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# Rehab for the Functional Unstable Ankle

In sports injury, ankle sprain is one of the most common injuries to treat. The acronyms RICE and MICE define the protocols for the first stages of care; however, return to sports is not complete without proprioceptive retraining.

In the acute stage, RICE (rest, ice, compression and elevation) is performed in the initial 24 to 72 hours to decrease the inflammation associated with soft tissue injury.

In the subacute stage, MICE (mobilization/manipulation, ice, compression and elevation) facilitate normal joint kinematics and healthy scar formation. This includes instruction in flexibility and strength exercises to restore full pain free ranges of motion and muscle balance (i.e. plantarflexion-dorsiflexion, inversion-eversion).

However, rehabilitation of the ankle and return to sport is not complete without proprioceptive retraining. In athletes where sports often demand quick starts, stops and change in direction, joint stability at the ankle depends upon quality input from mechanoreceptors and speed of muscle contraction throughout the entire lower limb. Single leg stance test provides a simple protocol to assess the athlete for a functional unstable ankle.<sup>1</sup>

Strategies for retraining proprioception in the functional unstable ankle must graduate the athlete from static to dynamic challenges. Static challenges include closed kinetic chain exercises with movement of the knee and hip, while dynamic challenges increase the level of difficulty by introducing a labile surface (i.e. rocker board).

In the athlete with acute or chronic recurrent ankle sprain, consider protocols to assess and retrain the functional unstable ankle before advising return to sport.

Static challenges include:

- Single leg stance (fig. 1)
- 747's (fig. 2)
- imaginary chairs (fig. 3)

Dynamic challenges include:

- rocker board (fig. 4)

*1 Liebenson, Outcomes in the small private practice, Rehabilitation of the Spine, Williams and Wilkins, 1996*

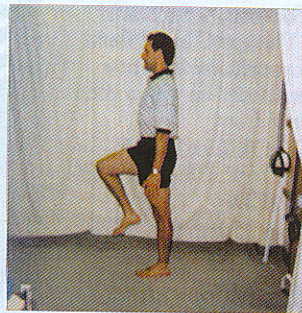


FIG. 1. SINGLE LEG STANCE

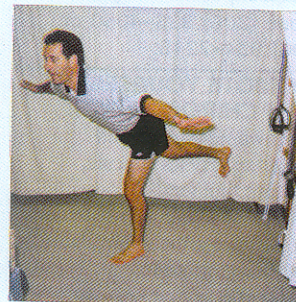


FIG. 2. "747'S"

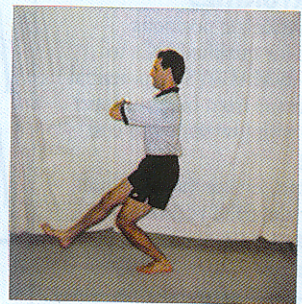


FIG. 3. IMAGINARY CHAIR

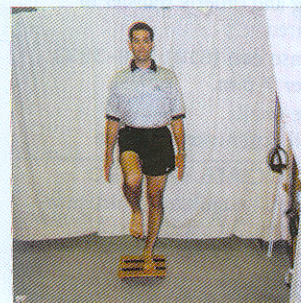


FIG. 4. ROCKER BOARD



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