Summary:

An aquatic environment may be ideal during all phases of ACL rehabilitation post surgery. The reduced weight-bearing environment can provide a safe environment for the patient’s range of motion and neuromuscular recovery activities that are not possible on land.

A thirty five year old world-class soccer player who sustained a complete tear of his ACL was able to return to play within ninety days of surgery due to aquatic therapy six days per week, twice a day.

Twenty patients with intra-particular ACL reconstructions were randomly assigned to a land or water exercise group. Participants in the water exercise group noted a greater minimization of joint effusion and greater self reports of functional improvements. Participants also found greater muscle girth at the calf and thigh, greater quadriceps strength, and better range of motion at the knee for those doing the water treadmill workout.

Clinical results show that athletes who participate in water rehabilitation and land-based post-rehabilitation have better scores on postural sway, indicating better balance. They also experienced fewer episodes of re-injury after return on play.