

# **Augmented feedback approach to double-leg squat training for patients with knee osteoarthritis: a preliminary study**

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## **ABSTRACT**

The aim of this preliminary study was to explore the effects of two types of augmented feedback on the strategy used by healthy participants and patients with knee osteoarthritis (OA) to perform a double-leg squat. Seven patients with knee OA and seven healthy participants performed three sets of eight double-leg squats: one without feedback, one with real-time kinematic feedback and one with real-time kinetic feedback. Kinematic and kinetic outcome measures (peak knee flexion angle, peak knee extensor moment, and symmetry of the support knee moment between the injured and non-injured knees) demonstrate the potential influence of real-time kinetic feedback on the motor strategy used to perform a double-leg squat in both groups. This feedback could be used to develop more efficient and effective motor strategies for squatting in patients with knee OA and further evaluation is warranted.

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**Full papers will be published in the Conference Proceedings and will be freely available to delegates at the conference and online on September 20, 2016.**