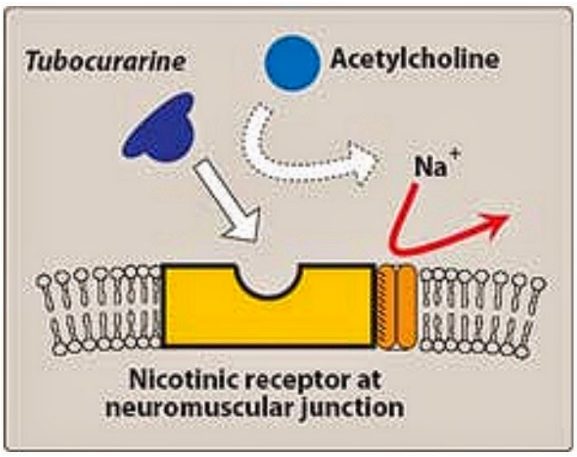

Continuous neuromuscular blockade is associated with decreased mortality in post-cardiac arrest patients

A recent retrospective study based on the analysis of data collected in a database on North American patients post-cardiac arrest shows that the early use of neuromuscular blocking agents is related to an improvement in survival.

The authors have shown that in all patients post-ACR neuromuscular blocking agents are administered, but it seems that only those who are given early and for at least 24 hours derive a real benefit.

There is indeed a marked improvement in survival and clearance of lactate in the subgroup of patients treated with neuromuscular blocking agents.

The authors comment that this effect is likely to be beneficial due to the reduction of O2 consumption and improved ventilation. There is also a better adaptation to invasive ventilation which also affects positively on outcome.

There are many limitations to this study. First we are talking about a retrospective study, the results of which are the result of ad hoc post-analysis but were not included in the initial declared end points. Then the patients who were administered neuromuscular blocking agents were probably the most responsive and with better neurological conditions. These and other elements may create a bias in the selection of patients. Finally, since in many of the patients (approximately 97%) was used therapeutic hypothermia, is highly controversial its influence on the results of the study.

Comment

Despite the limitations of this study, the administration of neuromuscular blockade has its physio-pathological rational in improving the survival of the post-cardiac arrest patients. In the past, some studies have yielded results in this sense.

The development of new more powerful trials is needed to determine the actual effectiveness of such treatment.