory Medicine 2003, 127(3):316-320**



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