FINALE SIMULATIE 2

**Simulatie focus** Ziek kind/trauma: Aspecifieke NAI presentatie

## Verwachte resultaten

**Teamleider -** Voert de eerste ABCDE-beoordeling uit, geeft leiding aan het team en leidt de behandeling - neemt waar nodig vaardigheden over.

**Team/Meer ervaren kandidaat** – Herkennen mogelijk hersenletsel en leidt onderzoek hiernaar en behandeling ervan. Vermoedt NAI (non-accidental injury) en verwijst naar juiste professionals.

## Voor de kandidaat die een herbeoordeling nodig heeft

Deze simulatie kan gebruikt worden om een kandidaat te herbeoordelen die een ziek kind simulatie moet herdoen. In dat geval verbetert het kind na correcte ABCDE beoordeling en aanpak volgens het sepsis algoritme (het kind evolueert dan niet naar verhoogde ICP). Alle parameters zijn dan beter bij de herbeoordeling, inclusief SpO2, hartritme en bewustzijn. De aanpak van NAI en verhoogde ICP kunnen dan besproken worden in de debriefing.

## Geschiedenis

|  |  |  |
| --- | --- | --- |
| **Personeel op spoed**Kai is a 6-week-old baby brought by parent. They were found unresponsive, in their moses basket. They last fed 3 hours previously and took the feed ok. |  | **Personeel op de afdeling**Kai is a 6-week-old baby who has been admitted 2 days ago for poor weight gain and crying with feeds. Their parent found them unresponsive in their cot. They last fed 3 hours previously and took the feed ok. Observations at that time were normal. |

**Bij aankomst**

Zorg ervoor dat het kaartje met aanwijzingen op de oefenpop ligt voor de start van de simulatie.

*Als je dichterbij komt, zie je een erg stile n slap kind.*

**Klinisch verloop** *(te geven tijdens de simulatie)*

|  |  |  |  |
| --- | --- | --- | --- |
| **Beoordeel** | **Kenmerken** | **Actie** | **Sleutelpunten** |
| A | Maintaining own airway. Some secretions in airway. | Assess, Suction |  |
| B | **AH 40/min** with irregular breaths. Equal air entry, no additional noises.**SpO2 94%** (poor trace). | Assess including auscul- tation and SpO2 | **High flow oxygen via non-rebreathing face mask****Call for Medical Emergency Team** |
| C | **HR 180/min, CRT 4sec, BP 90/40mmHg**Pale with cool peripheries | Assess and recognise compensated shock. | **Immediate IV/IO Bloods****Fluid bolus 10ml/kg****Give broad-spectrum antibiotic** |
| D | Responds to pain, **GCS 9**(E2V3M4). Pupils 3mm, re- flexes brisk. **BM 144mg/L, (8mmol/l)** | Recognise lowered levelof consciousness and escalate concern |  |
| E | Full fontanelle |  |  |

**Reassessment or weaker candidate or group** Use the guidance in blue box below

**Reassessment candidate**

This simulation can be used to reassess a candidate who needs to lead an illness simulation. In this case the candidate is expected to direct an ABCDE primary survey, identify sepsis as the diagnosis and manage IV fluids and antibiotics. The patient will then stabilise.

**Strong confident group or candidate** Use the guidance in yellow box below

**Team learning scenario**

Once the team have successfully managed the sepsis, the child becomes increasingly unwell. The team should recognise raised ICP and discuss/commence treatments and potential diagnoses before the scenario is stopped.

## Herbeoordeling (alleen voor de zeer competente groep - cursief gedrukte acties)

Bij het begin van de herbeoordeling gaat het kind achteruit met apnoe, desaturatie en bradycardie.

|  |  |  |  |
| --- | --- | --- | --- |
| **Beoordeel** | **Kenmerken** | **Acties** | **Sleutelpunten** |
| A | Patent | Assess |  |
| B | **AH 24/min** with frequent apnoeas requiring stimulationEqual air entry, no additional noises**SpO2 88-94%** (drops with desaturations) | Assess including auscultation and SpO2 | ***BMV ventilation*** |
| C | **HR 90/min, CRT 3sec, BD 100/30mmHg** (widened pulse pressure) | Reassess after fluid bolus |  |
| D | Floppy. Unresponsive.**GCS 6** (E1V2M3)Pupils size 2 reacting and size 4 slowly reacting. **BM 144mg/dl (8mmol/l)** | Assess Blood sugarConsideration of raised ICP | ***Hypertonic saline 5 ml/kg Arrange urgent CT head******Start neuroprotective management*** |
| E | **Temp 36.5**, pale, no rashes. |  |  |

|  |  |
| --- | --- |
| **NB** | * **Baby initially appears shocked and should be managed as if septic with fluid bolus and antibiotics.**
* **There are no external signs of injury but as scenario progresses assessment of pupils, full fontanelle and circulation changes (bradycardia and hypertension with widened pulse pressure) should alert to potential for traumatic brain injury.**
* **Baby requires management of raised ICP and intubation for CT scan with transfer to intensive care.**
 |

**Debriefing**

Bespreek aan de hand van de learning conversation de technische en niet-technische elementen van de simulatie.

**Beoordeling**

Dit station maakt deel uit van het continu beoordelingsproces, daarom moeten kandidaten weten of ze aan de norm voldoen.

Geef de kandidaten aan het eind de gelegenheid om vragen te stellen, deze te beantwoorden en vervolgens de belangrijkste punten samen te vatten.

**Algoritme**: toegenomen ICP



Sepsis



#  Hulpmiddelen om af te drukken en te lamineren

**Finaal 2 - Globaal overzicht (opoefenpop plaatsen)**

**Het kind is erg stil en slap.**

**Finaal 2 - Resultaten:**

Veneus/Capillair Bloedgas

Glycemie 144mg/dl (8mmol/L)

|  |  |  |
| --- | --- | --- |
|  | Initeel | Herbeoordeling |
| pH | 7.3 | 7.2 |
| pO2 | 68 mmHg (9.1kPa) | 74mmHg (9.8kPa) |
| pCO2 | 53mmHg (7.0kPa) | 45mmHg (6.0kPa) |
| HCO3- | 20 mmol/L | 20 mmmol/L |
| BE | 2mmol/L | 3 mmol/L |
| Lactate | 3.8mmol/L | 4.5 mmol/L |
| Na | 132mmol/L | 132 mmol/L |
| K | 5.2mmol/L | 5.2 mmol/L |
| Ca (geïoniseerd) | 1.2mmol/L | 1.1 mmol/L |

## Faculty helper information – Final 2

When candidate requests information regarding observations please give the following in “real-time” (e.g., wait for blood pressure to cycle, saturation trace to be achieved). If key treatment points are not undertaken, consider a “prompt” that would be visible in a child.

|  |  |  |
| --- | --- | --- |
| **Assess** | **Observation** | **Example prompt** |
| A | Maintaining own airway. Some secre- tions in airway. | “Sounds a bit gurgly” |
| B | **AH 40/min** with irregular breaths. Equal air entry, no additional noises.**SpO2 94%** (poor trace) | “Breaths are a bit shallow and irregular” |
| C | **HR 180/min, CRT 4sec, BD 90/40mmHg**Pale with cool peripheries | “What do you think of that blood pressure?”If “bloods” requested prompt and ask which ones |
| D | Responds to pain, **GCS 9** (E2V3M4). Pupils 3mm, reflexes brisk. **BM 144 mg/dl (8mmol/l)** | “The baby’s very quiet”Do you want a glucose? |
| E | Full fontanelle | To give as information if not asked for |

**Reassessment**

|  |  |  |
| --- | --- | --- |
| **Assess** | **Observation** | **Example prompt** |
| A | Patent |  |
| B | **AH 24/min** with frequent apnoeas requiring stimulationEqual air entry, no additional noises**SpO2 88-94%** (drops with desaturations) | “I’m not sure how good the breathing is, seems to be some long pauses”“The sats just keep dropping and then coming back up slowly” |
| C | **HR 90/mion, CRT 3sec, BD 100/30mmHg**(widened pulse pressure) | “Just redone the obs and they’ve changed a lot. What does that mean?” |
| D | Floppy. Unresponsive.**GCS 6** (E1V2M3)Pupils size 2 reacting and size 4 slowly reacting. **BM 144 mg/dl (8mmol/l)** | “Do you want me to call a senior?”“Do we need more help?” |
| E | **Temp 36.5**, pale, no rashes. |  |