

## Task 2

Write a medical case report on a patient presented to the Emergency Department. Use information provided below. Interpret the presented case. Complete this writing task in 220-240 words.

- **Patient data:** 43 yo, F

### O/E (the ambulance)

- **Medical interview:** supposedly drinking alcohol and snorting cocaine the night before
- **C/O:** repeated vomiting, in and out of consciousness
- **O/E:** incapable of being roused, hypoglycaemic with BSL 2.6 mmol/L, pin-point pupils
- **Treatment:** 1.6 mg i.v. naloxone, combative behaviour → sedation 3 mg midazolam

### On arrival at ED:

- **VS:** HR 105, BP 90/60, O2 sat 94% on non-rebreathing mask
- **Treatment (further agitation):** 1.5 mg midazolam
- **CVS:** hypotension, Venous Doppler (thrombosis)
- **CNS:** CT NAD, persistent confusion, agitation → sedation
- **RS:** bronchospasm, intubation and ventilation, CXR pneumonia – ceftriaxone, 3<sup>rd</sup> day – extubation in ICU
- **Treatment:** metarminol, adrenaline infus (400 µg/h)
- **GUS:** GCMS analysis of the urine (heroin, morphine, codeine)
- **Disch:** 8<sup>th</sup> day, follow-up: neuropsychiatric testing and haematology

### **Model answer**

A 43-year-old woman presented with an altered level of consciousness after alleged alcohol and cocaine intake the night before. She became ill with recurrent vomiting and lost and regained consciousness multiple times. The paramedics found her unrousable and hypoglycaemic with BSL/blood sugar level 2.6 mmol/L. Also, she had pin-point pupils. She was given 1.6 mg intravenous naloxone. She became combative and was sedated with midazolam (3 mg).

On arrival at the Emergency Department, vital HR was 105, BP 90/60, and O<sub>2</sub> sat 94% on non-rebreathing mask. She required further doses of midazolam to control her agitation (1.5 mg). She was then noted to develop hypotension and bronchospasm. Venous Doppler showed thrombosis. She was treated with a bolus dose of metaraminol and adrenaline infusion (400 µg/h). She was intubated and ventilated. CXR showed pneumonia which was treated then with ceftriaxone. CT brain was normal. Urine drug screen was positive for opiates and benzodiazepines. Moreover, GCMS analysis of the urine detected the presence of heroin, morphine and codeine. The patient demonstrated persistent confusion and agitation and required sedation. She was extubated on day 3 in ICU. Finally, she was discharged on day 8 to be followed up by neuropsychiatric testing and haematology.

It seems that the patient took heroin via the intranasal route. The potential diagnosis might be clinical syndrome of multi-organ dysfunction with altered level of consciousness.

(226 words)

*References: Becker T, Papathomas E, Chan BS (2017) Multi-Organ Failure from Intranasal Drug Use. App Clin Pharmacol Toxicol: ACPT-109. DOI: 10.29011/ACPT-109. 100009*