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| **Name:****DPT ID number:** | **NEUROLOGICAL OBSERVATION CHART** |
|  | **Date** |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **Time** |
|  | EyesOpen | Spontaneously | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Eyes closed by swelling= C |
| **C****O****M****A****S****C****A****L****E** | To Speech | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| To Pain | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Never | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Best**VerbalResponse | Orientated | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Enter a T if person has a Tracheostomy |
| Confused | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Inappropriate words | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| IncomprehensibleSounds | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Silent | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Best**MotorResponse | Obeys Commands | 6 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Usually record the best arm response |
| Localises pain | 5 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Flexion withdrawal | 4 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Decorticate flexion | 3 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Decerebrate extension | 2 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No Response | 1 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | **TOTAL out of 15** |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **1****2****3****4****5****6****7****8**Pupil Scale (mm) | 240230220210200**Blood** 190**Pressure** 180**And** 170**Pulse** 160**Rate** 150 140(Record also on pews chart.)13012011010090807060504030**Respiration** 2010 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | 4039383736353433323130 |
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| **Pupils** | **Right** | Size |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | **+** reacts**-** no reaction**C** eye closed |
| Reaction |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Left** | Size |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Reaction |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **L****I****M****B****M****O****V****E****M****E****N****T** | **Arms** | Normal Power |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  | Record right (R) and Left (L) separately if there is a difference between two sides |
| Mild Weakness |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Severe Weakness |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Spastic Flexion |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Extension |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No response |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| **Legs** | Normal Power |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Mild Weakness |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Severe Weakness |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Extension |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| No response |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |

**Modified Paediatric Glasgow Coma Scale for Children**

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| **Eye Opening Response** |
| **Score** | **>1 year** | **< 1 year** |
| 4 | Spontaneous | Spontaneous |
| 3 | To verbal command | To shout |
| 2 | To pain | To pain |
| 1 | None | None |

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| **Motor Response** |
| **Score** | **>1 year** | **< 1 year** |
| 6 | Obeys command | Displays spontaneous response |
| 5 | Localizes pain | Localizes pain |
| 4 | Withdraws from pain | Withdraws from pain |
| 3 | Displays abnormal flexes to pain | Displays abnormal flexes to pain |
| 2 | Displays abnormal extension to pain | Displays abnormal extension to pain |
| 1 | None | None |

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| **Verbal Response** |
| **Score** | **> 5 years** | **2-5 years** | **0-23 months** |
| 5 | Is orientated and converses | Uses appropriate words and phrases | Babbles, coos appropriately |
| 4 | Conversation is confused | Uses inappropriate words | Cries but is consolable |
| 3 | Words are inappropriate | Cries or screams persistently to pain | Cries or screams persistently to pain |
| 2 | Sounds are incomprehensible | Grunts or moans to pain | Grunts or moans to pain |
| 2 | Sounds are incomprehensible | Grunts or moans to pain | Grunts or moans to pain |
| 1 | None | None | None |

Reference: Royal College of Paediatrics and Child Health (RCPCH), 2015, revised 2019, The management of children and young people with an acute decrease in conscious level, London

**Check, observe and Monitoring Neuro-observations**

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| **Check**Establish knowledge of child in normal circumstances | Behaviour, sleep pattern, colour, limb weaknesses, pre-existing medical conditions.Sustained any other injuries, ingested any medication e.g. narcotics or sedatives |
|  **Observe**Neurological status, vital signs and patient condition | Complete a neurological assessment including pupil reaction and document all findings on the paediatric neurological observation chartScore neurological observation accurately to enable trends for improvement or deterioration.Document accurate vital signs on age-appropriate PEWs chart including temperature, oxygen saturations and blood pressure with each set of observations |
| **Monitor**Frequency schedule | * GCS < 15: repeat neuro observations every 30 minutes
* GCS 15: monitor every 30 minutes for 2 hours, every 60 minutes for 4 hours and 2 hourly thereafter
* Increase to every 30 minutes if GCS deteriorates to less than 15. Restart above frequency schedule following any deterioration.
* Escalate to medical staff for doctor review if deterioration or any concern noted.
 |

NOTE: for diabetic ketoacidosis, hourly neuro observations are required until patient is no longer on intravenous insulin (BSPED 2021)