

## 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.

| <u>AIRWAY</u> |   |  |
|---------------|---|--|
|               | 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 <sub>2</sub> >98%               |  |
|               | Attach ETCO2 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)               |  |

| DISABI | ITY AND EXPOSURE   |
|--------|--|
|        | Obtain CT Head <30min                                    |
|        | Adequate sedation and muscle relaxants                   |
|        | -see <u>NECTAR Infusions Guide</u>                       |
|        | 15min pupillary monitoring                               |
|        | C-Spine protection (if necessary)                        |
|        | Position head tilt 20-30°                                |
|        | Identify and treat seizures                              |
|        | Maintain normal blood glucose                            |
|        | Aim plasma Sodium>140mmol/L                              |
|        | Intracranial hypertensive crisis –                       |
|        | Bradycardia/hypertension/pupillary                       |
|        | dilatation   |
|        | o aim pCO₂/EtCO₂ 4-5kPa                                  |
|        | o 2.7-3% Saline 3ml/kg over 15min                        |
|        | o consider Mannitol 0.25-0.5g/kg                         |
|        | <ul> <li>sedate adequately(bolus pre-suction)</li> </ul> |
|        | <ul> <li>keep moving – don't delay</li> </ul>            |
|        | 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