

This newsletter is produced for the Newcastle Upon Tyne Hospitals by the Hospital Transfusion Team (HTT). The HTT meets monthly and reports to the Trust Hospital Transfusion Committee. This group is responsible for developing strategy for and monitoring compliance with policy.

This newsletter is one of the initiatives to help promote new information concerning blood transfusion, to highlight any recurring errors/incidents and to advertise training sessions/seminars.

## Blood Transfusion Pathway

This document **MUST** be used to document all transfusions within the Trust and has been designed to supplement the conventional medical and nursing clinical records and be retained in the document store within this admission episode.

SHOT recommend that all transfusion events undergo a formal pre-transfusion risk assessment for transfusion-associated circulatory overload (TACO) should be undertaken. TACO is the most commonly reported cause of transfusion-related mortality and major morbidity.

**Blood Transfusion Pathway**  
The Newcastle upon Tyne Hospitals NHS Foundation Trust

**YOU MUST BE TRAINED AND COMPETENTLY ASSESSED TO BE INVOLVED IN THE ADMINISTRATION OF BLOOD COMPONENTS**

Check all boxes which apply to the transfusion recipient. Check boxes to be ticked from the patient.

Check for blood component integrity	Check for blood component expiry
1. Check for blood component integrity	1. Check for blood component expiry
2. Check for blood component temperature	2. Check for blood component storage
3. Check for blood component volume	3. Check for blood component expiry
4. Check for blood component appearance	4. Check for blood component expiry
5. Check for blood component appearance	5. Check for blood component expiry

**Check for blood component expiry**

Component	Expiry	Time	Time
Red cells	31.12.20	10:00	10:00
Platelets	31.12.20	10:00	10:00
Fresh plasma	31.12.20	10:00	10:00
Cryoprecipitate	31.12.20	10:00	10:00
Factor VIII	31.12.20	10:00	10:00
Factor IX	31.12.20	10:00	10:00
Factor X	31.12.20	10:00	10:00
Factor XI	31.12.20	10:00	10:00
Factor XII	31.12.20	10:00	10:00
Factor XIII	31.12.20	10:00	10:00
Factor XIV	31.12.20	10:00	10:00
Factor XV	31.12.20	10:00	10:00
Factor XVI	31.12.20	10:00	10:00
Factor XVII	31.12.20	10:00	10:00
Factor XVIII	31.12.20	10:00	10:00
Factor XIX	31.12.20	10:00	10:00
Factor XX	31.12.20	10:00	10:00
Factor XXI	31.12.20	10:00	10:00
Factor XXII	31.12.20	10:00	10:00
Factor XXIII	31.12.20	10:00	10:00
Factor XXIV	31.12.20	10:00	10:00
Factor XXV	31.12.20	10:00	10:00
Factor XXVI	31.12.20	10:00	10:00
Factor XXVII	31.12.20	10:00	10:00
Factor XXVIII	31.12.20	10:00	10:00
Factor XXIX	31.12.20	10:00	10:00
Factor XXX	31.12.20	10:00	10:00

**Management of Suspected Acute Reactions**

Stop transfusion immediately if any of the following signs or symptoms are observed. Notify the transfusion laboratory and call a doctor.

**ACT UP! STOP THE TRANSFUSION AND CALL A DOCTOR**

1. Allergic reaction  
2. Febrile reaction  
3. Bacterial contamination  
4. Transfusion-related acute lung injury (TRALI)  
5. Transfusion-related circulatory overload (TACO)  
6. Transfusion-related haemolytic reaction (TRHR)

## Spotlight on the lab

We've had a busy few months but none more so than one of our Section Leads Michelle Evans.

Michelle graduated from Sunderland University and began her training as a Biomedical Scientist at the Royal Victoria Infirmary. She completed her MSc in Biomedical Science and has worked as part of the senior team in Blood Transfusion at both the RVI and the Freeman Hospital.



Not only did she win a poster award at this years British Blood Transfusion Society conference for her work on a novel way to predict Anti-D in pregnancy but she has also just achieved the Higher Specialist Diploma in Transfusion Science awarded by the IBMS demonstrating her high level of expert knowledge, skills and competence.

## COVID-19

We received a Greatix from Dr Andrew Charlton to Transfusion Lab Team/Lab manager & Practitioners (21/05/2020) concerning the Blood Transfusion laboratories involvement with NHS Nightingale



"Responded with fantastic speed, diligence and care to the request to set up a transfusion service for the North East Nightingale hospital. Not only turning around new procedures, training and regulatory approval, but arranging the purchase, installation and validation of a blood product fridge in an unbelievably short timescale. We even had a request from the regulatory body to share some of our good practice as an example to other Trusts."

What could we learn?:

"How to respond under immense organisational and personal pressure, with good humour, diligence and excellence. A fantastic team."

## Patient Blood Management

Emma McCone, one of the lead members of the trust PBM group recently presented a poster at the Nursing, Midwifery & Allied Health Professional Conference.

She continually works hard to ensure the patients journey is paramount within the trust and that the care provided is the best achievable



# Paperlite Update

To avoid the risk of over transfusing a patient, it is extremely important that all transfusion events are correctly documented and accessible as part of the patient record.

All transfusions should be recorded on the appropriate Blood Transfusion Pathway form, which is available within the Paper Vault (duplex printing should be used to print double-sided).

Once complete, The Blood Transfusion Pathway form should be kept with the patient and included as part of their temporary paper documentation.

In line with *paperlite* policy, the temporary paper documentation should be sent to Medical Records on a weekly basis, or on discharge of the patient.

**All Blood Transfusion Pathway forms MUST be separated and urgently hand delivered to Medical Records on the respective site. The Medical Records Team will immediately scan each form so that each transfusion event becomes viewable as part of the patient electronic record in Document Store.**

Before authorising any transfusion to a patient it is important to check both the electronic record in Document Store and the temporary paper documentation for previous transfusion history.

For any additional information, please contact the Transfusion Practitioners on either 48852 or 48853 in the first instance.

## Intraoperative Patient Blood Management

### Intraoperative Patient Blood Management

Perioperative blood transfusion is an independent risk factor for morbidity and mortality across a range of major surgeries. Patient blood management (PBM) is a multimodal approach that seeks to promote the appropriate provision and use of blood, its' components and derivatives, and strategies to reduce or avoid the need for blood transfusion. A key pillar of PBM is to minimise intra-operative bleeding.

### What is cell salvage?

*Cell salvage* is a way of collecting a patient's own blood from an operating site during surgery. This blood is then processed in a *cell salvage* machine and given back to the patient. It may mean that a patient does not require donated blood from the blood bank.

### What is tranexamic acid?

Tranexamic acid is an anti-fibrinolytic drug which can stabilise blood clots and reduce active bleeding. It has been used successfully in trauma cases and in routine surgery such as hip replacements.

### What are the NICE standards?

The NICE guideline for Blood Transfusion (2015) recommends offering tranexamic acid to adults expected to have moderate blood loss (greater than 500mls) and consideration of intra-operative cell salvage with tranexamic acid for patients who are expected to lose a very high volume of blood. It recommends cell salvage should not routinely be used without tranexamic acid.

### Do we meet the NICE standards?

A recent audit shows there is potential for greater utilisation of both tranexamic acid and cell salvage in major surgery undertaken at the Freeman Hospital. However, much of the evidence comes from trauma surgery and the use of cell saver in cancer cases is controversial due to concerns about spreading malignancy, but should be considered on a case by case basis.

### Potential areas for change

We are hoping to raise the profile of available equipment, educate perioperative teams and open up discussions with surgical specialties.

*Dr G Timms and Dr S Dawson*



Figure 1: Cell salvage machine which collects, filters, centrifuges and washes blood suctioned from surgical wounds so that it can be reinfused into the patient

### Feedback Welcome

Please send any feedback to  
[nuth.hospitaltransfusionteam@nhs.net](mailto:nuth.hospitaltransfusionteam@nhs.net)

Please also use this email for any non-urgent transfusion queries.



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