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Core Muscle Injury Repair Post-Operative Protocol

Day 1 to 7:

- Control post-operative pain and swelling. Compression shorts may be beneficial
- Avoid activity that increases intra-abdominal pressure – such as lifting.
- Recommend wearing compression shorts to help control swelling
- Walk as tolerated – aim for 1+ mile per day, increase as tolerated
- Exercises:
 - Kegel exercises 2 times per day
 - Isometric hip adduction, glute sets, transverse abdominus (TA) activation
 - Heel raises
 - Light core exercises – quadruped progression, double legged bridging, clamshells

Day 8 to 14:

- Recommend wearing compression shorts to help control swelling as needed in daily activities, for exercise
- Balance core and back, anterior and posterior chain exercises
- Avoid upper body lifting
- Begin gentle soft tissue massage of abdominal muscles and hip adductors both in rehab and at home at least twice per day. May also address surrounding hip musculature.
 - Avoid aggressive massage techniques such as instrument assisted or active release
- Exercises:
 - If a pool is available and incision is well healed, may begin pool walking
 - Progress to AROM and then light resistance exercises. Modify exercises as needed for pain, focus on good form and core control.
 - Progress clamshell and bridging resistance
 - Curl ups with TA activation. No full sit-ups.
 - Side-lying hip abduction and adduction. Start with AAROM if needed.
 - Single leg balance progression
 - Lunge progression with good form
 - Monster walks with light resistance band
 - Modified prone and side planks. Must be able to do 5 reps for 30 seconds with proper form before progressing to full planks.
 - Scapular stabilization exercises in standing
 - Light stretching
 - Hip flexors
 - Hamstrings
 - Quads
 - Groin
 - Side bending
 - Cardiovascular
 - Progress walking program
 - Elliptical or stair master as tolerated
 - If sufficient strength, initiate walk to jog program at day 10-12.

Day 15-21:

- Recommend wearing compression shorts for exercise
- Balance core and back, anterior and posterior chain exercises
- Maintain proper pelvic and lower extremity alignment and control
- Continue massage of abdominals, hip adductors, as well as other hip and core musculature.
 - Avoid active release or instrument assisted massage to the hip adductors, rectus abdominus
 - Foam rollers should not be used for at least 6 weeks on hip adductors. Foam rolling of surrounding hip muscles can begin at 4 weeks post-op.
- Exercises:
 - Pool exercises – walking, hip AROM, swimming (no breast stroke)
 - Continue single leg balance progression
 - Lunge progression with good form
 - Step-ups and step downs
 - Minisquats progressing to full squats
 - Monster walks
 - Modified prone and side planks. Must be able to do 5 reps for 30 seconds with proper form before progressing to full planks.
 - Continue to progress jogging program
 - Initiate low impact agility program, progress as tolerated
 - Initiate light sport specific activity

Day 22-28:

- Balance core and back, anterior and posterior chain exercises
- Maintain proper pelvic and lower extremity alignment and control
- Re-introduce weight training. Start at no more than 50% of pre-surgery weight level. Upper body exercises should start at/below shoulder height and then progress to overhead.
- Continue massage of abdominals, hip adductors, as well as other hip and core musculature.
 - Avoid active release or instrument assisted massage to the hip adductors, rectus abdominus
 - Foam rolling of hip muscles, but should not be used for at least 6 weeks on hip adductors.
- Exercises:
 - Pool exercises – running, agilities
 - Lunge progression with good form – add multiplanar, add weight
 - Single leg dead lift
 - Progress agility work. Increase speed as form improves.
 - Progress sport specific work into simulated non-contact drills
 - Start abdominal exercises. Limit crunches and situps.

Day 29-35:

- Balance core and back, anterior and posterior chain exercises
- Maintain proper pelvic and lower extremity alignment and control
- Continue massage of abdominals, hip adductors, as well as other hip and core musculature as needed.
 - Avoid active release or instrument assisted massage to the hip adductors, rectus abdominus
 - Foam rolling of hip muscles, but should not be used for at least 6 weeks on hip adductors.
- Exercises:
 - Single leg hops
 - Box Jumps
 - Continue sport specific exercises
 - Initiate participation in individual drills in practice, progress to full participation as tolerated

Day 36+:

- Progress into full sport activity
- Continue long term core strengthening program
 - Avoid active release or instrument assisted massage to the hip adductors, rectus abdominus