

## **ABSTRACT**

### **Title:**

Comparative analysis of selected coordinate indicators in front crawl swimming technique and crawling.

### **Purposes:**

The first aim of thesis is to compare coordinate indicators of average swimming cycle and average crawling cycle.

### **Methods:**

Surface electromyography of muscular activity combined with cinematography analysis used synchronized video recording.

Intraindividual comparative analysis and subsequent interindividual comparison of timing muscular activation in one average swimming and crawling cycle.

### **Results:**

The timing of muscular activity of m. pectoralis major and m. latissimus dorsi during swimming cycle was identical for all probands. This phenomenon was not found in crawling .

### **Key words:**

Swimming technique, Front Crawl, crawling, EMG, muscle, locomotion, shoulder girdle