

Anesthesiology Rounds
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Neuromuscular Monitoring
Part 2: A Review and Update
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Objectives:

- to define the different technologies available for monitoring neuromuscular blockade (NMB)
- to identify the different muscle sites that can be used for monitoring NMB and their characteristics
- to recognize the importance of relying on objective monitoring devices, particularly with regard to the recovery phase of NMB
- to understand the clinical relevancy of the “site-related neuromuscular monitoring” concept

Answer the following questions (only 1 answer is correct)

1. Regarding the different stimulation patterns, which is true?
 - a) a train-of-four (TOF) ratio of 0.7 guarantees recovery from NMB
 - b) contrary to TOF ratio, single twitch stimulation does not rely on a control measurement
 - c) recorded data regarding post-tetanic count are readily available for new muscle relaxants
 - d) single twitch stimulation every 10 seconds is an accurate way to assess the onset of NMB
2. Which of the the following statements is not true?
 - a) mechanographic methods can be used at the laryngeal site by placing the cuff of an endotracheal tube between the cords
 - b) electromyographic response at the diaphragmatic site is usually measured at the 3th or 4th intercostal space
 - c) the corrugator supercilii muscle can be difficult to use when assessing NMB because of its size
 - d) the adductor pollicis muscle is still the most widely used site for NMB evaluation

3. Regarding neuromuscular blockade, which statement is true?

- a) NMB is usually homogeneous from one muscular group to another
- b) diaphragmatic blockade is very useful during abdominal surgery
- c) complete recovery at the adductor pollicis site precedes recovery at the corrugator supercilii muscle.
- d) laryngeal muscle relaxation is best evaluated by stimulation of the adductor pollicis muscle

4. An ideal NMB monitoring device should exhibit all the following characteristics except:

- a) easy to use
- b) should produce results that agree with data from mechanomyography
- c) be inexpensive and robust
- d) should provide measurements from a single site

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