

# Ligament reconstruction effective in treating kneecap instability from trochlear dysplasia

March 16 2017

---

While a first time kneecap dislocation can usually be treated non-surgically, recurring dislocations often necessitate surgical intervention. MPFL (medial patellofemoral ligament) reconstructions have become a common surgical option and have seen improved outcomes and a high rate of return to sport.

However, it was previously unknown if this procedure is effective for people with trochlear dysplasia. Those who have recurrent patellofemoral—or kneecap—instability have a high incidence of trochlear dysplasia, the most common bony problem.

A new study from Hospital for Special Surgery (HSS), shared at this year's annual meeting of the American Academy of Orthopaedic Surgeons (AAOS) on March 16, seeks to determine if isolated MPFL reconstructions work for patients with trochlear dysplasia, sparing these patients larger more complicated bony procedures. It was a retrospective review of 105 patients who underwent MPFL reconstructions with Beth E. Shubin Stein, MD, sports medicine surgeon at HSS, with a 10 year follow up.

The study found high patient outcomes scores (87.2 on the Kujala Anterior Knee Pain Scale) and a high return to sports at one year (89 percent of those who participated in sports preoperatively). There was a 97 percent success rate; only 3 patients reported a postoperative dislocation.

"As surgeons, we like to do the least invasive surgery possible to fully fix the problem," said Dr. Shubin Stein, lead investigator. "With this study, we found that MPFL reconstruction is a safe and effective treatment for patients with patellofemoral instability even if in patients that have trochlear dysplasia."

In addition to MPFL reconstructions (a soft tissue procedure), surgeons can also perform a tibial tubercle osteotomy or trochleoplasty (both bony procedures) to regain stability in a patellar dislocation.

Both soft tissues and bony constraints maintain patellofemoral stability together. As such, surgeons in the past were sometimes reluctant to only perform a soft tissue procedure since it doesn't address the bony pathology that may also contribute to the instability.

"Equally as important, we showed that this technique can be done in [patients](#) who might previously be advised to undergo a bony procedure such as tibial tubercle osteotomy or trochleoplasty, which can be high risk surgeries," added Dr. Shubin Stein.

Provided by Hospital for Special Surgery

Citation: Ligament reconstruction effective in treating kneecap instability from trochlear dysplasia (2017, March 16) retrieved 18 July 2023 from <https://medicalxpress.com/news/2017-03-ligament-reconstruction-effective-kneecap-instability.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--