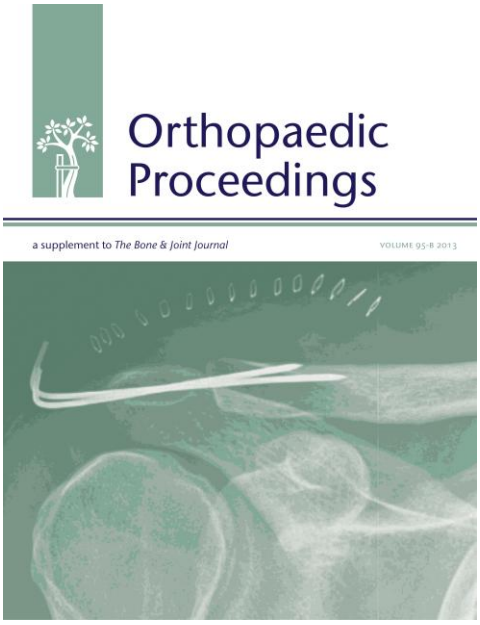

POSTERIOR CRUCIATE LIGAMENT AND MULTI-LIGAMENT RECONSTRUCTION USING LARS LIGAMENT

1. **B S Anand,**
2. **B H Krishnan and**
3. **D Houilhan-Burne**

-Author Affiliations

1. The Hillingdon Hospital NHS Trust, UK

Abstract

Purpose We conducted a prospective study to investigate the role of the LARS ligament system to reconstruct the posterior cruciate ligament and the postero-lateral corner of the knee.

We present a prospective single surgeon case series to evaluate early clinical and functional outcomes of postero-lateral corner and posterior cruciate ligament reconstruction in the knee using the LARS (ligament Augmentation and Reconstruction System) artificial ligament. 23 patients with multi-ligament knee injuries or isolated PCL injuries were treated with a mean follow up of 8 months (range: 2-37 months). Outcomes were assessed using the modified International Knee Documentation Committee score, and a modified Tegner- Lysholm score. 2 patients had acute reconstructive surgery within 7 days of injury, 5 patients within 3 months (semi-acute) and 16 were chronic cases that were operated on after three months from the date of injury.

The LARS ligament reconstruction achieved a significant improvement between preoperative and postoperative assessment in relation to knee stability, function and patient satisfaction. The sooner the patients were treated the greater the improvements in functional scores were noted. Most patients achieved a full functional range of movement within six months. We had 2 complications, one superficial wound infection and one stiff knee requiring a manipulation. To date we have had no LARS ligament failures.

In the short term the LARS functions well, with high clinical patient satisfaction, no signs of progressive laxity, synovitis or failure. We found no significant difference in functional score post reconstruction between the isolated PCL reconstructions and the multi ligament reconstructions. Our results show no early signs of the problems associated with synthetic grafts used in the past. Such grafts appear to be an attractive alternative to the use of autografts and allografts.

- **Knee**