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HIGH TIBIAL OSTEOTOMY POST OPERATIVE PROTOCOL (Dr. Akbar Nawab)

GENERAL GUIDELINES:

- TTWB with crutches in the brace for 6 weeks.
- ROM limited to 90° for the first 4 weeks and then progressed as tolerated.
- Limited ROM brace should be locked at 0° for all activities, including sleeping.
- Keep the entire leg elevated. Do not place pillows under the knee for long periods of time.
- Utilize cryotherapy for 20 to 30 minutes every hour for pain and swelling reduction.
- Keep incisions dry for 5 days but may shower anytime postoperatively.

WEEKS 0-4

- Restore superior and medial patellar mobility.
- Restore FULL knee extension within 2 weeks (low load-long duration stretching).
- Hamstring, gastrocnemius, and ITB stretching.
- Ankle ROM/strengthening for swelling and DVT prevention.
- Limited ROM to 0°-90°
- Modalities as needed for pain and swelling.
- NMES for Quadriceps activation and re-education. (home unit if available)
- 3-way (Flex/Abd/Ext) open chain straight leg exercises once pain is under control and adequate QUAD control established.
- Focus on knee remaining locked in concentric and eccentric phase of leg lifts. Increase reps and hold time initially, before adding resistance. No ankle weight until extensor lag is eliminated.

WEEKS 4-6

- Increase ROM as tolerated
- Continue to increase hip resistance during ABD/FLEX/EXT open chain exercises as tolerated.
- May start light aquatic exercises once good Quadriceps control is established.
- Soft tissue mobilizations as needed for scar and myofascial restrictions.
- Isometric hamstring strengthening on a ball progressing to AROM as tolerated.
- Initiate stationary bike for range of motion without resistance.

WEEKS 6-12

- ROM to WNL's as tolerated.
- Calf raises once full weight bearing
- Increase resistance with all exercises as tolerated.
- Hamstring curls to 90° with resistance as tolerated.
- Increase leg strength, allow for normal gait and walking longer distances.
- Start closed chain exercises as tolerated in a protected range. (Mini-squats, proprioceptive retraining, BAPS board)
- Leg press (0°-60°) with light resistance and high repetitions. (10-12 weeks postop)
- Increase resistance with stationary bike for strength and endurance training.
- Edema control.

MONTHS 3-6

- Low impact weight program increasing intensity of strength and functional training for a gradual return to normal activities.
- Elliptical trainer.
- Core strengthening.
- Regain Quad/hamstring girth and tone.

MONTHS 6-9

Sport specific training (if applicable).