

An Overview of Blood Transfusion Link Nurse Meeting



MARY METCALFE/CARMEL PARKER
TRANSFUSION PRACTITIONERS
7TH SEPTEMBER 2007

Reasons for Transfusion

- Massive blood loss
- Anaemia
- Surgery
- Critical care setting
- Transfusion dependant

Thalassaemia syndromes

Severe aplastic anaemia

Sickle cell disease

Myelodysplastic syndromes

Other congenital or acquired chronic anaemia

Blood Donation



- **Approximately 2 million units of blood are transfused in England**
- **MRI around 17,000 units are transfused**
- **Donate 450mls every 16 weeks**
- **Life style questionnaire**
- **Screened for specific viruses**
- **Unit of blood – life span of 35 days**

Transfusion Risks



- Risk of infection is very low
- Hepatitis risk from blood transfusion is around
1 in 500, 000 for hepatitis B
1 in 30 million for hepatitis C
HIV or HTLV infection is about 1 in 5 million
Risk of vCJD is probably low risk

Blood Availability



Samples are received and processed – group & antibody screen

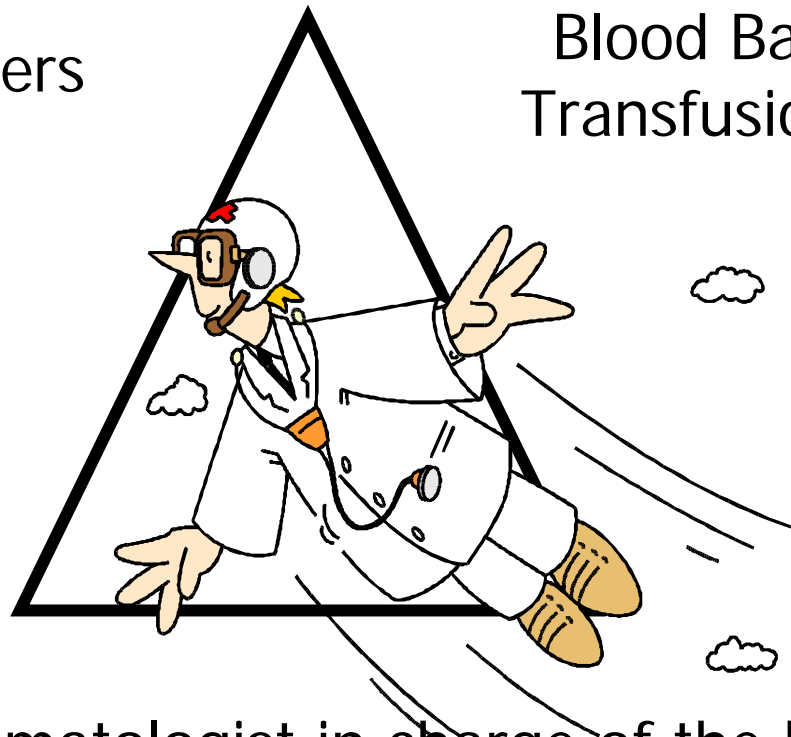


Routine crossmatch can take 2 hours or above
Good communication Wards/Transfusion

The Hit Squad (hospital transfusion team)

Specialist Practitioners
Of Transfusion

Head of the Hospital
Blood Banks &
Transfusion staff



Consultant haematologist in charge of the blood bank

Blood Component Bedside Check Procedure

Central Manchester and Manchester Children's University Hospitals NHS Trust

Perform essential checks indicated on the reverse of this label

Donor Unit Number **G092307187914D**

Surname **BLOGGS**

Forename **JOSEPH**

Date of Birth **27.07.1965** Gender **M**

Hospital No **M07/700000** NHS No. **XXXXXXXXXXXXXXXXXXXX**

Special Requirements

Patient Blood Group **O NEG** Unit Blood Group **O NEG**

Component **Red cells**

Expiry Date **08.07.2007**

Issued Against **TR900180D** Date Required **15.06.2007**

BMS sign and print name

Date Transfused _____ Signed _____
On completing the transfusion return this label to Transfusion Lab

Peel off the label below & file in the Patient's Notes

Surname **BLOGGS**

Forename **JOSEPH**

Hospital No **M07/700000** NHS No. _____

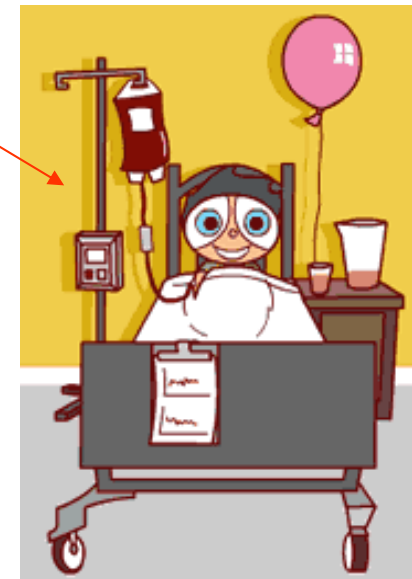
Donor Unit Number **G092307187914D**

1st Checker sign and print _____

2nd Checker sign and print _____

Transfusion began (Date & Time) _____

- SURNAME**
- FIRST NAME(s)**
- HOSPITAL NUMBER**
- D.O.B. BLOOD GROUP (Patient and Unit)**
- DONOR NUMBER**
- EXPIRY DATE**
- Special Requirements**



REMEMBER....
NO NAME BAND - NO TRANSFUSION

Blood Track Red Box



**The Blood Track Red Box
located next to the Blood
Bank and Satellite fridges**

**Electronic fridge door
release**

**Simple touch screen
interface**

Own Identification bar code

**Barcode blood in and out of
the Blood Fridge**

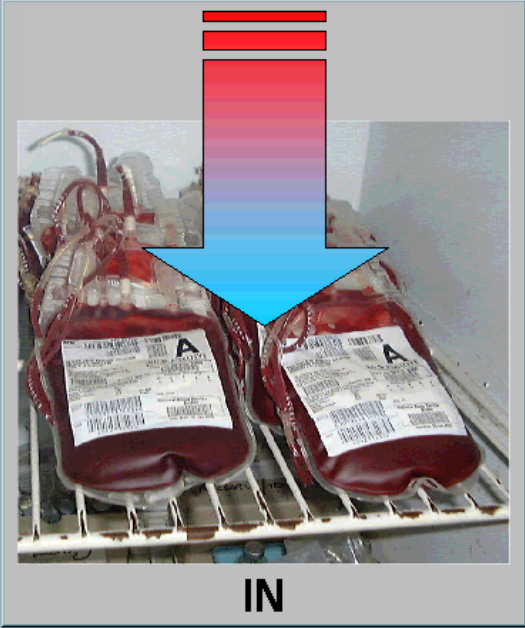
Simple touch screen

Are you taking blood in or out?

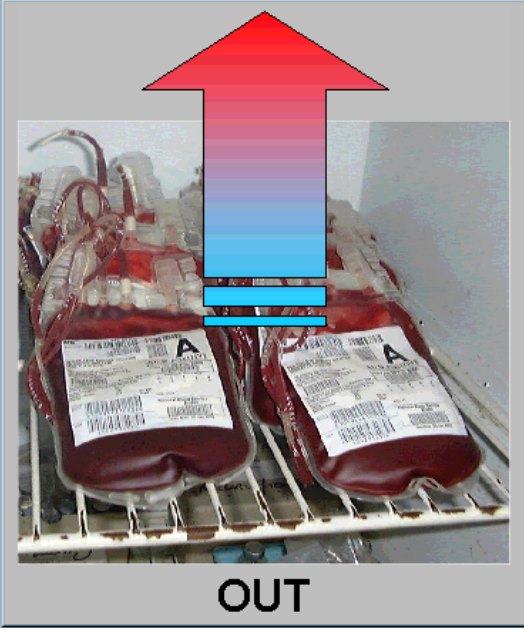
Choose In or Out

Are you Putting IN or Taking OUT?

Select IN or OUT below or Select from List



IN



OUT

Jehovah's Witness Guideline



- Issued in March 2007
- Aim of the guideline is to provide information about the management of this patient group.
- Facilitate acknowledgment and respect for Jehovah's Witnesses beliefs.
- Consent Policy

Children of Jehovah's Witness families



- Children may not hold the same religious views as their parents when they become adults
- Clinicians need to have awareness of the child's ethnic and religious background
- In some cases blood transfusion may be inevitable
- Good communication with the family
- No child in our Trust should receive an unnecessary blood /blood component

Contact Numbers



- **Hospital Liaison Committee for JW**
- **Obtained from the policy found on the Trust intranet or in the Trust Blood Transfusion policy**
- **Duty Manager pack or switchboard**

Acceptable Treatments



- **Most medical treatments**
- **Volume expanders**
- **Blood Tests**

Unacceptable treatments



- **Whole blood**
- **Red cells**
- **White cells**
- **Platelets**
- **Fresh Frozen Plasma**

Treatments that may be acceptable



- Autologous transfusion and haemodilution
- Haemodialysis
- Heart bypass
- Blood Products – Fractions of plasma or cellular components e.g. Albumin, cryoprecipitate, coagulation factors, vaccines.

The above is an individual choice of what a person will accept

Advance Decision document



- Old term was Advance Directive/Living Will
- Legally binding, unless the doctor has reason to believe the patient has changed their mind.
- Good documentation in the notes
- It is important to revisit/reassess the document does it still reflect the patient's wishes
- Pre-operative assessment

Predicting the risk of transfusion



- Low haemoglobin
- Low weight
- Small height
- Female
- Age 65 years or older
- Type of surgery
- Primary or revision of surgery
- Estimated blood loss (MSBOS)

What is classed as normal Haemoglobin ?

What alternatives are available?



- Proposed devices/techniques
- Intra-operative cell salvage – perfusionists

If surgery is not required

Pharmacological alternatives

- Iron/B12/folate replacement
- Review medications
- Discontinue specific drugs if applicable
- Reversal of anti-coagulants
- Recombinant erythropoietin
- Aprotinin

On or before elective admission to the ward



- Preliminary discussions
- Multi-disciplinary team are informed
- Outlined proposed surgery and the possible complications
- Confirm what is acceptable to the patient
- A copy of the Advanced document must be placed in the patient's notes
- Good documentation

Issues around consent



- Record of discussions
- Opportunity to speak in private
- Opportunity to speak to the JW Liaison if they so wish
- Risk of treatment refusal must be clear to the patient and fully documented
- Medical record should include what the patient will and will not accept
- Documented by 2 health professionals e.g. Registered nurse, doctor
- A verbally expressed change of mind must be honored and again witnessed and documented.

Informed consent/refusal of treatment offered



- JW patients presenting for treatment are obliged to inform all appropriate health care professionals of their wishes and beliefs
- In emergencies this information may not be available e.g. Unconscious/language barriers
- Advance decision documents – if the feeling is there is a change of mind consult with the legal department
- Tick the consent form to indicate an Advance Decision document and place a copy in the notes

Informed consent/refusal of treatment offered



- **Clinicians should revisit/reassess the Advanced Directive at each relevant admission**
- **The above document may be ineffective if the patient did not anticipate the current circumstances at the time the document was made**
- **Absence of an Advanced Directive document**

Life threatening bleeding/unconscious patient



- If time permits is there any documentary evidence
- If time permits discuss with relatives the implications of withholding blood
- The doctor should act in the best interests of the patient
- Need a clear signed report of the steps taken written in the patient's notes, signed and dated by the author

Children of Jehovah's Witnesses



- Well being of the child is paramount
- Parents of JW may not prevent clinicians from administering blood if the child's life or health is in imminent danger
- Consent should be sought
- Seek advise from the Trust legal department
- Well being of the child must take precedence

Refusal of treatment by child and parent



- **Prior to court application**
- **Establish that transfusion is essential or likely to save life or prevent serious permanent harm**
- **2 medical consultants are in agreement of need**
- **Parents are given the opportunity to be represented and of the intention to apply for the order**
- **In an emergency, children likely to die with out immediate administration of blood would be transfused without application to court**