

PHYSIOTHERAPY: **Dynamic Performance Rehab Program for an Ankle Injury** by: Mark McFadden, Physiotherapist

The Actual Result:

As a result of Physiotherapy and the Dynamic Performance Rehab Program within two months following a second-degree ankle sprain Norman has returned to competitive ultimate frisbee, feeling and performing at 100% of his capacity.

The Story:

During an Ultimate Frisbee match Norman suffered an ankle injury causing pain, swelling, weakness, reduced ability to walk and leaving him unable to compete. Norman has a history of repeated ankle injuries and the care of these previous injuries was self-directed with rest, ice, compression, elevation and slow integration back into sport. As a preventative measure Norman has been wearing supportive braces and taping both his ankles when he plays. In this case the brace and tape were not enough to protect his ankle.

With the mechanism of injury being the most common to occur for a sports related ankle sprain the clinical findings of the biomechanical & functional assessment were:

- Second-degree sprain to the stabilizing ligaments of the outside and front of his ankle.
- First-degree strain to the tendon/muscles that line the side of the lower leg and outside of the ankle.
- Underlying excessive movement at the ankle joint (a likely result of previous ankle sprains).
- Notable strength deficits, balance and functional skill impairments.

Initial Recovery: Week 1-3

CARE: Supporting the most efficient healing process was critical. Elements of self-care took priority and Norman was given a strict regime of daily activities for gains in movement & strength, reduction of pain & swelling, and initial balance work. Physiotherapy sessions included hands-on techniques for swelling reduction, joint movement and electrotherapy treatment for tissue healing support.



RESULT: Primary objective achieved! At the end of the initial three weeks the inflammatory process had past and Norman was moving toward recovery of functional skills.

Dynamic Performance Recovery: Week 4 & 5

STATUS: Now care focused on dynamic recovery of the residual impairments: joint movement, strength, balance, speed and propulsion. Not addressing these would leave him at a significant risk of re-injury. Upon initial testing in the Adelaide Clinic's Dynamic Performance Rehab Program, Norman was scored at 90% capacity for moderate intensity, but this was well below the intensity needed for Ultimate. The new goal was set for 100% performance capacity, within 5 weeks.

CARE: Over two weeks Norman participated in three sessions of 1 hour with Marcelo Olenewa, the Medical Exercise Specialist, involved in the program for specifically designed exercises addressing the residual impairments. These sessions provided skilled advice and on-hand assistance for the specific exercises that would progress Norman in the most efficient way possible. Norman was then completing 2-3 self-directed workouts per week of the same exercises.

RESULT: Upon reassessment Norman scored 82% capacity at peak-performance intensity, a level similar to ultimate! Although performance was markedly improved it was still below a desirable level of performance ability. At this point Norman decided to return to modified participation in Ultimate aware of remaining impairments and knowledge of re-injury risk.

Dynamic Performance Recovery: Week 6-8

CARE: Three sessions with Medical Exercise specialist for exercises advanced and six self-care sessions. With renewed effort exercise intensity was elevated to simulate skills more closely related to Ultimate.

RESULT: Upon reassessment Norman scored 95% capacity at peak performance intensity. Performing all tests with full movement and without pain. Having only minor residual deficits in dynamic balance and propulsion skills Norman continues with refined exercises for further improvement. But more important, Norman describes a 100% confidence level in his ankle's ability and performance.

Ultimate Result! Successful Recovery!

The Dynamic Performance Rehab Program integrates the expertise of Physiotherapy and Medical Exercise Specialist and is geared to objectively scoring the participant's performance & recovery all the way to reintegration into their preferred sport or activity.

Norman's Testimonial:

"Thanks to the Ankle Recovery program, I was able to recover from a bad ankle sprain. More importantly, it addressed the deficiencies in my lower leg (balance and control). Not only am I recovered from my ankle injury, but I also feel stronger and more confident with my ankles. I'm looking forward to my summer. Thanks!"

For information about the Dynamic Performance Rehab Programs for the Ankle, Knee, Elbow and Shoulder please contact the Adelaide Health Clinic. We would be happy to discuss how these programs can help you!



Norman (on left) playing in an Ultimate Frisbee tournament in Vegas, towering over a 6 foot opponent.



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