Chapter 6 – Management Protocols

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Ankle Sprain/Strain

Ankle Sprain/Strain

Management Protocol

TYPE OF CONDITION: Traumatic

MECHANISMS OF INJURY

Direct Trauma: Examples can include:

a. Sliding into base
b. Stepping in hole
c. Making a quick cutting or turning move

COMPLICATING FACTORS

Phases may be prolonged by complicating factors that may include diabetes, lack of exercise, failed surgical procedures, history of previous injury, etc.

MANAGEMENT PLAN

PHASE 1: Acute Traumatic / Acute Exacerbation

Plan of care may include:

1. Specific chiropractic adjustments to the ankle and associated subluxations
2. Ice: 15-20 minutes, 3 times daily up to every 60 minutes (see Chapter 4 - 1). Provide patient with Cold Therapy handout
3. EMS: IFC at 80-120 Hz for 15-20 minutes until resolution, can be used hourly (see Chapter 4 - 4)
4. Brace/tape for support
5. Myofascial therapy
6. Instruction for activities of daily living (ADLs), restriction of relevant work and recreational activities
7. Maintain total body conditioning
8. Write the alphabet with toes 2 times
9. Toe pointing exercises (dorsi/plantar flexion)
10. Elevate the leg during the night by raising the foot of the bed
11. Use crutches to avoid weight bearing if necessary (up to 3 or 4 days)

Time Frame: 3-5 days
Frequency of Care: daily
Goals: Decrease pain and inflammation, reduction of subluxations, protect from further trauma

PHASE 2: Sub-Acute

Plan of care may include:
1. Specific chiropractic adjustments to the ankle and related subluxations
2. Ice and EMS, daily as follows: 2-3 times per week at 1-150 Hz for 15-20 minutes
3. Ultrasound underwater 3-5 times per week for 5 minutes (see Chapter 4 - 3)
4. Rehabilitative Exercise (see Chapter 5)
   a. Passive range of motion as indicated
   b. Active range of motion as indicated
   c. Manual resistance exercise
   d. Follow upgrade criteria for stage 3 chronic
5. Maintain total body conditioning
6. Myofascial therapy
7. Progressive weight bearing if using crutches
8. Continue previous exercises
9. Weight-bearing range of motion exercises (BAPS board)

Time Frame: 1–2 or 1–3 weeks
Frequency of Care: 1-3 times per week
Goals: Upon re-exam: decrease swelling and restore full muscle contraction without pain on re-exam, reduction of subluxation

PHASE 3: Chronic

Plan of care may include:
1. Specific chiropractic adjustments to the ankle and associated subluxations as needed
2. Rehabilitative exercise (see Chapter 5)
   a. Resisted active exercise
3. Maintain total body conditioning
4. Myofascial therapy
5. Continue with previous exercises
6. Balance board: plantar/dorsi, inversion/eversion one minute
7. Calf raises
8. Heel/Toe walking
9. Achilles tendon stretch
10. Preventive taping or other external support during aggressive sports as necessary

Time Frame: 4-12 weeks
Frequency of Care: 1-2 times per week
Goals: Upon re-exam: 50% reduction in pain and inflammation, restoration of range of motion, reduction of subluxations

PHASE 4: Reconditioning

Plan of Care
1. Specific chiropractic adjustments to the ankle and associated subluxations
2. Incorporation and retraining of job/sport specific skills
3. Return to work/play (light duty/drill and light contact)
4. Home program of therapeutic exercise
5. Maintain total body conditioning

Time Frame: Up to 12 weeks post-injury, follow up assessments every 2 to 6 weeks until maximum patient improvement
Goals: Upon re-exam: 90% minimum reduction of pain and inflammation, improved strength, improved stability, restoration of function, improved skills, reduction of subluxations.

LIGHT DUTY WORK/PLAY CRITERIA

1. Minimal aggravation of symptomatology
2. Minimal chance of increased structural damage or re-injury

RETURN TO WORK/PLAY CRITERIA

1. Strength near equal (90%) to uninvolved limb or pre-injured state
2. Range of motion near equal (95%) to uninvolved limb or pre-injured state
3. Functional power and endurance is normal (at least 90%)
4. Normal functional cardiovascular endurance
5. Restoration of functional balance and proprioceptive sense
6. Symmetrical girth measurements

Reference Consulted

Souza, Thomas A. Differential Diagnosis and Management for the Chiropractor, Protocols and Algorithms, Gaithersburg, MD; Aspen Publisher, Inc. 2001