

Referral of neonate with NEC/Acute abdomen to Retrieval Service

Teleconference

Referring Consultant, Retrieval, PICU & Paed Surgeon Consultant on call and PIC NIC

Obtain history and current patient status

DCS is management of choice for sick neonates with NEC and perforation or on inotropes

DCS Unlikely

Continue normal PICU/surgical management

DCS Likely

Add PICU Nurse in Charge into conference call (if not already)

Request local hospital to take FBC, U&E, clotting

Request referrer to send any baby/maternal bld grp/antibody Hx/anti-D information to bch-tr.Bloodbank@nhs.net

Urgent (aim <1hr) transfer to PICU@BCH (Parent(s) to come with transport team where possible)

Actions Required - before arrival

- KIDS/NTS to take & label blood into BCHXmatch bottle
- PICU NIC to arrange admission into DCS capable bedspace
- PICU nurses/Tech Team arrange bedspace as DCS poster
- PICU to ICE request Xmatch & prepare form for 'DCS blood pack'
- Surgeons to liaise with Theatre Team/Anaesthetics

DCS Blood Pack

PICU medical team to inform Blood Bank of need for 'DCS blood pack':

- 1 adult RBC
- 1 Octaplas
- 1 platelets (paed unit)

Actions Required - on arrival

- check labelling of XM sample taken by KIDS/NTS and take to Blood Bank - 1st task **before** pt handover
- **STOP/GO** surgical/PICU assessment - clinical decision on DCS and whether PICU or theatres
- Surgeons to update Anaesthetist/Theatre staff & PIC Consultant to inform PICU Nursing Team of decision
- Theatre Team to start prepping trolley as DCS poster in theatres & be ready to come down
- PICU to assess/insert central venous/periph arterial access (insertion by senior PICU clinician)
- If difficult access PICU to discuss with Anaesthetics (Help with insertion/use NIBP?)
- Send 2nd Xmatch sample to Blood Bank
- Aim to obtain crossmatch & start of surgery within 1hr of arrival (Blood Bank to inform PICU when available)

DCS start

- Entire theatre team to be involved plus bed side nurse
- Take positions as per DCS poster
- Full WHO checklist
- Aim for surgery including anaesthetic to take < 1 hour
- Sit-reps every 10 mins (TBCS - see bed space set up poster)
- Surgeons to note KTS and finish times for audit
- Sign out and handover

Debrief

Complete in every case and consider all parts of the pathway. Record feedback for audit

Summary of Requirements for Cross Match of Blood Products for DCS

CROSS MATCHING OF BLOOD PRODUCTS IS A TIME-CRITICAL STEP IN THE DCS PROCESS

Pre-PICU Admission

KIDS/NTS Consultant:

1. Request information from referring hospital
 - i. Is there any maternal blood group or antibody history available?
 - ii. Was the mother given prophylactic anti-D at any point during pregnancy?
 - iii. Is there information available from any blood group investigations for the patient?

Any available information should be e-mailed by the referring hospital to bch-tr.Bloodbank@nhs.net

KIDS/NTS Transfer Team:

2. Take blood sample of ≥ 2 mls as 1st cross match sample (pink EDTA bottle)

Samples <2mls require a longer manual process; Capillary samples should be avoided as they often clot

PICU Consultant/delegate:

3. Generate ICE request for **URGENT** 'DCS blood pack'
 - 1x adult packed RBC, 1x Octaplas, 1x paediatric platelets
 - use L number generated by KIDS/NTS
4. Print ICE request label* and attach to cross match blood form
5. Inform Blood Bank of patient ETA and requirement for **URGENT** DCS blood pack
6. Inform Blood Bank of patient ETA following KIDS/NTS update

Blood Bottle Labelling

Use details from BCH registration, *not* referring unit

Must be hand written with *all* the following:

- Hospital Reg no. (&/or NHS no.)
- Surname
- Forename (even if just 'Baby')
- Date of Birth
- Date and time of collection
- Details of person collecting (initials or name)

If any of these details are missing/incorrect the sample may be rejected by the lab

On Arrival to PICU *before* Patient Handover

KIDS/NTS Transfer Team:

Handover cross match sample to PICU team - this should be accompanied by a check of the label - check points in box above against blood bottle and BCH registration details

PICU Consultant/delegate:

Ensure 1st cross match blood sample is placed in pre-labeled request form and immediately walked down to Blood Bank - this will usually be done by a PICU Housekeeper or Resource Nurse

After Patient Handover

PICU Consultant/delegate:

Take EDTA blood sample of ≥ 0.5 mls as 2nd cross match sample (pink EDTA bottle)

Hand write patient details with L number on blood bottle (*non-hand written bottles will be rejected by the lab*)

Sample 1 and 2 should be taken at least 30mins apart; do NOT wait for the 2nd sample before sending the 1st sample

*if labels cannot be printed, the request form can be handwritten, but a note should be made on the form that an electronic request has been made

Other points to note:

- A maternal blood sample is *not* required (often difficult to validate in relation to the patient)
- Do *not* wait for blood to be cross matched at the referring hospital
- Do *not* delay patient transfer waiting for referring hospital blood products
- If blood products are transferred with patient, inform BCH Blood Bank pre-transfer and still take 1st XM sample pre-PICU arrival
- Do *not* open a blood transport box at any point, but take the sealed box directly to Blood Bank on patient arrival (if opened the products can no longer be re-issued for use at BCH)