TRANSFUSION OBSERVATIONS, ADVERSE REACTIONS AND CARE OF THE PATIENT

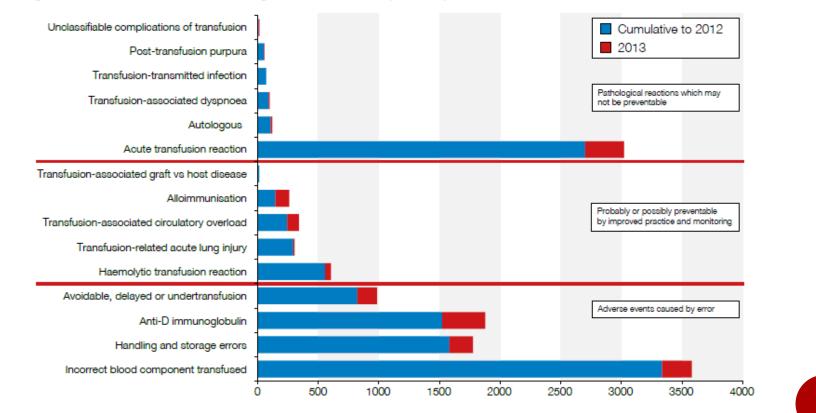
Karen Mead Specialist Practitioner of Transfusion North Bristol NHS Trust

WHY DO WE TAKE OBSERVATIONS DURING A BLOOD COMPONENT TRANSFUSION?

- Administration problems
- Febrile reaction (<24 hrs)
- Allergic reaction (<24 hrs)
- Acute haemolytic reaction (<24 hrs)
- Bacterial contamination
- Transfusion-associated circulatory overload
- Transfusion-related acute lung injury
- Delayed haemolytic reaction (>24 hours)
- Post-transfusion purpura
- Transfusion-associated graft-versus-host disease

HOW DO THINGS GO WRONG?

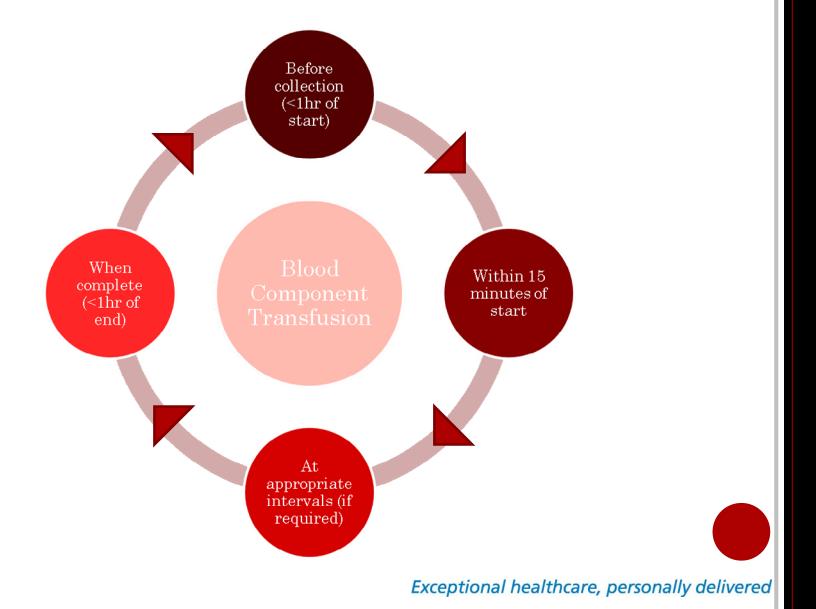
Figure 1: Cumulative data for SHOT categories 1996/7 to 2013 (n=13,141)

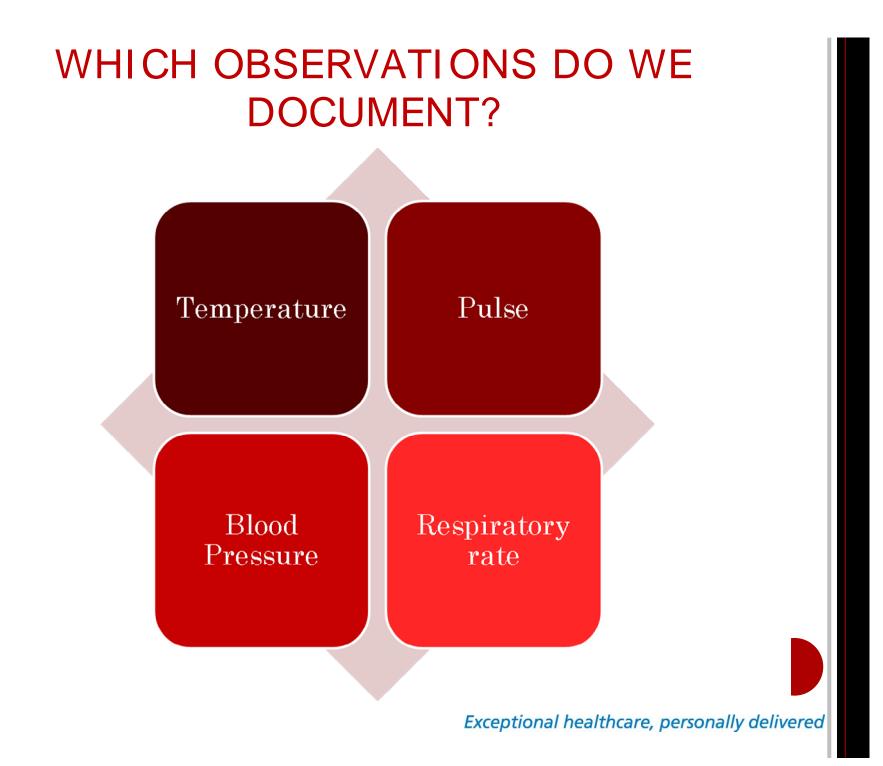


SHOT

SERIOUS HAZARDS OF TRANSFUSION

WHEN DO WE CARRY OUT OBSERVATIONS?





WHAT SIGNS AND SYMPTOMS SHOULD WE BE LOOKING FOR?

- Patient feeling feverish, hot and clammy
- Shivering or 'cold chills'
- Breathing problems
- Extreme tiredness
- Passing much less, very dark or blood in the urine
- Swelling
- Itchy skin rash
- Pain in the lower back (loin pain)
- Unexpected or unexplained bruising
- Jaundice (yellow colour in whites of eyes or skin)
- Nausea or vomiting

WHAT SHOULD HAPPEN IF YOUR PATIENT IS HAVING A SUSPECTED REACTION?

- Stop the transfusion if appropriate
- Maintain venous access

Stop

Check

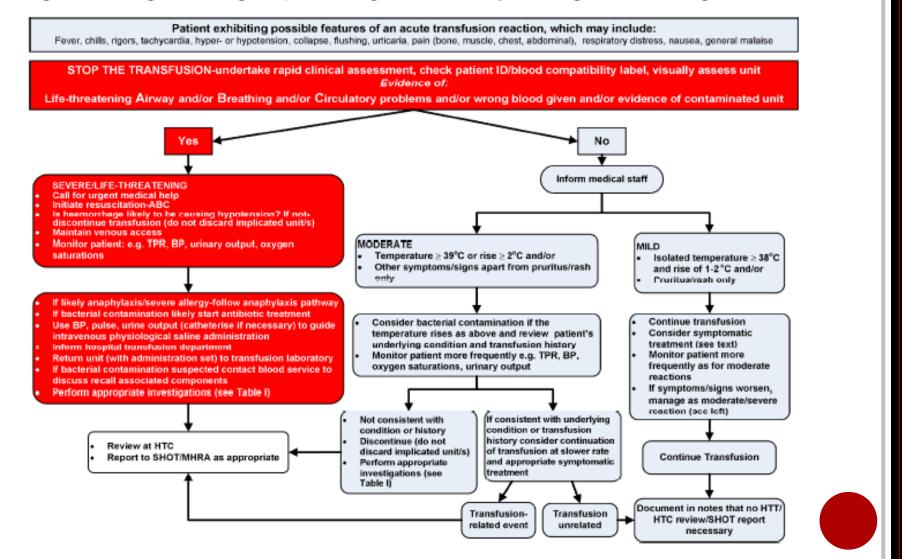
Test

- Inform Nurse in charge / Doctor
 - Check and document patient observations
 - Check correct unit given to patient

- Take blood samples to identify type of reaction
- Return blood unit(s) to transfusion for further testing and microbiology

MANAGEMENT OF ACUTE TRANSFUSION REACTIONS

Figure 1 Flow Diagram for recognition, initial management and subsequent management and investigations.



INFORMATION FOR TRANSFUSED DAY CASE PATIENTS

North Bristol

Advice following a blood transfusion

Most blood transfusions take place without problems but having a blood transfusion carries with it a very small risk of developing side effects. These may develop within several hours, or in some cases may happen days or weeks later.

These side effects are often mild, but it is still important to report any unusual or unexpected symptoms to a doctor or nurse (or midwife if your transfusion was related to pregnancy/childbirth).

Please contact the hospital for advice if you experience any of the following after having a blood transfusion:

- A high temperature feeling feverish, hot and clammy
- Shivering or 'cold chills'
- Breathing problems
- Extreme tiredness
- Passing blood in your urine
- Passing much less, or very dark, urine
- Itchy skin rash
- Pain in the lower back (loin pain)
- Unexpected or unexplained bruising
- Jaundice (yellow colour of the white of your eyes or your skin)

When contacting the hospital for advice, please inform the hospital staff that you have recently had a blood transfusion.

Exceptional healthcare, personally delivered



This section to be completed by staff on discharge. Explain to the patient how to obtain assistance in the event of a problem (both 'in hours' and 'out of hours'), and then give the leaflet to the patient: before they leave the ward/clinic.

Ward/Department Contact telephone number(s):

Daytime:

Night time/weekends:

Date and time of last transfusion:

If you are unable to make contact with the hospital where you had your transfusion, then please contact your GP as soon as possible.

In the rare event of an emergency (life threatening problems, for example difficulty with breathing), call 999 for an ambulance and bring this leaflet into hospital with you.

If you would like further information or advice about this, or other aspects of blood transfusion, please discuss this with your hospital doctor, nurse or midwife.

References

Acknowledgements: The Leeds Teaching Hospitals NHS Trust, Taunton & Somerset Hospital NHS Trust)

Information contained in this leaflet has been produced in collaboration with the NHSBT Better Blood Transfusion Team

NHS Constitution. Information on your rights and responsibilities. Available at www.nhs.uk/aboutnhs/constitution [Last Accessed March 2010]



O North Bristol NHS Trust. First Published November 2011. Review due November 2013. NBT002585

KEY POINTS TO REMEMBER

Donor Exposure

- Each blood unit comes from an individual blood donor
- The risk of reaction does not reduce if patient previously transfused
- Observations must be carried out for all components and all transfusions

Patients At Higher Risk of Reaction

- Patients who are allergic to other things are more likely to suffer an allergic reaction to blood
- Patients who have reacted to blood components before are more likely to react again
- •These patients may require more frequent observations

Key Management Requirements

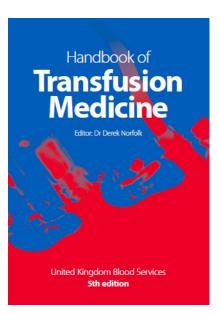
- Severe ATRs occur in about 1 in 7000 units transfused
- Transfusion should only take place when there are enough staff available to monitor the patient
- Transfusions overnight should be avoided unless clinically essential (or where staffing levels are maintained overnight)



REFERENCES

- Norfolk D. (2013) Handbook of Transfusion Medicine. 5th edition, London: Published by Stationary Office. Available at <u>http://www.transfusionguidelines</u> .org.uk
- British Committee for Standards in Haematology (BCSH) Blood Transfusion Task Force (2012) Guideline on the investigation and management of acute transfusion reactions. Available at:

http://www.bcshguidelines.com/



Guideline on the investigation and management of acute transfusion reactions

Prepared by the BCSH Blood Transfusion Task Force

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