

Scenario

SUMMARY

Setting: Emergency Department

Clinical focus: Type 1 diabetic child, hypoglycaemia

Situational factors: During GCSEs, poor oral intake leading to hypoglycaemia

Learning Objectives :

Initial structured A to E assessment

Recognition of hypoglycaemia and underlying diabetes

Treatment of hypoglycaemia

STAGE DESIGN /PROPS / TECHNICAL SET UP

Sim man set up, if possible put novopen / BM machine in trouser pocket.

BRIEFING TO PARTICIPANTS : Scene

15 year old Karl is brought in by paramedics after falling off his chair during his GCSE maths exam this morning. He was found to be less responsive by teachers and 'slurring his words' when lying on the floor. They called an ambulance who have brought him to AE. They feel he is confused and 'may have taken something.'

PRESENTATION

EXPECTED RESPONSE

ACTORS NOTES

| PRESENTATION | EXPECTED RESPONSE | ACTORS NOTES |
|--|--|--|
| | | Paramedic: Helpful |
| <p>Examination: A: Patent B: RR 16, Sats 99% in air C: HR SR 80, CRT 2 sec, BP 120/80 D: GCS V on AVPU E: Temp 37°C</p> <p><u>Blood sugar 2</u></p> | <p>ABCD approach Specifically: Thorough A to E assessment Recognises hypoglycaemia and gives hypostop Explores history further – type 1 diabetes</p> | <p>If they make attempt to call mum – to be answered by faculty and explain he is type 1 diabetic and missed breakfast</p> |
| <p>Progress – Improves: BM improves to 5 Becomes more responsive</p> | <p>Mum arrives – history from mum and Karl. Liaise with paediatric diabetic team,</p> | |
| <p>Progress – Deteriorates: Becomes less responsive, BM falls further – seizure</p> | | <p>Remain helpful</p> |
| | | |
| DEBRIEF | CLINICAL | CRM |
| <p>As required based on identified issues/frames</p> | <p>Discussion of treatment options for hypoglycaemia in diabetic teenager.</p> | |

Sample No.: S1234567
Patient ID:
Name: Karl Ben Hydrate
Comments:

Rack:
Ward:

Tube: 12:34:35
Dr.:
Birth: Sex:
Inst.ID:XS-800i^65614

| | | | |
|--------|-------|-----------------------|--------|
| WBC | 8.2 | [10 ⁹ /L] | |
| RBC | 2.08 | [10 ¹² /L] | |
| HGB | 145 | [g/L] | |
| HCT | 0.184 | [Ratio] | |
| MCV | 88.0 | [fL] | |
| MCH | 29.8 | [pg] | |
| MCHC | 339 | [g/L] | |
| PLT | 140 | [10 ⁹ /L] | |
| RDW-SD | 42.4 | [fL] | |
| RDW-CV | 14.0 | [%] | |
| PDW | 11.3 | [fL] | |
| MPV | 10.5 | [fL] | |
| P-LCR | 27.7 | [%] | |
| PCT | 0.18 | [%] | |
| NEUT | 5.2 | [10 ⁹ /L] | 65.5 |
| LYMPH | 2.75 | [10 ⁹ /L] | 15.6 * |
| MONO | 1.58 | [10 ⁹ /L] | 9.0 * |
| EO | 0.04 | [10 ⁹ /L] | 0.2 * |
| BASO | 0.03 | [10 ⁹ /L] | 0.2 |

Actions required

- Normal
- Abnormal but no immediate danger
- Significantly abnormal results -
patient in imminent danger

document STAT actions taken

NPT samples
processed by

NPT results



Measurement report

2:52

Serial number : 19241

Instrument ID : LRI A&E 1

Operator ID : blood

Leicester Royal Infirmary A&E

| | | | |
|--------------------------------|------------------|-----------|---------|
| Pat. ID | S1234567 | | |
| Last name | Hvdrate | | |
| First name | Karl | | |
| Blood type | Venous | | |
| FIO ₂ | 0.21 | | |
| pH | 7.34 (-) | [7.350 - | 7.450] |
| PCO ₂ | 5.0 kPa | [4.27 - | 6.40] |
| PO ₂ | 12 kPa (-) | [11.07 - | 14.40] |
| BE | -2 mmol/L | | |
| cHCO ₃ ⁻ | 20 mmol/L | | |
| Na ⁺ | 137 mmol/L | [136.0 - | 145.0] |
| K ⁺ | 4.0 mmol/L | [3.50 - | 5.10] |
| Ca ²⁺ | 1.3 mmol/L | [1.150 - | 1.330] |
| Cl ⁻ | 106 mmol/L | [98.0 - | 107.0] |
| Glu | 2.0 mmol/L | [3.5 - | 5.3] |
| Lac | 1.0 mmol/L | [0.4 - | 0.8] |
| Urea | 5.5 mmol/L | [2.5 - | 6.4] |
| AG | 18.2 mmol/L | | |
| Osm | 288 mOsm/kg | | |
| Hct | 45 % (-) | [36.0 - | 53.0] |
| Hct(c) | 45 % | | |
| tHb | 145 g/L | [115.0 - | 178.0] |
| SO ₂ | 98 % | [94.0 - | 98.0] |
| COHb | 1 % | [0.0 - | 3.0] |
| MetHb | 1.4 % | [0.0 - | 1.5] |
| HHb | 2.5 % | [0.0 - | 2.9] |
| O ₂ Hb | 38 % | [94.0 - | 98.0] |
| Bili | Out of range (-) | [51 - | 850] |