



Orthopaedic
Associates of
Zanesville

ORTHOPAEDIC ASSOCIATES OF ZANESVILLE

TOTAL KNEE REPLACEMENT

Post-Operative Rehabilitation Protocol

General considerations:

- All times are to be considered approximate, with actual progression based upon clinical presentation.
- Patients are weight bearing as tolerated with the use of crutches, a walker or a cane to assist walking until they are able to demonstrate good walking mechanics, then full weight bearing.
- Early emphasis is on achieving full extension equal to the opposite leg as soon as able.
- No passive or active flexion range of motion greater than 90 degrees until stitches are removed.
- Regular manual treatment should be conducted to the patella and all incisions so they remain mobile.
- Early exercises should focus on recruitment proper quadriceps set.
- No resisted leg extension machines (isotonic or isokinetic) at any point in the rehab process.

Week 1:

- M.D./nurse visit after hospital discharge to change dressing and review home exercise program.
- Icing, elevation, and aggressive edema control (i.e. circumferential massage, compressive wraps).

Manual: -Soft tissue treatments and gentle mobilization to the posterior musculature, patella, and incisions to avoid flexion or patella contracture.

- Exercise:** -Initiate quadriceps/ gluteal sets, gait training, balance/ proprioception exercises.
- Straight leg raise exercises with proper quad set (standing and seated).
 - Passive and active range of motion exercises.
 - Well leg cycling and upper body conditioning.

Goals:

- Decrease pain and edema.
- Range of motion <90 degrees (until stitches removed).

Week 2-4:

- Nurse visit at 14 days for stitch removal and check-up.

Manual: -Continue with soft tissue treatments and gentle mobilization to the posterior musculature, patella, and incisions to avoid flexion or patella contracture.

- Exercise:** -Continue with home program, progress flexion range of motion, gait training, soft tissue treatments, and balance/proprioception exercises.
- Incorporate functional exercises as able (i.e. seated/standing marching, hamstring carpet drags, hip/gluteal exercises, and core stabilization exercises).
 - Aerobic exercise as tolerated (i.e. bilateral stationary cycling as able, upper body ergometer)

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Goals:

Decreased pain and edema.
Range of motion \leq 10 degrees extension to 100 degrees.

Week 4-6:

-M.D. visit at 4 weeks.

Manual: -Soft tissue treatments and gentle mobilization to the posterior musculature, patella, and incisions to avoid flexion or patella contracture.

Exercise: -Increase the intensity of functional exercises (i.e. progress to walking outside, introducing weight machines as able).
-Continue balance/proprioception exercises (i.e. heel-to-toe walking, assisted single leg balance).
-Pool work outs once incisions completely closed.

Goals:

Gait without a limp.
Range of motion \leq 5 degrees extension to 110 degrees.

Week 6-8:

Manual: -Continue soft tissue treatments, joint mobilizations, patellar glides to increase range of motion.

Exercise: -Add lateral training exercises (i.e. lateral steps, lateral step-ups, step overs) as able.
-Incorporate single leg exercises as able (eccentric focus early on).

Goals:

-Patients should be walking without a limp.
-Range of motion should be 0 to 115 degrees.

Week 8-12:

Manual: -Continue soft tissue treatments, joint mobilizations, patellar glides to increase range of motion.

Exercise: -Begin to incorporate activity specific training (i.e. household chores, gardening, sporting activities).
-Low impact activities until week 12.
-No twisting, pivoting until after week 12.
-Patients should be weaned into a home/gym program with emphasis on their particular



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activity/sport.

Goals:

- Range of motion with-in functional limits.
- Return to all functional activities.