## Adult TIL Advanced with scores to match PED

| Recommended time for assessment | | | |
|---|---|---|---|
| | Basic | Intermediate | Advanced |
| Pre-enrollment | X | X | X |
| Day 1 post-enrollment | X | X | X |
| Daily | X | X | X |
| >once daily | | | X |
| Discharge | X | X | X |

Intermediate

| Corres. to basic level | | Assignment of scores to correspond with PED version | |
|---|---|---|---|
| | | Score | Max score |
| 1 | Head elevation for ICP control | 1 | |
| 1 | Nursed flat (180°) for CPP management | 1 | 1 |
| 1 | Sedation (low dose as required for mechanical ventilation) | 1 | |
| 2 | Higher dose sedation for ICP control (not aiming for burst suppression) | 2 | |
| 4 | Metabolic suppression for ICP control with high dose barbiturates or propofol | 5 | |
| 2 | Neuromuscular blockade (paralysis) | 3 | 8 |
| | CSF drainage <120 ml/day (<5 ml/hour) | 2 | |
| 2 | CSF drainage ≥ 120 ml/day (≥ 5 ml/hour) | 3 | 3 |
| | Fluid loading for maintenance of cerebral perfusion | 1 | |
| 2 | Vasopressor therapy required for management of cerebral perfusion | 1 | 2 |
| | Mild hypocapnia for ICP control [PaCO2 4.6–5.3kPa (35-40 mmHg)] | 1 | |
| 3 | Moderate hypocapnia for ICP control [PaCO2 4.0-4.5 kPa (30-35 mmHg)] | 2 | |
| 4 | Intensive hypocapnia for ICP control (PaCO2 < 4 kPa (30 mmHg)] | 4 | 4 |
| 2 | Hyperosmolar therapy with mannitol up to 2 g/kg/24 hours | 2 | |
| 2 | Hyperosmolar therapy with hypertonic saline up to 0.3 g/kg/24 hours | 2 | |
| 3 | Hyperosmolar therapy with mannitol > 2 g/kg/24 hours | 3 | |
| 3 | Hyperosmolar therapy with hypertonic saline > 0.3 g/kg/24 hours | 3 | 6 |
| 1 | Treatment of fever (temp. >38°C) or spontaneous temp < 34.5°C | | |
| 3 | Mild hypothermia for ICP control with a lower limit of 35°C | 2 | |
| 4 | Hypothermia below 35°C | 5 | 5 |
| 4 | Intracranial operation for progressive mass lesion, not scheduled on admission | 4 | |
| 4 | Decompressive craniectomy | 5 | 9 |
| | Total maximal score: | | 38 |

The corresponding TIL basic version is determined by the highest level recorded in all categories.

Advanced

| Corres. to basic level | | Assignment of scores to correspond with PED version | |
|---|---|---|---|
| | | Score | Max score |
| 1 | Head elevation for ICP control | 1 | |
| 1 | Nursed flat (180°) for CPP management | 1 | 1 |
| 1 | Sedation (low dose as required for mechanical ventilation) | 1 | |
| 2 | Higher dose sedation for ICP control (not aiming for burst suppression) | 2 | |
| 4 | Metabolic suppression for ICP control with high dose barbiturates or propofol | 5 | |
| 2 | Neuromuscular blockade (paralysis) | 3 | 8 |
| | CSF drainage <120 ml/day (<5 ml/hour) | 2 | |
| 2 | CSF drainage ≥ 120 ml/day (≥ 5 ml/hour) | 3 | 3 |
| | Fluid loading for maintenance of cerebral perfusion | 1 | |
| 2 | Vasopressor therapy required for management of cerebral perfusion | 1 | 2 |
| | Mild hypocapnia for ICP control [PaCO2 4.6–5.3kPa (35-40 mmHg)] | 1 | |
| 3 | Moderate hypocapnia for ICP control [PaCO2 4.0-4.5 kPa (30-35 mmHg)] | 2 | |
| 4 | Intensive hypocapnia for ICP control (PaCO2 < 4 kPa (30 mmHg)] | 4 | 4 |
| 2 | Hyperosmolar therapy with mannitol up to 2 g/kg/24 hours | 2 | |
| 2 | Hyperosmolar therapy with hypertonic saline up to 0.3 g/kg/24 hours | 2 | |
| 3 | Hyperosmolar therapy with mannitol > 2 g/kg/24 hours | 3 | |
| 3 | Hyperosmolar therapy with hypertonic saline > 0.3 g/kg/24 hours | 3 | 6 |
| 1 | Treatment of fever (temp. >38°C) or spontaneous temp < 34.5°C | | |
| 3 | Mild hypothermia for ICP control with a lower limit of 35°C | 2 | |
| 4 | Hypothermia below 35°C | 5 | 5 |
| 4 | Intracranial operation for progressive mass lesion, not scheduled on admission | 4 | |
| 4 | Decompressive craniectomy | 5 | 9 |
| | Total maximal score: | | 38 |

The corresponding TIL basic version is determined by the highest level recorded in all categories.

**Fluids**

Fluid in: ☐☐☐☐☐ ml

Blood and derivates: ☐☐☐☐☐ ml

Fluid out: ☐☐☐☐☐ ml

**Total dose vasopressors**

Noradrenaline: ☐☐☐ mg

Phenylephrine: ☐☐☐ mg

Dopamine: ☐☐☐ mg

**Total dose hyperosmolar agents**

Mannitol: ☐☐☐ g

Hypertonic Saline: ☐☐☐ g

## Reformatted Pediatric Intensity Level of Therapy Score

| Variable | Score | Max possible score |
|---|---|---|
| Head elevation for ICP control | 1 | |
| Nursed flat (180°) for CPP management | 1 | 1 |
| Sedation (low dose as required for mechanical ventilation) | 1 | |
| Higher dose sedation for ICP control (pentobarbital ≤36 mg/kg) | 3 | |
| Metabolic suppression for ICP control with high dose sedation (pentobarbital >36 mg/kg) | 4 | |
| Neuromuscular blockade | 2 | 6 |
| Ventricular CSF drainage | | |
| 0-11 times/24 hours | 1 | |
| 12-23 times/24 hours | 2 | |
| ≥ 24 times or continuous | 3 | |
| Lumbar CSF drainage | 3 | 6 |
| Induced hypertension (≥95$^{th}$ percentile for age) | 2 | 2 |
| Moderate hypocapnia for ICP control (PaCO2 of 32-35 mmHg) | 2 | |
| Intensive hypocapnia for ICP control (PaCO2 of <32 mmHg) | 4 | 4 |
| Hyperosmolar therapy with mannitol ≤ 1 g/kg/24 hours | 1 | |
| 1.1-2 g/kg/24 hours | 2 | |
| > 2 g/kg/24 hours | 3 | |
| Hypertonic saline (any dose or rate, regardless of serum [Na]) | 3 | 6 |
| Treatment of fever (temp. of > 38.5°C) or or spontaneous temp of <34.5°C | 1 | |
| Mild hypothermia for ICP control with a lower limit of 35°C | 2 | |
| Hypothermia below 35°C | 4 | 4 |
| Intracranial operation for progressive mass lesion not scheduled on admission | 4 | |
| Decompressive craniectomy | 5 | 9 |
| Maximum possible score | | 38 |

CSF: Cerebrospinal Fluid
* For scoring purposes, 5mg of thiopental = 1mg of pentobarbital
All scores are recorded once per 24hr period, defined by the time of trauma.

Adapted from: Shore P, Adelson PD, Kochanek PM, Hand L, Roy L. Reliability and validity of the Pediatric Intensity Level of Therapy (PILOT) Scale: A measure of the use of intracranial pressure-directed therapies. Critical Care Medicine. 34(7): 1981- 7, 2006.