ENC(C) Review Questions

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1. You are working at triage and a bed has just become available in the department. According to Canadian Triage and Acuity Scale (CTAS) guidelines, which of the following patients should be assigned the highest triage score and assigned to the available bed?

A. 25-year-old male with 10 cm laceration to right forearm from skill saw blade. Pressure dressing in place, bleeding controlled. Neurovascular status to the right upper limb is intact. Pain level is 4/10.

B. 40-year-old male with "heartburn" after playing hockey. He went out for beer and wings after the game. He arrives pale and nauseated, with a serum glucose level of 11 mmol/L. His past medical history includes diabetes and heavy smoking. He denies drug use.

C. 70-year-old female with fractured left hip from fall at home, standing height. Left leg is externally rotated and shortened. Neurovascular status to the left lower limb is intact. Vital signs are stable; alert and oriented. Pain level is 5/10.

D. 28-year-old female with mild abdominal cramping and moderate vaginal bleeding at 13 weeks gestation. Blood pressure (BP) is 100/60 mmHg, heart rate (HR) is 94 beats/minute (bpm), and temperature (Temp) is 37.3°C. She is anxious and crying; her husband is with her.

2. A three-year old-child is brought to the emergency department (ED) by her parents. Her mother states she has had a fever and no appetite for two days. Which of the triage nurse's findings below is <u>not</u> a component of the pediatric assessment triangle (PAT)?

- A. Pallor to mucous membranes
- B. Intercostal and substernal retractions
- C. Limp muscle tone, uninterested in surroundings
- D. Decreased urine output for 24 hours

3. Which of the following assessment findings is classic for acute angle-closure glaucoma?

- A. Severe, sudden eye pain
- B. Mild, progressive eye pain
- C. Grey floating objects
- D. Flashes of light

4. Which of the following is <u>not</u> a cause of rhabdomyolysis?

- A. Toxic ingestion
- B. Crush injury
- C. Hypotension
- D. Overexertion

5. Which of the following are risk factors for ectopic pregnancy? (Choose all that apply)

- A. Previous history of sexually transmitted infections
- B. In vitro fertilization (IVF)
- C. Maternal smoking
- D. Chromosomal anomalies

Answer Key with Rationale

1. Correct answer: B

A 40-year-old male patient with signs/symptoms that are suspicious for a cardiac event should be assigned a higher triage score (CTAS Level 2) (Canadian Association of Emergency Physicians [CAEP], 2012, p. 18) and be assigned to the next available bed. His past medical history of diabetes and heavy smoking also increase his risk for acute coronary syndrome (ACS) (Foley & Sweet, 2019, pp. 234-235).

A 25-year-old male patient with a 10 cm laceration for which bleeding is controlled and neurovascular status to the limb is intact can be assigned to the waiting room (CTAS Level 4). His pain level (4/10; acute, peripheral), neurovascular status to the limb, and overall hemodynamic stability must be reassessed as per CTAS guidelines (i.e., every 60 minutes) (CAEP, 2012, p. 15).

A 70-year-old female patient with suspected fractured hip from a fall (standing height) and hemodynamic stability may also be assigned to the waiting room; however, the nurse must recognize the potential for deterioration in this patient (CTAS Level 3) (CAEP, 2012, p. 18).

A 28-year-old female patient with mild abdominal cramping and moderate vaginal bleeding at 13 weeks (< 20 weeks) gestation may also be assigned to the waiting room. As above, the triage nurse must recognize that the patient's vital signs are near lower (BP) and upper (HR) limits indicating the potential for deterioration. CTAS Level 3 may be appropriate for this patient (CAEP, 2012, p. 23).

Note: These triage scenarios are designed as a learning tool only. The triage process is complex and dynamic, with more comprehensive patient data upon which to base one's triage assessment and assignment of triage acuity level.

2. Correct answer: D

Although decreased urine output may be a sign of circulatory compromise (e.g., dehydration), urine output itself is not a component of the PAT. The three components of the PAT include: general appearance, breathing, and circulation; this tool assists the nurse in identifying the critically ill pediatric patient or one

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who is at risk for sudden deterioration (CAEP, 2012, pp. 38-39). A pediatric patient with signs of compromise in general appearance (e.g., limp muscle tone, uninterested in surroundings), breathing (e.g., intercostal/substernal retractions), and/or circulation (e.g., pallor to mucous membranes) requires immediate or urgent intervention.

3. Correct answer: A

Severe, sudden eye pain is the cardinal sign of acute angle glaucoma. Headache, nausea, and/or vomiting often accompany the pain. If not recognized and treated promptly, the dramatic increase in intraocular pressure may lead to permanent damage to corneal endothelium, lens, iris, optic nerve, and retina, causing blindness. Mild, progressive eye pain may be indicative of ocular conditions such as conjunctivitis and conjunctival/corneal foreign body, as irritation progressively worsens (Woods, 2018, pp. 256-257). Grey floating objects ("floaters") and flashes of light are symptoms of retinal detachment (Nolan-Kelley, 2019, pp. 374-375). Generally, observe for these four red flags or cardinal symptoms for all eye conditions: 1) change in vision (i.e., blurring, blindness, diplopia), 2) change in the appearance of the eye (i.e., redness, hazy pupil/iris, cloudiness), 3) discomfort/pain, and 4) history of eye trauma (Nolan-Kelley, 2019, pp. 365-366).

4. Correct answer: C

Hypotension does not lead to rhabdomyolysis. If not corrected, hypotension leads to decreased renal perfusion and acute kidney injury (AKI), specifically prerenal AKI (Baxter, 2020, p. 273). Rhabdomyolysis involves the destruction of skeletal muscle cells which may in turn lead to AKI as well (intrarenal, acute tubular necrosis [ATN]). Toxic ingestion (e.g., "statin" drug class), crush injury (e.g., prolonged entrapment), and overexertion (e.g., endurance athletes) are potential causes of rhabdomyolysis as myoglobin is released into the blood. Fluid shifts from the intravascular to interstitial space, leading to hypovolemia and decreased renal perfusion (prerenal AKI) (Baxter, 2020, p. 275).

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As myoglobin accumulates in the blood, it becomes an endogenous toxin compromising the kidneys' ability to eliminate it from the body. Intrarenal AKI (ATN) ensues (Lough, 2022b, p. 654).

5. Correct answer: A, B, C

There are multiple factors that can contribute to ectopic pregnancy which is a pregnancy that implants outside of the uterus. Among the most common factors are those that cause anomalies in the fallopian tubes such as the scarring associated with pelvic inflammatory disease (Jordan, 2020). Bouyer et al. (2003) identify smoking as a risk factor for ectopic pregnancy with a potential association between smoking and reduced tubal motility. There is some research that reports an increased risk of ectopic implantation with in vitro fertilization and other assisted reproduction methods (Tulandi, 2021). Chromosomal abnormalities is a contributing factor to spontaneous abortion (Jordan, 2020).

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