NEUROMUSCULAR BLOCKADE AND STEINERT'S DISEASE

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Background:

Neuromuscular diseases represent a challenge to any anesthetic approach¹. The use of neuromuscular blocking agents is controversial and, according to some authors, they should be avoided². When they are necessary, neuromuscular block reversion is a source of additional complications, namely due to the secondary effects associated with the use of acetylcholinesterase inhibitors in this population.

Case report:

Discussion:

Steinert's Disease or Myotonic Dystrophy Type I is the most common myotonic syndrome². It's a degenerative hereditary disease, with multisystemic involvement, which manifestations are characterized by muscle weakness and myotonia¹.

The use of neuromuscular blocking agents is one of the main difficulties in its anesthetic approach, due to the risk of necessity of prolonged mechanical ventilation support (as there is an increased sensibility to non-depolarizing agents), succinylcholine-induced cardiac arrest and neostigmine-induced myotonia². But, in some procedures, as laparoscopic surgery it is needed and cannot be avoided. Sugammadex seems to be effective for neuromuscular blockade reversion in this population, which can prevent the use and consequent secondary effects of depolarizing muscle relaxants and acetylcholinesterase inhibitors. Our result is in agreement with others already published^{2,3}, yet more clinical studies are necessary to prove it.

<http://bousounisgen677s12.weebly.com/disease.html>

Learning points:

The use of neuromuscular blocking agents in patients with neuromuscular disease remains controversial and is one of the main concerns for the anaesthesiologist.

When its administration is necessary, reversion with sugammadex seems to represent a safe and effective approach.

References:

- ¹Muscle Nerve, 2013; 48: 451–460
- ² Case reports in Anesthesiology, 2012;Article ID 107952
- ³ Rev Esp Anesthesiol Reanim, 2013; 60(4): 226-229