

Challenges of matching units in the Laboratory and Tooting



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Blood Products

- **Where do we order Blood products?**
 - Tooting NHSBT
- **How do we order Blood?**
 - Traditionally Fax now Online blood ordering System (OBOS)
- **When do we order?**
 - Twice/once a day routine or Urgent ad-hoc/blue light
- **What do we order?**
 - Pack red cells, Frozen Plasma, Platelets, Cryoprecipitates

What Blood Products Available

Adult and Neonatal Red cells



What Blood Products Available

Adult and Neonatal Platelets



What Blood Products Available

Single and Pooled FFP (Fresh Frozen Plasma) & Cryo



What products Available From Octapharma

Octaplas LG – This is alternative to FFP





Neonates V Paediatrics



Until how old we call them Neonates?

In blood transfusion we call up to 4 Months neonates, our LIMS (Laboratory Information Management System) also set up like that.

We Only Issue O Negative neonatal packs

We can issue O positive as exchange unit




Paediatrics?

From 4 months to 16 years.

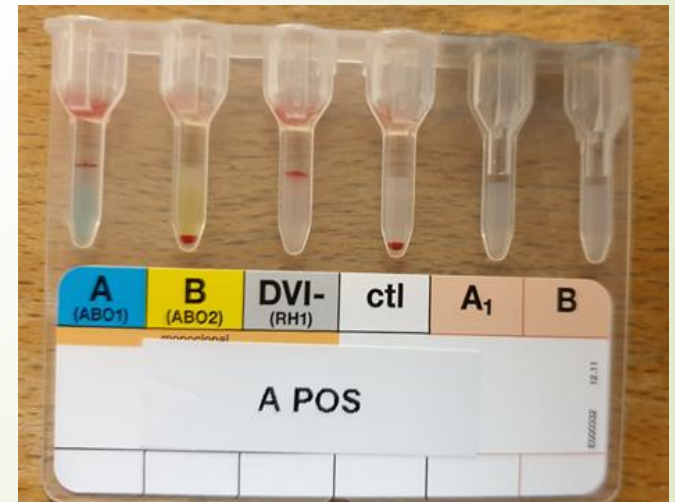
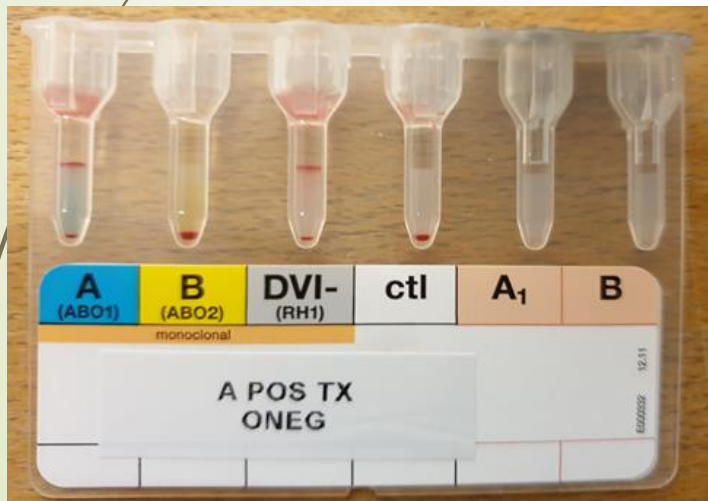


Neonatal Blood selection?

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- Before we issue Neonatal blood, we/LIMS system need to have Mums Antibody screen. If not a current sample, then we need to have a result from Mum within 72 hours of Baby's birth time.
 - Then we need Baby's DAT (Direct Antiglobulin Test).
 - If Mum's antibody screen negative and DAT negative, then we just select a neonatal red cell unit and issue electronically.
 - If either of them positive then we have to perform manual crossmatch, this is depending on Mum's Antibody screen!!
 - Manual crossmatch can take some hours again this is depending on what type of antibody is positive?
 - Blood may need to be ordered from Tooting, transported and then crossmatched and issued – waiting for collection**
 - However in emergency we can always issue Neonatal O Negative units

What Challenges?

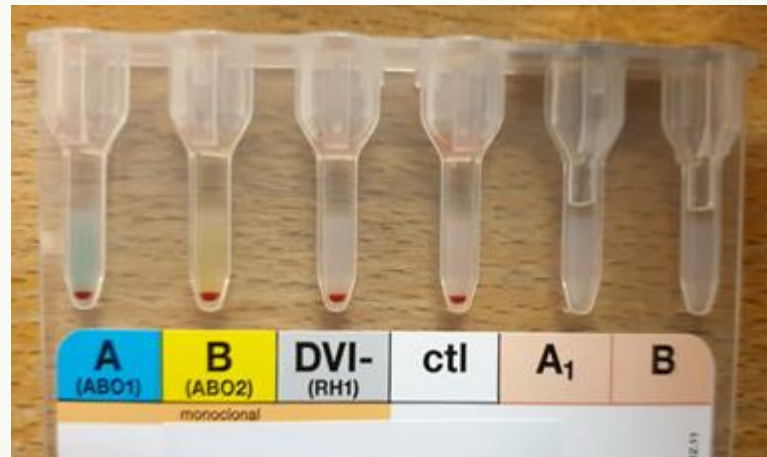
- Patients Transfer from other sites and no Mum details and/or no baby samples?
- Baby have had transfusion from other sites and lab will do extended investigation!



What Challenges?


- Mum may have complicated antibody screen and baby is waiting to transfer to this site – but no communication
- Sample received but addressograph labelled or miss spelled or even missing for point of ID
- Baby need platelet but on the form request for FFP!!
- Of course laboratory staff forgot to order the products or not informed to Neonatal unit – happens – Then I deal with DATIX 😞
- Also a porter collected the most anticipated platelet and placed into the refrigerator!! Again deal with the

What is the blood Group?

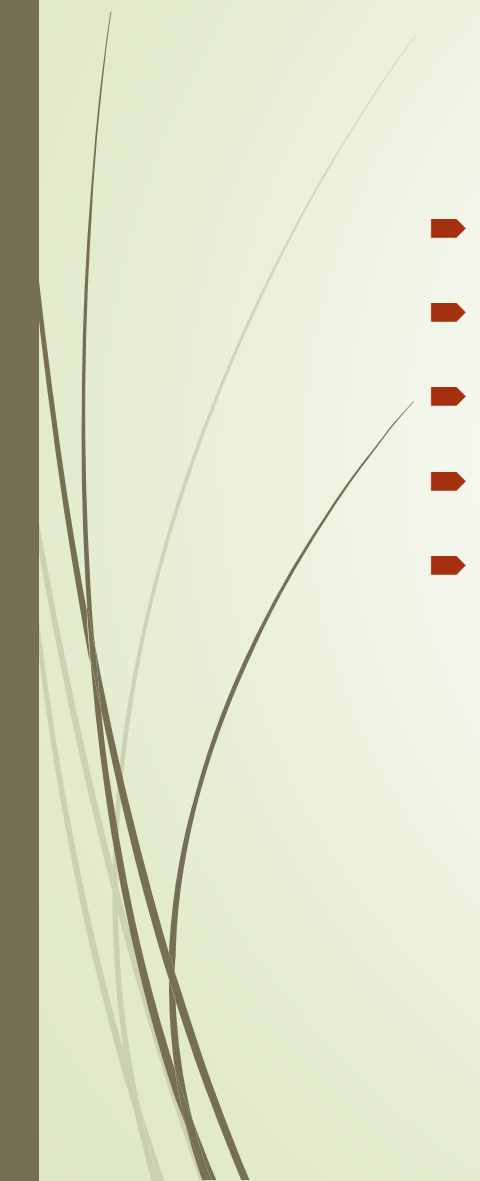


Exchange Blood Transfusion

- Very stressful at clinical end
- In laboratory communication is very key
- Clinicians have to go through protocols prior to exchange transfusion, communicating to transfusion department is the main part and the person who receives the call in the lab needs to act very precisely – things can go wrong!!
- Incident ...
 - Exchange blood ordered
 - Lab staff take the notes and ask the clinician to send the request form
 - 518ml of blood requested on the form, Mum screen negative and DAT negative
 - BMS called tooting- Tooting issue department said two units should be fine
 - BMS ordered the units on OBOS
 - Blood received – and issued
 - Late at night Neonatal unit called and BMS said blood issued – they ask how much answer was 501ml
 - Clinician went mad .. asked to get the extra unit to cover the required amount
 - Further unit ordered through “serve” at night
 - At the end Neonatal team decided not to transfuse the units!!



Crossmatching to Paediatric Patients

- Electronic issue – 72 Hours & 7 days rule
 - Thalassemia/sickle patients
 - Irradiated products
 - Again sampling issues
 - Communication – After school transfusion ..
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**Presentation
Finished.**

Any questions?