

Total Ankle Arthroplasty Protocol

Phase 1	Surgery to 6 weeks post-op
Appointments	<ul style="list-style-type: none"> Rehabilitation appointments begin approximately 14 days after surgery, 1-2 times per week
Rehabilitation Goals	<ul style="list-style-type: none"> Activities of daily living (ADLs) with safe crutch/walker use; instruction as needed Control swelling and pain Begin ankle range of motion (ROM) at 2 weeks: Dorsiflexion (DF)/plantar flexion (PF) Maintain hip and knee ROM Increase hip, knee and core strength
Precautions	<ul style="list-style-type: none"> Non-weight bearing (NWB); short leg cast for two weeks, followed by tall CAM boot for one month or until week 6 Watch for signs of infection Avoid long periods of dependent positioning of the foot and complete frequent elevation
Suggested Therapeutic Exercise/Treatment	<ul style="list-style-type: none"> Frequent elevation of ankle above the level of the heart Ankle active range of motion (AROM: DF/PF) Four way leg raises lying down Knee AROM Transverse abdominis recruitment Edema massage
Cardiovascular Exercise	<ul style="list-style-type: none"> Upper Body Ergometer (UBE)
Progression Criteria	<ul style="list-style-type: none"> 6 weeks post-op No wound complications

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Phase 2	Begin after meeting Phase 1 criteria (usually 6 weeks after surgery)
Appointments	<ul style="list-style-type: none"> Rehabilitation appointments are 1-2 times every 1-2 weeks
Rehabilitation Goals	<ul style="list-style-type: none"> Reduce swelling Increase ankle ROM in all planes Weight-bearing tolerance in boot with safe ADL progression Increased mobility of scar Maintain hip/knee ROM, strength and flexibility
Precautions	<ul style="list-style-type: none"> Progress weight bearing in boot per surgeon's instructions MUST be pain free, normal gait Week 6-10 in CAM boot: <ul style="list-style-type: none"> Week 6-8: up to 50% weight bearing Week 8-10: progression to full weight bearing Week 10: Begin progression into normal shoe Continue to sleep in the boot
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> Gait training and weight shifts Ankle AROM/passive range of motion (PROM) Calf stretching Scar massage and soft tissue mobilization of calf Joint mobilization: focus on talocrural distraction to improve ankle DF/PF Four-way ankle isometrics Seated tilt/BAPS board Seated knee extension and prone hamstring curls against gravity (no ankle weights) Four-way leg raises in standing Transverse abdominis strengthening
Cardiovascular Exercise	<ul style="list-style-type: none"> Stationary bike (in boot, no resistance) Swimming (once wound is fully healed) Aquatic therapy may begin if available
Progression Criteria	<ul style="list-style-type: none"> Able to ambulate independently in walking boot Active ROM between 5⁰ DF and 20⁰ PF

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Phase 3	Begin after meeting Phase 2 criteria (usually 10 weeks after surgery)
Appointments	<ul style="list-style-type: none"> Rehabilitation appointments are once per week
Rehabilitation Goals	<ul style="list-style-type: none"> WBAT in shoe Normalize gait without assistive device Retrain ankle proprioception Improve ankle strength
Precautions	<ul style="list-style-type: none"> Avoid exercises that create movement compensations Wean from boot and progress WBAT, with use of Hely-Weber Zap ankle brace as needed
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> Gait training Scar massage and joint mobilizations as needed Calf stretching Four-way ankle strengthening with resistance band Balance and proprioception exercises Functional movements (squats, steps) Core and lower extremity strengthening
Cardiovascular Exercise	<ul style="list-style-type: none"> Stationary bike Swimming Aquatic therapy
Progression Criteria	<ul style="list-style-type: none"> Able to ambulate independently in shoe Able to complete bilateral heel raises

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Phase 4	Begin after meeting Phase 3 criteria (usually 14 weeks after surgery)
Appointments	<ul style="list-style-type: none"> Rehabilitation appointments are once every 2-4 weeks
Rehabilitation Goals	<ul style="list-style-type: none"> Normal gait pattern Single leg stance with good control for >10 seconds Ankle ROM between 10° DF and 35° PF Able to complete single leg heel raise
Precautions	<ul style="list-style-type: none"> Avoid forceful impact activities Anticipate return to golf at 3-4 months, hiking at 4-5 months
Suggested Therapeutic Exercises	<ul style="list-style-type: none"> Balance and proprioception exercises on unstable surfaces Higher level core and lower extremity strengthening exercises Higher level functional movements (floor transfers, lunges walking on hillsides)
Cardiovascular Exercise	<ul style="list-style-type: none"> Stationary bike progressing to outdoor cycling Swimming Walking Golfing