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Evaluation of modern treatment methods of lateral ligaments of the ankle injuries

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Background: Lateral ligaments of the ankle injuries (sprains/tears) are known to be among the most common sports-related injuries. These injuries account for a significant amount of all sports-related injuries with almost all injuries arising due to damage of the Anterior talofibular ligament (ATFL) or Calcaneofibular ligament (CFL). Although relatively benign injuries, inadequate treatment and rehabilitation can lead to residual symptoms in many patients after 6 weeks to 18 months.

Aims: To evaluate the methods and strategies currently in use to treat injuries to the lateral ligaments of the ankle by exploring their effectiveness and variations of treatment in connection with trauma mechanisms and injury severity.

Method: Analytical literature review study and researching a wide spectrum of internet databases, orthopaedic journals, articles, books, and e-books mainly from PubMed registry, NCBI and UpToDate which define, outline, evaluate and discuss the topic, facilitating the drawing of a well-reasoned conclusion about the methods in use to treat injuries of the lateral ligaments of the ankle complex.

Results: Early and efficient initial treatment with supportive pain control, limited immobilization, early return to weight bearing and range of motion, and directed physical therapy is most effective in treatment of minor grade sprains and for preventing recurrent injury. Surgical reconstruction of the lateral ligaments is most effective for patients with high grade sprains, continued instability, and dysfunction despite physical therapy. Athletes with a history of an ankle sprain should be prophylactically braced or taped to reduce risk of recurrent injury and improve performance and functionality.

Conclusion: The current methods of treatment all have merit as they all show positive post treatment results. The effectiveness and efficiency of treatment varies depending on the specific injury and the individual who sustained the injury, these must be considered when deciding on the treatment method.



Figure 2.5.1.8. Percutaneous anatomic reconstruction of the lateral ligaments of the ankle with a Tightrope system
<https://sogacot.org/a-new-minimally-invasive-method-for-anatomic-reconstruction-of-the-lateral-ankle-ligaments-with-a-tightrope-system/>

References

- 1.) Cottom JM, Baker, JS, Richardson PE. The “all inside” arthroscopic Broström procedure augmented with a proximal suture anchor augmentation: A prospective study of 45 consecutive patients. *J Foot Ankle Surg.* 2016; 55(6): 1223-1228
- 2.) A Closer Look at A Minimally Invasive Approach To Lateral Ankle Repair. June 19, 2017. Volume 30 - Issue 7 - July 2017. Pages: 60-64. James M.
- 3.) Kerkhoffs GM, Handoll HH, de Bie R, Rowe BH, Struijs PA. Surgical versus conservative treatment for acute injuries of the lateral ligament complex of the ankle in adults. *Cochrane Database Syst Rev.* 2007 Apr 18;(2):CD000380. doi: 10.1002/14651858.CD000380.pub2. PMID: 17443501.
- 4.) Porter M, Shadbolt B, Stuart R. Primary ankle ligament augmentation versus modified Brostrom-Gould procedure: a 2-year randomized controlled trial. *ANZ J Surg.* 2015; 85:44–8
- 5.) Cao, Y., Hong, Y., Xu, Y. et al. Surgical management of chronic lateral ankle instability: a meta-analysis. *J Orthop Surg Res* 13, 159 (2018)
- 6.) D’Hooghe, P., Cruz, F. & Alkhelaifi, K. Return to Play After a Lateral Ligament Ankle Sprain. *Curr Rev Musculoskelet Med* 13, 281–288 (2020).

Biography

Godsfavour Maduka MD is a graduate of the Riga Stradins University medical school where he received prizes for excellent academic progress. He has completed a 4-month internship in Trauma and orthopedics surgery at the National trauma and orthopedics hospital and an 8-month internship at the Paul Stradins clinical university hospital in both Anaesthesiology and Endocrinology. Over the past year Dr Maduka MD has completed a Clinical fellowship at The Lister hospital East and North Hertfordshire NHS Trust in General and Vascular surgery and is currently completing a 4-month clinical fellowship in Gastroenterology. He is actively involved in Surgical clinical Audits and quality improvement research projects to produce improvements in patient results and satisfaction. He has a keen interest in clinical education and teaching and has been heavily involved in developing and delivering teaching programmes for Physician associate students and medical students.

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