

Anesthesiology Rounds
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Neuromuscular Blocking Agents and Pregnancy
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Objectives:

- To understand how the neuromuscular blocking agents affect the embryo and fetus during pregnancy.
- To define how the physiological changes associated with pregnancy affect induction and maintenance of anesthesia.
- To identify the major role that succinylcholine plays in the pregnant patient.
- To understand the modifications in the pharmacokinetics and pharmacodynamics of the neuromuscular blocking agents during pregnancy.

Questions (Only 1 response is correct)

1. Concerning the toxicity of neuromuscular blocking agents during pregnancy, which is true?
 - a: The safety of the neuromuscular blocking agents has been definitively established
 - b: The nondepolarizing neuromuscular blocking agents are highly teratogenic at the usual clinical doses
 - c: Neuromuscular blocking agents have a tocolytic action
 - d: The nondepolarizing neuromuscular blocking agents contribute to the onset of premature delivery
 - e: Experimentally, *in vitro*, a teratogenic effect was observed in animals with certain nondepolarizing neuromuscular blocking agents
2. When intubating a pregnant women, which response is false?
 - a: The recommended technique is "rapid-sequence" induction
 - b: Changes in the airways of pregnant women are likely to further evolve during pregnancy
 - c: Succinylcholine must be used at a dose of of 1 mg/Kg
 - d: The use of a priming dose is particularly recommended
 - e: Rocuronium, at a dose of 0.6 mg/Kg, provides good conditions for intubation in 90 seconds

3. Regarding the nondepolarizing neuromuscular blocking agents during pregnancy, which response is false?

- a: Vecuronium has a decreased duration of action
- b: Atracurium crosses the placental barrier
- c: Vecuronium has an increased clearance
- d: Cisatracurium has a decreased duration of action in the postpartum period
- e: Their duration of action may be increased by magnesium sulphate

4. Which statement is true?

- a: Breast-feeding is contraindicated immediately following a cesarean because of the risk of paralysis of the newborn.
- b: Residual paralysis of the newborn is not observed immediately following a cesarean
- c: Vecuronium does not cross the placental barrier
- d: The neonate cannot metabolize succinylcholine
- e: The neonate is particularly sensitive to neuromuscular blocking agents.

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