

Developing a local pathway for the immediate availability of X Matched Blood for Normothermic Regional Perfusion (NRP) in DCD Donation, preventing wastage & reducing pressure on SNODs & the Theatre team

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Background

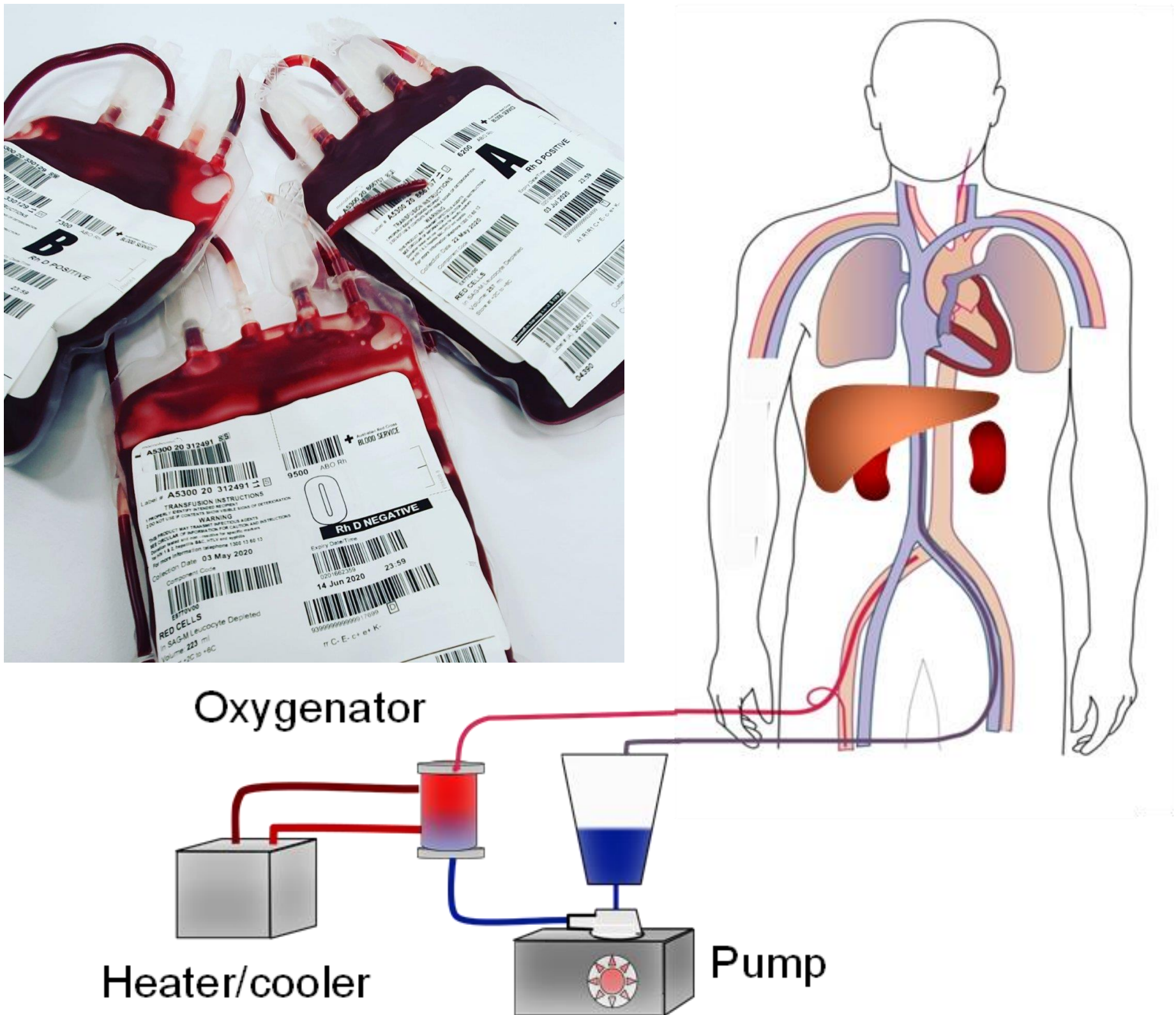
- Increasing use of NRP nationally, with our local NORS team starting in early 2022
- Two patients as controlled DCD's with the planned use of abdominal NRP
- Both patients had a prolonged time to asystole
- X matched blood required to prime the NRP circuit had been transferred to theatre in a standard unrefrigerated transport bag
- 7 Units of blood wasted due to cold chain being broken
- Clinical governance/local Datix raised
- Development of SOP to ensure timely availability of blood that protects the cold chain if blood is then not required

Issues to Consider

- Location of storage of blood
- Defining a trigger point at which blood is transferred to theatre
- Communication between SNOD whilst at bedside during WOT/ Asystole and theatre team
- Identifying who is responsible for ensuring blood is available in theatre in time for NRP
- Practicalities of blood transfer to theatre- an additional stress for SNODs whilst facilitating DCD process
- Adherence to local hospital policy to ensure safety checks completed prior to handing over blood to the perfusionist
- Blood needs to be available in a time critical manner, whilst also protecting the cold chain to prevent blood wastage if not needed (e.g PTA)

Recommendation

- Every hospital must have a reliable & robust pathway to ensure blood is available within a time critical manner for NRP Perfusion in DCD retrieval. This will ensure the cold chain is protected, preventing the wastage of Cross Matched Blood. This applies to blood storage across all Organ Retrieval.



North Bristol NHS TrustPolicy Number: [Insert document number]

**Use of blood to facilitate abdominal normothermic regional perfusion in organ donors following circulatory death (DCD)**

**Division: ASCCR**  
**Document No\* (if Trust-Wide):**  
Contact [policiesandguidelines@nbt.nhs.uk](mailto:policiesandguidelines@nbt.nhs.uk) for a reference number if required

Specific staff groups to whom this policy directly applies	Likely frequency of use	Other staff who may need to be familiar with policy
Intensive care nurses Theatre ODP/Nurses Theatre porters	1-2 times a month	Senior ITU and theatre staff

Development of a local SOP

- Needed as there was no region wide policy in place, due to the different logistics of blood storage, policies and tracking at each hospital
- This highlighted need for a Trust wide working group to develop a local SOP for collection and storage of X Matched blood for Organ Perfusion, to prevent blood wastage & reduce pressure on SNODs whilst facilitating DCD donation
- Development of SOP involved local theatre staff & Blood Transfusion
- Engagement/ education programme has improved understanding & engagement with Organ Donation pathway across Trust , especially with Theatre team