Conservatively treated PCL injury: clinical, radiographic and patient-related outcomes 11 years after injury

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Introduction

The aim of this study was to identify the long-term outcome of PCL injury treated conservatively.

Methods

A prospective cohort study involving 1145 patients with traumatic knee haemarthrosis was performed between 2002 and 2008. 29 patients with PCL injuries were identified. 5 patients were excluded. Patients completed KOOS, Anterior knee pain scale and EQ5D questionnaires. Subjects were examined clinically and radiographically including the Puddu axial to estimate tibial translation, and MRI.

Results

15 patients attended for follow-up. The median follow-up time was 11 years (8-14). The median age at follow-up was 42 (30-73). No patients had been treated with a PCL-specific orthosis. 53% of patients had evidence of degeneration in the tibiofemoral joint and 20% in the patellofemoral joint. Median posterior tibial translation was 3.6mm (range 0-10). Continuity of the PCL was noted in all of the 13 patients who underwent MRI. However, 3 of these were noted to have a somewhat abnormal signal.

Discussion

PCL injury is uncommon and this, like most studies is based on a small group. Despite a large cohort of 1145 patients over 6 years we identified only 29 with a PCL injury. 9 patients were lost to follow-up. Rates of PCL healing appear to be good despite no specific treatment. Some degree of persistent posterior translation is common though. Objective estimation of posterior tibial translation is difficult and methods for attempting this are in some cases not well validated.

Conclusion

Conservatively treated PCL injuries should be treated with a PCL-specific orthosis.