

**Summary:**

**Measurement of the muscle tissue EMG activity after  
whole body cryotherapy (-130°C)**

**Goal :** The goal of this study was monitoring electrical activity muscle tissue after whole body cryotherapy, by using surface EMG.

**Methods:** Muscle tissue activity was monitoring from m. biceps brachii by using surface electromyography. Five professional sportsmen, from 20 to 30 years old, was participating on measurements. The attention was to measure MVC (maximum voluntary contraction) before and after whole body cryotherapy. Further there was monitoring onset of muscle fatigue during isometric contraction, before and after whole – body cryotherapy.

**Results:** It is possible to monitor changes in electrical muscle activity after whole-body cryotherapy. We observed prolongation of muscle fatigue onset in four from five probands after whole-body cryotherapy and increased MVC after whole-body cryotherapy of all five probands.

**Key words:** whole-body cryotherapy, surface EMG, muscle fatigue, isometric muscle contraction, maximum voluntary contraction (MVC)