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## ***Physical Therapy Update***

*The clinical staff at Frederick Sport and Spine Clinic regularly reviews articles, discusses the content and implements the information into our patient treatments. As a service to the local medical community, we are offering a summary of these articles to Physicians and Medical Practitioners. It is our intention to provide only the most pertinent info in these ½ page summaries. Further info is available at the clinic. Please take a moment to peruse the information below and contact us if you have any questions about the subject matter. Enjoy!*

### ***The Effects of a Supplemental Aquatic Physical Therapy Program on Balance and Girth for NCAA Division II Athletes with a Grade I or II Lateral Ankle Sprain***

By Paula Geigle, Kelly Daddona, Kelly Finken, Ali Irving, Melissa Kolski, Manda Kolste, Brian Shak; The Journal of Aquatic Physical Therapy, *Fall 2001; pages 13-10*

Lateral ankle sprains affect a large amount of athletes each year. Whether the athlete was grabbing a rebound or sliding into third base, an ankle sprain can cause the athlete to miss a significant portion of their season or lead to chronic instability if return to sport occurs too soon. Among sport-specific ankle sprains, 85 percent are due to an inversion force on the lateral ligaments. Typically the anterior talofibular ligament is the most vulnerable and, as a result, most of the athletes we see in the office are lateral ankle sprains. This can be quite debilitating, especially when the sport of choice involves a high level of running or jumping.

Following an ankle injury, it is essential to implement intervention strategies that will allow for better results for those patients anxious to return to sport. This study investigated the effects of aquatic therapy in addition to land therapy on single limb stance time and girth for NCAA Division III athletes with grade I or II acute lateral ankle sprains. The subjects were either seen for 60 minutes of land therapy only or a combination of land therapy for 30 minutes and aquatic therapy for 30 minutes. Visits were scheduled daily for treatment until they were able to return to sport using a sport specific functional assessment. The results of the study demonstrated that there is a positive relationship with the use of a supplemental aquatic physical therapy program for improved unilateral stance balance. In addition, the study attributed positive changes in girth due to the combined effect of healing time and the intervention procedures.

So why include aquatic therapy with your patient's therapy interventions? The study demonstrated that aquatic therapy uses a variety of water properties to decrease pain, edema and joint compression. Moreover, it assists in improving flexibility, strength and proprioception, all important for returning back to sport at optimal performance level.

Lateral ankle instability is common in athletes. The use of aquatic and land-based therapy can greatly speed the recovery time and prevent recurrent sprains. From the talented young athlete to the weekend warrior, they now have better treatment options with aquatic therapy and can return to perform at the highest level if given the opportunity early on.

Reviewer: Virginia Standford, MSPT  
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