

BLOOD TRANSFUSION SECOND SAMPLE POLICY

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1. INTRODUCTION

The BCSH (British Committee for Standards in Haematology) guidelines for pre-transfusion compatibility procedures in blood transfusion laboratories (2012) have recommended that “unless secure electronic patient identification systems are in place, a second sample should be requested for confirmation of the ABO group for a first time patient prior to transfusion, where this does not impede the delivery of urgent red cells or other components.”

2. AIM, PURPOSE AND OUTCOMES

This policy is designed to inform staff of the requirements of two ABO blood groups prior to Transfusion.

3. SCOPE

3.1 Who is the Policy Intended to Benefit or Affect

This policy applies to all directly employed staff within NHS Lanarkshire

3.2 Who are the Stakeholders

Directly employed staff within NHS Lanarkshire

4. PRINCIPAL CONTENT

In the absence of secure electronic patient identification system, NHS Lanarkshire blood banks will require a second confirmatory blood transfusion sample before it issues blood or blood components. For fully compatible blood to be issued patients must have a current valid sample and a previously known blood group within NHSL Laboratory Information System. This policy, in line with the national guideline, is aimed at reducing a potentially life threatening ABO incompatibility reaction where the first sample taken involves a Wrong Blood in Tube error.

However, the interpretation of the guideline will allow the urgent issue of Group O RhD Negative or Positive blood when it would be less safe to wait for the result of a second sample or where a second sample is otherwise unavailable.

NHS Lanarkshire has assessed that issuing emergency Group O RhD Negative or Positive blood is safer than delaying transfusion.

NHS Lanarkshire is aware that in certain circumstances a second sample will not be available. Examples of these circumstances include situations where a sample is impossible to obtain due to poor venous access. It also includes situations where the obtaining of a sample could cause significant and undue distress to the patient or potentially endanger the member of staff involved in the phlebotomy procedure. These

situations are likely to be very rare. In their event, the situation should be discussed with a senior clinician responsible for the patient who then must authorize the transfusion to proceed in the absence of a second confirmatory sample. In an emergency situation, again Group O blood will be issued to the patient to prevent unnecessary delay. In a controlled situation with a clinically stable patient, the situation should be discussed with the duty Haematologist to agree on the correct course of Blood Transfusion management.

Group O Rh negative blood will still be available within all agreed clinical areas and match fridges within each hospital site. A confirmatory blood sample will be requested after emergency blood has been issued.

Children under 12 months old are exempt from requiring a second confirmatory sample. Group O RhD negative Paediatric Red Cells will be issued to these patients from the first sample.

NHSL will aim to reduce the number of patients who present for transfusion with only one blood group record by encouraging Pre-assessment clinic sampling, more frequent blood sampling at patient's first visit and the development of national cross hospital patient records.

Adherence to this policy will allow NHS Lanarkshire to remain within recommendations of the guidelines, add increased safety to the process of blood transfusion and minimise delay the delivery of blood and blood products to the patients of Lanarkshire.

5. ROLES AND RESPONSIBILITIES

Employees must:

- Ensure they are familiar with the policy and procedures
- Comply with the policy, seeking clarification where required

Transfusion staff must:

- Provide support to staff seeking clarification on policy
- Monitor and review the policy

6. RESOURCE IMPLICATIONS

None identified

7. COMMUNICATION PLAN

This policy will be available on Firstport. Posters and Flyers are available throughout the acute sites.

This policy will also be discussed at the appropriate management team meetings

8. QUALITY IMPROVEMENT – MONITORING AND REVIEW

This policy will be monitored by the Transfusion department and reviewed in conjunction with the Lanarkshire Transfusion Group. This policy will be reviewed every 2 years.

9. EQUALITY IMPACT ASSESSMENT

This policy meets NHS Lanarkshire EDIA

10. FAQs

10.1 Why have you been asked to provide a second blood sample?

A second blood sample will now be requested by blood transfusion laboratories when handling requests for blood or blood components. The second sample procedure has been introduced following the recommendation from the British Committee for Standards in Haematology (BCSH) 2012 and the Serious Hazards of Transfusion (SHOT) 2013.

The measure is designed to improve patient safety by reducing the risk of the wrong blood in tube (WBIT) incidents leading to a patient receiving an ABO incompatible transfusion. We want to ensure that your patient receives the right blood at the right time.

A WBIT incident is when:

Blood is taken from the wrong patient and is labelled with the intended patient's details.

Blood is taken from the intended patient, but labelled with another patient's details.

10.2 How do I know if a second sample is required for my patient?

If your patient requires a second sample for blood components to be issued and you have requested a crossmatch you will be contacted once by the transfusion laboratory to ask for a second sample to be taken. It will then be your responsibility to ensure this sample is taken and supplied to the Transfusion Laboratory. Once this second sample has been received, processed and the same result concluded the blood components will be issued. You will also see any valid or historical blood group within the patient file on browser for reference.

The historical sample can be taken any time before the required transfusion where it is known in NHSL computer systems eg. Patient was Group & Saved in August 2019, this patient will only require one current valid sample to be taken before transfusion.

10.3 Can I take two samples at the same time?

No, it is important that the samples are taken separately as this is the fundamental principle of the policy, to reduce the risk of a WBIT incident.

The two samples must be taken by two separate venepunctures and ideally by different people if possible. However, when a second sample is requested for a patient, provided it is taken in a timely manner, this will not lead to a delay in the issue of blood for that patient. You may find it helpful to think ahead – if you know a patient is going to require a second sample, think about the opportunities to take a group check sample during other routine venepunctures.

10.4 Is this a board policy?

Yes, this change in practice has been incorporated into the board Transfusion Policy and will commence on 5th July 2021

10.5 Which components does a second sample apply?

A second sample will be required for Red cells, Platelets, Fresh Frozen Plasma (FFP) and Cryoprecipitate.

10.6 Do I need to send a new transfusion request form with the second sample?

Yes, it is imperative to send a new request form to the Transfusion Laboratory; the sample cannot be processed without a request form.

10.7 What if my request for blood components is an emergency?

Emergency requests for blood components will continue to be handled using existing protocols. Group O blood will continue to be issued in these cases until a second sample has been tested and verified. The second sample policy will not cause a delay to patients receiving blood and blood components in emergency cases.

10.8 What happens if I send references samples to SNBTS?

These will be processed as normal locally. The responsibility for ensuring you have the correct samples lies with the referring hospital transfusion lab.

If your patient has multiple antibodies please contact your hospital Transfusion Laboratory for more information

10.9 Which patients require a second sample?

Requests for blood components for all patients over the age of 12 months in non urgent cases will require a second sample. The second sample is an ABO group check to confirm the blood was taken from the same patient on two separate occasions.

11. REFERENCES

British Committee for Standards in Hematology (BCSH). Pre-transfusion testing. 2012
Serious Hazards of Transfusion (SHOT) <https://www.shotuk.org/>