



Matthew Varacallo MD
ACL Reconstruction
Aquatic / Water Exercise / Rehab guidelines



*Unless otherwise instructed, may begin aquatherapy / water exercises 4 weeks after surgery

4-8 weeks:

- Range of motion exercises
 - Knee lifts
 - Chest-high water, back against wall for support
 - *3 sets of 10 reps, each limb
 - Knee-to-chest exercises/motions
- May use underwater treadmill (if available) or begin with walking in chest-high water
 - Walking in chest-high water correlates to 75% reduction in weight bearing forces
 - Walking in waist-high is a 50% reduction in weight bearing forces
- OK for water bicycle exercises if available
- Implement lap swimming with straight leg kicking technique and forms
 - Begin with front crawl technique / freestyle / backstroke
 - Freestyle / flutter kicks OK , or buoy between legs
- **Avoid**
 - diving, whip kicks, deep knee flexion/push-off maneuvers
 - fins, butterfly/dolphin kicks, no breaststroke kicks

8-12 weeks

- Water jogging can begin once able to demonstrate no difficulty with ambulating in water and once gait on land has normalized
- Progress from water jogging → progress to jogging with weighted vest (if available)
- Gradually progress to straight-line sprinting in water (no cutting) at 10-12 weeks
- OK to transition to all strokes/kicks after 8 weeks unless otherwise instructed

3 months and beyond

- Gradual progression to aquatic / exercise activity as tolerated without restriction

Matthew A. Varacallo MD
Penn Highlands Healthcare – Orthopaedic Surgery & Sports Medicine
145 Hospital Avenue, Suite 301
DuBois, PA 15857
O: 814-375-6200
F: 814-375-6452