



Court Ready Series - Hip Rotation

Handball, like all rotational sports, requires the player to use the ground forces to generate power in a stroke. One of the most important elements in this is Hip rotation. Issues with the hips are one of the most common things we see in the clinic: hip pain; reduced hip mobility; hip flexor injuries; hamstring and groin pain originating in the hips, and so on.

There are a few key movements that we look for. The first is Hip hinge. This is needed to allow the player get into a semi squatted position to maximise the power generated from the ground. Next, and possibly most important, we look at the amount of rotation in the hip joints. Any reduction in hip mobility is a red flag, both as a predictor of potential future injury, and a loss in power. We also look at the body's ability to separate. This involves stabilising the lower body and rotating the upper body, and then the reverse. This is a trait we see in the top players, which allows them maximise their rotation forces to generate power.

Take the example of a right hand dominant Handballer. To allow a proper back swing, the right hip must rotate one way, while the left hip has to rotate the opposite. As you attack the ball, the hips must then work in the opposite direction. Therefore, if you have a hip injury or reduced hip rotation, you are losing speed, power, and an efficient stoke technique. The rest of the body has to compensate putting extra pressure on shoulders, lower back and hamstrings.

There are many reasons as to why you may be losing hip rotation. Obviously as we get older we tend to have a level of joint degeneration which often results in reduced mobility. Many people are born with hips that have reduced mobility and that is the way their body moves. However, most of us have reduced mobility that can be improved. As a Handballer, you may have reduced hip mobility which could be improved by exercise, which in turn will improve your handball.

Here are some of the exercises we prescribe to help improve hip mobility. If you have pain in any of these movements, or are struggling to do them, you should seek advice from your physio or Coach.

Hip Windshield Wipers

- Both hips and knees flexed at 90 degrees.
- Place two fists between both knees and tighten grip on the fists.
- As you squeeze the knees together rotate each hip as far as possible keeping movement controlled.
- Don't hold end range, rotations are fluid both directions.
- Do 15 -20 reps



Alternating Pigeon

- Start off in a press up position.
- Step your shin into front of your body close to hands or have your knee pointed between your hands.
- Try and keep hips as square as possible to each other and legs in a straight line.
- Opposite knee can be placed on the ground.
- Alternate between legs, holding for 3 seconds each rep.
- Do 5 6 reps each side.



Deep Lunge

- Start off in a press up position.
- Bring your right foot forward, place it next to your right hand (or as close as you can). Knee should be at outside of your arm/shoulder.
- Bend your right forearm so that it is horizontal to the ground. Take a big deep breath in and as you exhale you will try and get your forearm as close to the ground as you can without letting the knee fall out to the side. (Don't force it too much).
- Do 5 6 reps each side.



Tommy Gallagher is a Registered Physical Therapist who specialises in Elite Athlete Injury treatment and Rehabilitation. With 15 years' experience working in Gaelic games, Golf, Athletics, Rugby, and Football, his main clinic in Donegal helps athletes of all ages recover from injury and come back fitter and stronger. His methods of finding the source of pain and weakness means that you are working with the person the Professionals turn to in their time of need. For more information or if you would like to see us cover a specific topic over the coming months, send an email to tommy@tommygallagher.ie or call 074 9168788

Avril McNamee works alongside Tommy as a Senior Rehabilitation Coach. As a successful Handballer herself, she brings a wealth of knowledge and expertise to help players maximise their physical potential on the court. All programmes are individually designed to improve a player's mobility, speed and power, in a way that they can transfer into their game.

