

# **Effects of Functional Electrical Stimulation on Peak Torque and Body Composition in Patients with Incomplete Spinal Cord Injury**

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摘要

## **Abstract**

The aim of this study was to investigate the change in body composition, leg girths, and muscle strength of patients with incomplete spinal cord injury (SCI) after functional electrical stimulation cycling exercises (FESCE). Eighteen subjects with incomplete SCI were recruited. Each patient received FESCE three times per week for 8 weeks. Body composition, thigh and calf girths of bilateral legs, muscle strength of bilateral knee flexors and extensors were measured before and after 4 and 8 weeks of FESCE. A significant increase in bilateral thigh girth after 4 weeks of FESCE and significant increase in muscular peak torque of knee flexion and extension were found after 8 weeks of training. Besides, lean body mass increased significantly after complete treatment. FESCE can increase the thigh girth and muscular peak torque of patients with incomplete spinal cord injury.