ABSTRACT

Background and Purpose: Lateral ankle sprain the most common injury in physically active populations. Individuals who sustain an acute lateral ankle sprain may not receive timely formal rehabilitation and are at an increased risk to have subsequent sprains which can lead to chronic pain and instability. Attention to essential factors for ligament protection and healing while preserving ankle movement, may result in a more stable yet mobile ankle offering improved outcomes. The purpose of this case series was to describe the methods and observe the outcomes associated with a comprehensive strategy for managing acute first episode grade II lateral ankle sprains.

Study design: Prospective case series.

Case Descriptions and Interventions: Ten patients (mean age 26.7 years, range 16-51 years, mean 2.3 days from injury) with acute grade II lateral ankle sprain were treated with an approach to protect the injured ligament, prevent impairments to movement, restore strength and proprioception, and progress to full function. Patient outcomes were assessed at four, eight, and 12 weeks. Follow-up interviews at six and 12 months assessed injury recurrence.

Outcomes: Patients were treated for an average of eight sessions over a mean of seven weeks. Rapid change in self-reported function, ankle ROM, and pain were observed in the first four weeks of care. Clinically meaningful improvements in function and ankle ROM were also noted at eight weeks and maintained at 12-week follow-ups. All patients returned to desired physical activity with only a single re-sprain event within one year after injury.

Conclusion: The results of this prospective case series suggest that a treatment approach designed to protect the injured ligament, maintain and restore normal ankle motion, and provide a tailored functional pathway to return to run and sport demonstrated resolution of symptoms and improvement in reported functional outcomes in a group of patients following grade II acute primary ankle sprain.

Level of Evidence: Level IV, Case Series

Key Words: Ankle sprain, joint mobilization, rehabilitation, movement system