

Thesis Title	The Study of Structure and Function of Knee in Thai Boxers.
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Abstract

The present study was undertaken in professional Thai boxers (TB) to investigate their structural and functional changes of the knee as a consequence to intensive training and competition in comparison to those of age matched group of non-athlete (NA). The mean age of subjects was 16 years old. TB and NA were tested for knee extension and knee flexion on a Cybex 6000 isokinetic dynamometer at the speeds of movement of 60, 180, 300 deg/sec and were evaluated the structural status of the knees by the Orthopaedist. Results indicate that: 1. No significant difference were demonstrated in the torque/body weight (PT/BW) ratio between right and left knee during concentric activity at slow speed. 2. No significant difference were found in the quadriceps and hamstring PT/BW ratio between TB and NA during concentric activity at slow speed. 3. The effect of endurance training on thigh muscles may be resulted in smaller TW (Total work) and AP (Average power) at functional speeds in TB. 4. TB showed more endurance than did in NA. 5. There is no difference in structure of the knee between TB and NA. 6. There was no correlation between knee functional and structural parameters in terms of patellar position.