

Questions and Answers

Preguntas y respuestas

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1. Comparing the use of the erector spinae plane (ESP) block versus the transversus abdominis plane (TAP) block in ovarian surgery, the work by Abdullah Sherif, et al. found that [\(1\)](#):

- Highly significant lower opioid consumption in the TAP group.
- No statistically significant difference in the visual analogue scale (VAS) between the two groups within the first 24 hours after surgery.
- A lower prevalence of postoperative nausea and vomiting in the ESP group versus the TAP group.
- The ESP block allows for lower opioid consumption and longer times to analgesic demand.

2. The study by Calabrese S. on the impact of the COVID-19 pandemic on Latin American anesthesiologists, reported that among the 2,170 anesthesiologists infected with SARS-CoV-2 [\(2\)](#):

- The average age of the deceased anesthesiologists was 65 years.
- The lethality rate was 18%.
- Mortality in males was close to 80%, compared to 20% in females.
- The calculated lethality rate for Latin America was 7.6%, 5.4% for South America and 12.9% for Mexico-Central America-Caribbean.

3. In the study by Rivera-Palacios A. et al. on measurement of mechanical power during mechanical ventilation in critically

ill patients with SARS-CoV-2, all of the following was found, except [\(3\)](#):

- Mechanical power is an important variable to consider in monitoring mechanical ventilation.
- An average mechanical power value of 22.7 ± 1 Joules/min.
- Mechanical power was lower in the subgroup of patients with SARS-CoV-2 infection than the subgroup of patients without a diagnosis of SARS-CoV-2 infection.
- In patients with SARS-CoV-2 infection, a higher mechanical power value was associated with more days of mechanical ventilation and longer ICU stay.

4. One of the factors involved in ventilation induced lung injury (VILI) originates from the energy or mechanical power (MP) exchange between the ventilator and the lung parenchyma. With respect to PM, it is false that its value is associated with [\(3\)](#):

- ICU mortality.
- In-hospital mortality.
- Low tidal volume.
- High PM values are expressed in dynes/sec.

5. In the work published by Rivera-Palacios, et al. on the measurement of ventilation mechanical power (MP) in ventilated patients due to SARS-CoV-2 lung injury, when comparing patients

with SARS-CoV-2 infection vs. those with another disease, which of the following statements is correct? (3):

- a. Driving pressure and mechanical power were lower in patients with SARS-CoV-2 infection.
- b. Dynamic as well as static compliance were higher in patients without SARS-CoV-2 infection.
- c. Dynamic as well as static compliance were higher in patients with SARS-CoV-2 infection.
- d. There was no significant difference between the 2 groups.

6. Mechanical power (MP) during mechanical ventilation is calculated on the basis of the formula simplified by Gattinoni, et al. What is the correct formula? (3):

- a. $0.098 \times (\text{respiratory rate}) \times \text{peak pressure} - (\Delta P / 2)$.
- b. $0.098 \times (\text{respiratory rate}) \times (\text{tidal volume}) - (\Delta P / 2)$.
- c. $0.098 \times (\text{tidal volume}) \times \text{peak pressure} - (\Delta P / 2)$.
- d. $0.098 \times (\text{respiratory rate}) \times (\text{tidal volume}) \times \text{peak pressure} - (\Delta P / 2)$.

7. The cognitive load (CL) theory postulates that working memory has a limited capacity. Related to this theory, which of the following statements is false? (4):

- a. CL can be intrinsic, when associated with the design of the activity performed.
- b. CL can be extrinsic, when related to external factors linked to the personal context of each learner.
- c. CL is the work required exclusively for learning.
- d. When intrinsic and extrinsic loads are low, less working memory is available for germinal load, which optimizes the learning process.

8. In which of the following interventions does the erector spinae muscle plane (ESP) block have the lowest performance? (5):

- a. Thoracotomy for lobectomy.
- b. Lung transplantation.
- c. As a rescue for failed epidural analgesia.
- d. Lumbar spine surgery.

9. Which of the following factors are part of the "pentad" in the development of coagulopathy associated with severe hemorrhagic shock, as described by Quintana-Díaz M. et al. (6):

- a. Hypoglycemia, hypothermia, hypoxemia, acidemia and hypocalcemia.
- b. Hypothermia, hypoxemia, acidemia, hypocalcemia and hyperglycemia.
- c. Hypoxemia, acidemia, hyperglycemia, hypocalcemia and hypofibrinogenemia.
- d. Hypoxemia, acidemia, hypocalcemia, hypothermia and hypomagnesemia.

10. Which of the following statements regarding breastfeeding and anesthesia is false (7)?

- a. Non-opioid anesthetic and analgesic drugs are compatible with breast milk, as they are transferred in very small amounts and do not affect the newborn.
- b. It is not necessary to pump and dump milk from post-operative puerperal patients. If prolonged surgery and repeated postoperative intravenous opioid use are anticipated, or if the infant is unable to stay with the mother, the need to express and store milk should be discussed in advance with the help of a lactation expert.
- c. Codeine can be used with breastfeeding, due to its pharmacokinetics.
- d. Non-opioid anesthetic and analgesic drugs are compatible with breast milk, as they are transferred in very small amounts, and do not cause any effects on the newborn.

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ANSWERS

1. C.
2. D.
3. C.
4. D.
5. C.
6. D.
7. C.
8. D.
9. B.
10. C.