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# **Questions and answers**

## Preguntas y respuestas

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**1.** A safety culture is needed in healthcare institutions in order to offer patients and staff the right protective conditions that can lead to a maximum reduction in potential adverse events and complications. Which of the following operational definitions describes a clinical incident or near-miss? (1)

- **a.** Event that occurs during clinical care which does not cause harm but is a reflection of flaws in the care process.
- **b.** Another type of event that is reported but is not related to lack of care safety: complaints, suggestions related to food, the environment or the housekeeping service.
- **c.** An event that may send a warning signal of a greater risk of a clinical incident or a reportable event with an undesired effect.
- **d.** Unintentional care-related injury that results in delayed discharge, prolonged length of stay or disability, and which may be life-threatening or cause the death of the patient. be life-threatening or cause the death of the patient.

**2.** During support to patients on ECMO for the treatment of refractory hypoxemia, in which of the following conditions is changing the oxygenator circuit not necessary? (2)

- a. Clinical signs of hemolysis.
- **b.** Free hemoglobin greater than 75 mg/dL.
- **c.** Free hemoglobin value of 60 mg/dL.
- **d.** Need for prone positioning.

**3.** According to the publication by Flórez et al., which of the following interventions has the best current evidence regarding a reduction in days on mechanical ventilation and mortality in critically ill patients with COVID-19? (3)

- **a.** lvermectin.
- b. Hydroxychloroquine.
- c. Dexamethasone.
- **d.** Interferon.

**4.** According to the study published by Calvache et al. in 2019 on the need for palliative care in Colombia, in which of the following age groups was cancer the main cause of death? (4)

a. 18 to 44 years.
b. 45 to 64 years.
c. 65 to 79 years.
d. 80 and older.

**5.** A 60-year-old female patient with well controlled diabetes, not requiring insulin, was scheduled for right hemicolectomy. Laboratory tests were normal, except for Hb 10.2 g/dL, creatinine 1.20 mg/dL and blood glucose 125 mg/dL. The patient required transfusion of 2 units of packed red blood cells due to an estimated blood loss of 1000 cm3. Twelve days later she developed surgical site infection (SSI). Which of the patient-related factos was associated with the highest risk (OR)

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for SSI? For your answer, take into account the paper published by Ariza et al. on SSI in adults undergoing major surgery. (5)

- **a.** Blood loss of 1000 cm3.
- **b.** Intraoperative transfusion of 2 units of packed red blood cells.
- c. Preoperative hemoglobin level of 10.2 grdL.
- **d.** Diabetes mellitus: blood glucose of 125 mg/dL.

**6.** One of the recommendations to be implemented when mental health strategies are developed as a result of the repercussions of the COVID-19 pandemic, is to establish a hierarchy for psychological interventions, based on a classification of the population into four levels. The following population of patients isolated with symptoms of infection, close contacts, and patients in clinics providing care during the outbreak, is classified as level: (6)

- a. One.
- **b.** Two.
- c. Three.
- d. Four.

**7.** The primary cause of unexpected readmission after outpatient surgery is postoperative vomiting (POV). In the paper by Jaimes-Daza et al. on POV in the pediatric population, the only logistic regression variables that were included in the final model as risk factors for POV were: (7)

- **a.** Anesthesia time > 45 minutes and postoperative use of opioids.
- **b.** History of kinetosis and intraoperative opioid use.
- **c.** Urgent surgery and intraoperative opioid use.
- $\textbf{d.} \ \text{Receiving prophylaxis and premedication} \, .$

**8.** During adrenalectomy in a patient with pheochromocytoma, all of the following are true, except: (8)

- **a.** Severe hypertensive attacks may occur even in patients who have never been hypertensive.
- **b.** In patients with tachyarrhythmias, the use of calcium channel blockers or ß blockers, avoiding prior use of a blockers, is recommended.
- c. After tumor resection, the most common complication is severe arterial hypotension due to increased venous capacity and the residual effects of the hypotensive drugs used previously.
- **d.** In order to avoid hypotension, the hypotensive drug used before tumor resection must ideally have a short half-life, and volume expansion is recommended during and after surgery using goal-directed hemodynamic fluid therapy.

**9.** Which of the following statements regarding clevidipine is NOT true? (8)

- **a.** It is an intravenous calcium antagonist with a short half-life and no residual effect.
- **b.** In has a negligible effect on heart rate and myocardial oxygen consumption.
- **c.** It has a dose-dependent linear effect and is metabolized through the cytochrome p450 pathway, with renal clearance of its inactive metabolites.
- **d.** Does not require dose adjustment based on weight or renal/liver function.

**10.** Patients with essential thrombocythemia pose several challenges for anesthetic management, including a greater risk of perioperative thrombosis. Regarding this rare disease, all of the following are true, except: (9)

- **a.** It is bone marrow clone defect characterized by thrombocytosis (platelet count >450 000/µL).
- **b.** It is a disease condition associated with perioperative bleeding and the risk of developing heparin-induced type 2 thrombocytopenia during cardiac surgery.
- c. Patients may develop acquired type

A hemophilia and run the risk of perioperative bleeding.

**d.** In absence of reactive thrombocytosis and in the presence of persistent thrombocytosis, it is advisable to alert about the need of patient workup to rule out essential thrombocythemia.

**11.** Regarding COVID-19-related diagnostic tests, it is true that (10):

- **a.** Specific immunoglobulins (IgM and IgG) for SARS-CoV-2 provide estimates of population exposure; this can be used to understand the usefulness of the basic reproductive number or Ro.
- **b.** The real-time reverse transcription polymerase chain reaction (rRT-PCR) detects active disease. It is very useful during pandemics because of its high specificity.
- c. Performing diagnostic tests before any surgical procedure is recommended, due to their high ability to diagnose SARS-CoV-2 infection in asymptomatic patients.
- **d.** In the setting of sedation procedures outside the operating room, performing standardized serological or virological tests is recommended in patients who will be subjected to the intervention.

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#### **ANSWERS**

- 1.a.
- **2.** d.
- **3.** C.
- 4. b.
- 5. a.
- 6. b.
- **7.** a. 8. b.
- **9.** C. **10.** C.
- 11. a.