NHS Children's Acute Transport Service

Clinical Guidelines

Management of critically ill child at the local DGH

Document Control Information

Author	E Polke	**Author Position**	Service Coordinator
Document Owner	E. Polke	**Document Owner Position**	Service Coordinator
Document Version	Version 3	**Replaces Version**	January 2016
First Introduced		**Review Schedule**	2 Yearly
Active Date	January 2018	**Next Review**	January 2020
CATS Document Number	**1120092018**		
Applicable to	**All CATS employees**		

Purpose

It is important that in the event that there is a delay in PCC transport team availability due to workload that the DGH have a contingency plan in place to temporarily care for a child with guidance from the CATS consultant .
In order to utilise the resources available to you there should be a designated area to take the child to such as theatre recovery, SCBU and/or AICU.
Adequate and ongoing dialogue between the CATS consultant and the consultants involved in the child's care is the key to delivering quality care and preventing errors from occurring.

Assessment

Ensure plan agreed and instigated in conjunction with the CATS consultant
Do not delay urgent treatment or interventions whilst awaiting the PCC transport team.

If clinical condition warrants immediate transfer (e.g. emergency neurosurgery required) refer to CATS clinical guidelines and 'Transport considerations when transfer is undertaken by local DGH team'.

Initial management priorities

Preparation is the key to minimising clinical instability

AIRWAY **DO NOT use pre cut tubes** If cuffed tubes available consider using them (may not need to inflate cuff) Secure airway ensuring good position with no significant leak Add **PEEP** as soon as possible to ventilation circuit Add appropriate HME to circuit Gastric tube on free drainage (all ventilated children)	Discuss induction agent with CATS consultant Anticipate CVS instability with induction (If septic/cardiac) Prepare fluid bolus and possible dopamine infusion Chest X ray post intubation (Ideal Position at base of T2) with copy requested for transport team
BREATHING Ensure adequate ventilation Is the chest wall moving? Is air entry equal? Have you good saturation readings? Transport ventilator if available otherwise utilise other ventilation resources from SCBU/AICU **Always monitor end tidal carbon dioxide ($ETCO_2$)** Exclude ETT related problems urgently if ventilation difficult	Discuss ventilation strategies with CATS consultant Consider appropriate blood gas targets dependent on clinical condition **Possible Ventilation problems:** Inadequate sedation/paralysis Large leak around ETT in child requiring high Ventilator pressures **(need to upsize tube)** **Unintended endobronchial intubation** Consider physiotherapy and suction Tension pneumothorax **(must be drained)**

CIRCULATION **Continuous cuff BP readings whilst awaiting arterial line placement** **2** good intravenous access points are a priority In a life threatening situation consider peripheral or IO inotrope infusion until central line access can be established. Arterial line attempted but can run on peripheral blood gases In neonatal shock consider cardiac anomaly (femoral pulses/ 4 limb BP)	Anticipate CVS instability at induction Discuss circulatory support measures with CATS consultant (most appropriate inotrope) Early aggressive fluid resuscitation + inotropes may be required Avoid propofol if CVS instability **Unable to get BP reading from cuff** **Check:** Cuff size (2/3 upper arm width) Check femoral pulses and peripheral pulses Check $ETCO_2$ tracing (poor cardiac output) **Give more fluid and titrate inotropes constantly reassessing until either arterial line placed or successful BP cuff readings recorded at frequent intervals.**

DISABILITY Commence adequate sedation & paralysis (see CATS prescription sheet for drug infusion doses) Monitor Blood Glucose Consider urinary catheter (monitoring of output/avoid retention) Pupils Temperature control aim for normothermia unless cooling indicated Maintenance fluids commenced	Discuss specific concerns re sedation with CATS consultant Consider specific antibiotic cover Consider further tests such as CT scan, blood film Copy all notes for team Transfer x-rays/scans to receiving unit eg.IEP via blue light transfer

On going management/contingency plan

Appropriate staff identified to support care whilst awaiting next available CATS team.
Care area identified to assist with resource management within the DGH.
(Child moved to NICU/AICU/Theatre Recovery).
Ongoing dialogue continues between DGH team and CATS consultant in relation to the clinical management.
Plan agreed and updated according to clinical condition.

Detailed clinical guidelines are available on the CATS website: **http://www.cats.nhs.uk**