

ABSTRACT

- Title:** The utilization of tensiomyograph for measuring muscle imbalances of men in artistic gymnastics.
- Objectives:** The goal of the study is through utilization of tensiomyograph determinate commonly occurring phenomena in musculoskeletal system in mens artistic gymnastics.
- Methods:** This is a pilot study. Data were collected with tensiomyograph. Research was done through qualitative mapping of 10 probands. Five muscles on the upper part of the body were measured on each side – 10 muscles total.
- Results:** Percentage of recommended activities is as follows: 39% of stretching exercises, 26% of activation exercises, 3% of strength exercises. Muscles with standard physiological properties account for 32% of the whole representation. Total lateral symmetry of each muscle is in the range of 6.4%. The highest lateral symmetry was achieved by the muscle biceps brachii with 86.5% and the lowest latissimus dorsi with 80.1%. The right and left elbows have an average functional lateral symmetry with 75% right elbow and 78.1% left elbow.
- Keywords:** tensiomyograf, artistic gymnastics, physiology, lateral symmetry