Ankle Fracture

General Principles:
This protocol was designed to provide the rehabilitation professional with a guideline of postoperative care. It should be stressed that this is only a protocol and should not be a substitute for clinical decision making regarding a patient’s progression. Actual progression should be individualized based upon your patient’s physical examination, progress, and presence of any complications.

Note: The total length of rehabilitation will vary depending on the following factors: severity or acuteness of injury, age, health, personal goals of patient, or healing of the fracture site.

PHASE I: (Protection)

Patients in this phase should concentrate on decreasing pain, swelling, and maintain maximum protection to allow for fracture healing. Gradual progression of active and passive ROM with no resisted / strengthening exercises.

Weight Bearing-
1. Typically Non-weight bearing restriction with duration to be specified by physician

Orthotics-
1. Ankle brace or walking boot per physician orders for exercises and ADL’s
2. Compression wrap as needed to control swelling

Modalities (PRN)-
1. Ice, E-stim, Compression, and Elevation as needed to control pain and swelling
2. Moist heat, warm whirlpool, and/or pulsed ultrasound after 48 hours.
3. Ice for 20 minutes following exercises throughout protocol.

ROM-
1. Passive and Active ROM in all planes as tolerated. Gentle Inversion / Eversion ROM initially
2. NO resisted or strengthening activities

Exercises-
1. Towel stretch for gastrocnemius/soleus.
2. Stationary Bike, Upper body bike, Seated step machine with no resistance (In orthotic)
3. Elevated ankle pumps, alphabet, & toe curling
3. Aquatics
   a. As appropriate for weight bearing restrictions
   b. When incision healing allows

PHASE II: (Intermediate)

Patients in this phase may be partial weight bearing with moderate protection of ankle brace or walking boot. Gradual progression of ankle isometrics, and light strengthening exercises.

Weight Bearing-
1. Partial weight bearing restriction as specified by physician
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Orthotics-
1. Ankle brace or walking boot per physician orders for exercises and ADL’s
2. May perform exercises out of orthotic as appropriate

Modalities (PRN)-
1. Continue only as needed.

ROM-
1. Progress ankle Active and Passive ROM to full as tolerated

Exercises-
1. Continue/progress previous exercises.
2. Seated wobble board / BAPS board
   a. Progress to standing as weight bearing allows
3. Intrinsic foot strengthening
   a. Marble pick up, towel scrunches
4. May add resistance to stationary bicycle, Step Machine, etc
5. Resisted Knee Extension and flexion strengthening
   a. Keep resistance above fracture site
6. Shuttle / Leg Press
   a. Within weight bearing restrictions
7. Ankle Isometrics (Sub-maximal, Sub-painful)
   a. Progress to maximal as tolerated
8. Seated Ankle ROM including calf raises and toe raises

PHASE III: (Strengthening)

Patients may progress to this phase when they are full weight bearing, ROM progressing to full in all planes, and minimal to no pain with Phase II exercises.

Weight Bearing-
1. Progress to full weight bearing as tolerated with normal gait

Orthotics-
1. Continue with brace for exercises. May discontinue brace per physician direction

Modalities (PRN)-
1. Continue only as needed.

ROM-
1. Maintain full ROM

Exercises-
1. Continue Phase II, advance resistance and duration as tolerated.
2. Progress to isotonic ankle strengthening, all planes as tolerated
   a. Theraband
   b. Shuttle calf raises
   c. Standing / Seated calf raises with resistance
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3. Standing balance / proprioception
4. May progress to Elliptical runner

PHASE IV: (Advanced Strengthening)

As patient’s strength and proprioception improve, athletes may progress into sports-specific activities as tolerated. Begin with low level activities and progress duration and intensity.

Orthotics-
1. Continue with brace for exercises. May discontinue brace for ADL’s per physician direction

Modalities (PRN)-
1. Continue only as needed.

ROM-
1. Maintain full ROM

Exercises-
1. Continue Phase III, advance resistance and duration as tolerated.
2. May initiate isokinetics
   a. 60 to 180 degrees per second
3. Begin sports / work activities
   a. Interval Running program
   b. Plyometrics
4. May perform functional testing
   a. Jump and hop tests
   b. Isokinetic strength test