

Five Key Exercises for Hip Patients, Clients & Students

By Lynda Huey

Patients, clients, and students with hip problems love the feeling of being able to do their therapeutic exercises without having to put any weight on their hips. This means you'll either need to find a pool with deep water for them or modify the exercises so they don't touch the bottom of the pool. Patients and students may be coming to your pool or you may be going to your clients' home pools. (For simplicity, let's call them patients for the rest of this article.) Wherever you see them, they will need the pieces of equipment at the end of this article in order to have an optimum water rehab session.

The session starts with 15-20 minutes of deep-water interval training: Running, Powerwalking and Flies (abduction/adduction). Then comes stretching: Hamstring Stretch, Quad Stretch, Hip Flexor Stretch, and a lateral split holding the side of the pool and opening the feet as wide as possible on the pool wall. Next is a full kicking series followed by the five key exercises for hip patients. Do 10-20 repetitions of each exercise. Do all five exercises on one leg, then turn and repeat on the other side. When your patient can easily do 20 reps, consider whether they need help with range of motion (ROM). If so, add the Hydro-Fit mini buoyancy cuff to the series, then within a few visits move to the standard buoyancy cuff. Once good ROM is achieved, transition to the AquaLogix resistance blades. (See the list of equipment at the end of this article.)

- 1. Deep Back Kicks.** You'll still have your float belt on as you face the side of the pool. Lean forward and look down at the water. Let your hips float up as high as the belt will lift them. That's the position you want to maintain throughout the exercise, regardless of where your legs are moving. Keep your hips up!

The emphasis is on the backswing in this exercise. But in order to have a powerful backswing, you have to reach each leg far enough forward to create room for the backswing. One leg will reach almost to touch the side of the pool. The other leg does the work of swinging backward by generating great muscular strength from the gluts. Watch Lynda teaching the exercise on this video. (Link to the video on LyndaHuey.com)



Caption: In this photo the patient has both hands on the top bar. Some people prefer that hand hold, but if you notice your hips are sinking, put one hand down lower.

- 2. Lateral Leg Raises.** Stand with the right hand on the side of the pool and face the end of the pool. Maintain erect posture and lift the left leg directly to the side. Don't let the patient lean to the side to be able to lift higher. Keep the feet parallel so that the left knee points forward rather than upward.
- 3. Forward/Back Leg Swings.** Continue standing erect with the hand on the side of the pool for stability. Swing the left leg straight forward, then swing it down and to the rear. If a full swing backward hurts the patient's back, don't let them swing so far.
- 4. Leg Circles.** Now that the patient has moved the leg sideways, forward, and backward, put those movements together into a circular movement for complete circumduction at the hip. Lift the left leg straight forward. Now circle the leg smoothly to the left and then behind the body. Complete the circle by brushing the left leg past the right leg, then reaching forward to begin the next circle. You may have to hold the patient's hips as they learn to perform this motion without moving their pelvis or back. You may also have to manually move the leg through the circle the first few times until they find the correct height at which to do the circles smoothly. Do all the reps in this counterclockwise motion, then reverse to repeat the reps with a clockwise motion. **This is one of the most important exercises in regaining full range of motion of the hip.**

5. **4-Way Hip.** Step away from the side of the pool so that you must balance without holding on. Focus your eyes on a point at eye level in front of you. It's amazing how much better you can balance with a focal point! Lift your left leg forward, then back to center; lift your leg backward, then back to center; lift your leg to the side, then back to center. Cross your left leg in front of your right leg, then back to center. Once this becomes easy, you can make it harder by adding resistance blades, move onto a step, or both.



Now turn and face the other direction and repeat these five exercises while standing on your left leg and working your right hip.

EQUIPMENT NEEDED

Flotation belt: There are many on the market to choose from. If you have deep water, all you have to consider is offering them a belt with enough buoyancy to keep their chins out of the water as they exercise leisurely. If there's not enough buoyancy in a belt and the chin touches the water, they'll lift their heads and arch their backs, throwing off their vertical alignment. If the pool you're using doesn't have deep water so patients can do walking and running exercises without touching the pool bottom, choose the most buoyant belt available, either the AquaJogger Shape Pro model or The CompletePT belt, formerly the Hydro-Tone belt. Extra buoyancy will help in doing the modified versions of the exercises, in the box at the end of this article.

Tether: In busy pools, patients can be lined up for good space utilization if you tether them to the side of the pool during deep-water interval training. Even if space isn't an issue, use tethers to help patients lift into good running and walking form. Without being held in place, most patients lean too far forward, trying to move across the pool rather than do the exercise correctly, with good form. CompletePT has a tether strap that fits onto the top strap of the CompletePT belt, the Aqua Trim belt, and the Wave belt.

Hydro-Fit Buoyancy Cuffs: If patients need to improve their range of motion, the first equipment we will add to their lower body exercise program is the mini buoyancy cuff by Hydro-Fit. Once that is mastered, we move to the standard buoyancy cuff, which has significantly more lift to it. We teach patients where the "brakes" are so they can push their leg down with their own hand if they feel the cuff is lifting their leg too fast or too high. Once normal range of motion is achieved, they can transition to the Aqualogix Blades or Hydro-Tone Boot.

Aqualogix Blades and Hydro-Tone Boots: We start all patients with NO buoyancy or resistance equipment the first session to eliminate variables in case the patients come back the second visit with a flare up. If they lack range of motion (ROM), the buoyancy pieces are used first. If ROM is fine, we start with the minimum resistance Blades while doing lower body exercises and work our way up to the maximum resistance Blades, and eventually the Hydro-Tone boots if appropriate.

At the end of a session, you can give hip patients ***except those who have had total hip surgery*** a lovely way to end the session – joint distraction. See photo and technique described below.

For safety, make sure the patient is wearing a flotation belt before adding ankle weights.



Keifer Ankle Weights: We start small women with 1.5 lbs. of weight on each ankle and bigger women with 2.5 lbs. Smaller men can start with 2.5 lbs. and bigger men with 5 lbs. on each ankle. After a few sessions, the weight can be increased using comfort and results as the guide.

Noodles: Two noodles are needed to do the hip joint distraction technique at the end of the session. One noodle goes around the patient's back with the loose ends at the front and the other goes around the patient with the loose ends at the back. You can buy these in sporting goods stores, discount stores, and in summer, even in grocery stores.

Put on your own float belt so you can help pull the patient into the deep end of the pool. Adjust the noodles so that the patient is straight up and down when not moving. Let them stay there for 10-15 minutes. They LOVE it and always ask for more time!

Modifications for shallow-water pools in order to perform non-weight bearing intervals:

*Patients lean slightly forward in order to do the equivalent of deep-water running. Their feet will push more backward than downward so they don't feel any impact.

*For deep-water walking, patients lean backward and lift one straight leg and then the other in opposition to their arm actions. The backward lean creates more core work and prevents patients from touching the bottom.

*To do Flies (abduction/adduction), patients either lean back and keep their straight legs slightly in front of them and off the bottom of the pool, or they can do bent-knee movements where there's a 90-degree bend in both the knees and hips. In effect, this shortens the legs so they don't touch down.

Suppliers:

AquaJogger – AquaJogger flotation belts; new “shape pro” model has extra buoyancy

AquaJogger.com

Aqualogix – High Speed and Max Resistance Blades

AqualogixFitness.com

Huey's Athletic Network – CompletePT Belt, Tether

LAHuey.com

Hydro-Fit – Wave Belt, Mini and Standard Buoyancy Cuffs

HydroFit.com

Hydro-Tone – Resistance Boots

HydroTone.com

Kiefer – Ankle weights

Kiefer.com

Water Gear – Aqua Trim Flotation Belt

WaterGear.com

Lynda Huey, M.S. started Huey's Athletic Network in 1986 and CompletePT Pool & Land Physical Therapy in 1999. She has written four books on water rehab and exercise and recently licensed her pool protocols to UCLA for their first aquatic therapy program.