



# TIME-CRITICAL NEUROSURGICAL TRANSFER CHECKLIST

Children requiring immediate life-saving care may present to hospitals without neurosurgical services. However they will require urgent stabilisation and transfer to a neurosurgical centre. This checklist will assist you undertake the time-critical transfer in a safe and timely manner.

#### **AIRWAY**

- □ ETT secure( correct size & length/avoid nasal)
- Position of gastric tube and tracheal tube confirmed (ETT tip at T2 on CXR ideal for transfer)
- □ Appropriate HME filter for patient size
- □ C-Spine protection (if necessary)
- □ Orogastric tube on free drainage

## BREATHING

- □ Avoid hypoxia  $SpO_2 > 98\%$
- Attach ETCO<sub>2</sub> monitoring (aim 4.5-5.5kPa)
- Standard ventilator settings : PEEP 4/ Rate 15-30/ Ti 0.7/PIP to move chest

## **CIRCULATION**

- Minimum 2 points of IV access for transfer
  -discuss inotrope options with NECTAR Consultant
  -consider IO access no transfer delay for CVC
- □ Maintain age appropriate systolic BP
- Regular BP no transfer delay for arterial line
- Consider obtaining a blood group/cross match sample to accompany patient (fully labelled)

# **DISABILITY AND EXPOSURE**

- □ Obtain CT Head <30min
- Adequate sedation and muscle relaxants
  -see NECTAR Infusions Guide
- **15min pupillary monitoring**
- □ C-Spine protection (if necessary)
- $\Box$  Position head tilt 20-30<sup>o</sup>
- Identify and treat seizures
- □ Maintain normal blood glucose
- □ Aim plasma Sodium>140mmol/L
- Intracranial hypertensive crisis –
  Bradycardia/hypertension/pupillary
  dilatation
  - aim pCO<sub>2</sub>/EtCO<sub>2</sub> 4-5kPa
  - 2.7-3% Saline 3ml/kg over 15min
  - consider Mannitol 0.25-0.5g/kg
  - sedate adequately(bolus pre-suction)
  - keep moving don't delay
- Maintain normothermia regular/core temperature monitoring
- □ Secondary survey (if trauma)

#### **PREPARATION, PACKAGING & TRANSFER**

- Request urgent 999 Ambulance transfer(Category RED1 or RED2)
- Emergency airway & breathing equipment portable suction/fluids/drugs/adequate O2
- Ensure patient & equipment is adequately secured to ambulance trolley
- Ensure smooth journey due to effects on haemodynamics and ICP
- □ Travel safe –seatbelt on at all times
- Transfer letter with photocopy of relevant notes, results, drugs charts, anaesthetic charts etc
- PACS/copy of all imaging
- Document and highlight any Safeguarding issues
- □ Keep parents up to date
- Phone receiving team with ETA and inform them if there are any changes in the patient's condition or you are concerned that the patient is deteriorating further

IF AT ANY POINT YOU WANT FURTHER ADVICE CALL NECTAR ON 01912826699