Primary ankle ligament augmentation versus modified Brostrom-Gould procedure: a 2-year randomized controlled trial.

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Abstract

**BACKGROUND:** More than 20% of patients develop chronic instability following appropriate management of an 'ankle sprain'. There is little research comparing surgical techniques. 'Anatomical' procedures, such as the modified Brostrom-Gould (MBG), are generally preferred. However, not all patients are suitable for this procedure. Augmentation of a primary repair using a synthetic ligament, such as the ligament augmentation reconstruction system (LARS), is another 'anatomic' option. Our objective was to compare the clinical outcome following the MBG with that following the LARS technique using a prospective randomized clinical trial.

**METHODS:** Patients who satisfied the study criteria were randomly allocated to undergo the LARS procedure or the MBG procedure. All patients followed a similar rehabilitation programme. Patients completed the foot and ankle outcome score (FAOS) before surgery, and then at 1 year and 2 years following surgery. Statistical analysis was used to compare the groups (P < 0.05).

**RESULTS:** Forty-one patients took part in the study, 21 were randomized to the LARS group and 20 to the MBG group. The LARS group had a significantly better improvement in the total FAOS at both 1 year (25.5 standard error (SE) 3.8 versus 16.0 SE 3.3) and 2 years (27.1 SE 4.5 versus 15.8 SE 4.9) post-surgery.

**CONCLUSION:** Primary repair combined with LARS results in better patient-scored clinical outcome, at 2 years post-surgery, than the MBG procedure. Although longer follow-up is required, the LARS procedure may be considered as an alternative, especially in those patients for whom the MBG is relatively contra-indicated.

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**KEYWORDS:** Brostrom-Gould; LARS; ankle; instability; reconstruction

PMID: 25171115 [PubMed - as supplied by publisher]