Ankle Sprain Rehabilitation& Exercise Progression

PRINCIPLE FOUR OSTEOPATHY

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Considerations

- Injury? Mechanism
- Healing time frames?
- Current functional status?
- Sports/Occupation/Age/Previous History Injuries
- Consideration & function of associated areas: 1st ray, mid tarsal's, subtalar, talocrural, tibia/fibular, knee, hip, spine

Goals

- Healing
- Restore foot & ankle function in weight bearing & gait
- Restore muscle, ligament & joint proprioception
- Restore movement & strength, endurance etc
- Train fundamental movement patterns gait, squat, lunge, balance & reach, jumping, hopping
- ALWAYS aim to restore Tri Plane Movement & Function of lower limb function

Beginner Phase Rehabilitation & Conditioning

- RICER
- Reduce pain, inflammation & improve ROM
- Manual therapy techniques joint, ligamentous, muscular foot/ankle, distal tibia/fibular & proximal leg/hip
- Stretching i.e. calf, sole us, plantar fascia, quad, hamstrings, gluteal, psoas, itb
- ROM exercises i.e. dorsiflexion/plantar flexion, inversion/eversion
- Strength exercises i.e. calf raises, weight bearing function & movement

Balance & Proprioception Driven Exercises

- Bilateral Foot stance eyes closed/open, vestibular, head/nose, hands tri plane directions (sagittal reach, frontal reach, transverse plane reach)
- Split Squat Stance eyes closed/open, vestibular, head/nose, hands tri plane directions

Overloading/Progression Variables:

- Pre position foot position & upper body
- Vestibular head movements
- Visual feedback eyes open/closed
- Driver direction, distance, angle, repetitions, speed
- External equipment Ground Reaction FMS i.e. pillow, bosu ball,

Focus

- Reduce pain levels, inflammation & restore ROM
- Restore weight bearing activity
- Introduce gentle ROM exercises and early strengthening/endurance exercises
- Challenge ones balance & proprioception whereby centre gravity is over base of support and graduating to whereby challenging ones balance and proprioception by moving centre of gravity away from base of support

Intermediate Phase Rehabilitation & Conditioning

Single Leg Balance Test & Exercise: COG over base of support, Visual & Vestibular alternations, Ground Reaction FMS changes i.e. pillow, bosu ball

Single Leg Balance & Reach Test & Exercise: Nose/head, torso, hand, foot - tri plane (sagittal reach, frontal reach, transverse reach) drivers

Squats closed chain: Squat Variations i.e. Pre position feet, Overload nose, head, torso, hand drivers

Lunge: Closed chain injured side planted - Tri Plane - Arm Drivers, Foot Position

Lunge: Open Chain - Injured side movement driven - Arm Drivers, Foot Position & External Equipment

Step Up/Down: Closed chain injured side planted, Arm Drivers, Foot position & External Equipment

Step Up/Down: Open chain injured side moving, Arm Drivers, Foot Position & External Equipment

Advanced Phase

Jumping: Drivers: Feet, Arm, And External Equipment Tri Plane Focus: Sagittal, Frontal, Transverse: AP, PA, LR, RL, 90 degree left, 90 degree right, 180 degree, 270 degrees, 360 degree

Hopping: Drivers: Feet, Arm, And External Equipment Tri Plane Focus: Sagittal, Frontal, Transverse: AP, PA, LR, RL, 90 degree left, 90 degree right, 180 degree, 270 degree, 360 degree

Skipping

Running

Return to normal activities & sport

Overloading/Progressing Variables

- Start & Finish Position Foot, Body, Arms, Head
- Repetition
- Sets
- Distance
- Angle
- Height
- Driver i.e. nose, head, torso, hand (uni/bilateral), knee, foot
- External Position Equipment i.e. bosu ball, core tex, mat, ladder, hurdles, Plyometric boxes

Osteopath Heath Williams of Principle Four Osteopathy is located in the heart of the Melbourne City CBD 3000. Osteopath Heath Williams has a special interest in rehabilitation and exercise prescription. Principle Four Osteopathy is located at 29 Somerset Place Melbourne City CBD. Please contact Osteopath Heath Williams at <u>heath.williams@principle4.com</u>