

## **Abstract**

This work is about muscle weakness of critically ill patients, about its history, etiology, pathophysiology, incidence at departments of intensive care, diagnostics and therapy. The intensive physical therapy showed to be one of the preventive factors. The rehabilitation of critically ill patients has its specific procedures, especially for unconscious patients. It is possible to start the therapy only in concordance with safety criteria.

The work includes data from a research, done on 27 patients from the Department of Anaesthesia and Intensive Care of Královské Vinohrady University Hospital in Prague. In a half year period, the effects of assisted electrical ergometry on cross section of rectus femoris muscle and on muscle strength of limbs were observed.

The aim of this work is to find out, if this intensive rehabilitation will have any effect on given parameters.

**Keywords:** ICUAW, rehabilitation, safety criteria, manual muscle strength testing, measuring the cross sectional diameter of the rectus femoris muscle