He skied performing narrow slaloms turns (SLALOM) and wide slaloms turns (GIGANTE) with ski-mojo OFF and ON.

Tests were performed on a skiing treadmill by an experienced skier wearing the ski-mojo for the first time.

**INTRODUCTION**

The aim of the investigation was the evaluation of the muscular activity patterns on a skier equipped with a ski-mojo device. Tests were performed on a skiing treadmill by an experienced skier wearing the ski-mojo for the first time. He skied performing narrow slaloms turns (SLALOM) and wide slaloms turns (GIAGANTE) with ski-mojo OFF and ON.

**MATERIALS AND METHODS:**

A SKIMAGIC treadmill was used outdoor at Longarone-Italy for the tests. The treadmill is made of a synthetic fur snow surface wetted by water that is spinning at variable speeds. The tests were performed at a speed of 22 km/h on a slope of 30°.

**DATA ANALYSIS.** EMG signals were analyzed and averaged over ten turns. The average activity resulting over the turn cycle on five dominant leg muscles are plotted. Red curves are with ski-mojo ON. Black curves are with ski-mojo OFF.

**RESULTS:**

EMG signals were consistently lower when the ski-mojo was activated (ON). The average reduction of the EMG activation signal is reported for each muscle in the two conditions of Special Slalom (SS) & Giant Slalom (GS).

**CONCLUSIONS:**

The tests performed with the ski-mojo activated consistently showed a relevant reduction of Muscle Activation levels on five principal leg muscles, ranging from -19% to -37%.

Although the tests were performed on a single skier, the positive effects of ski-mojo in reducing fatigue are likely to be statistically confirmed by further ongoing tests.