




Upper Extremities: Injuries and Management



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OLYMPIC GOLD QUEST

Causes of Injuries

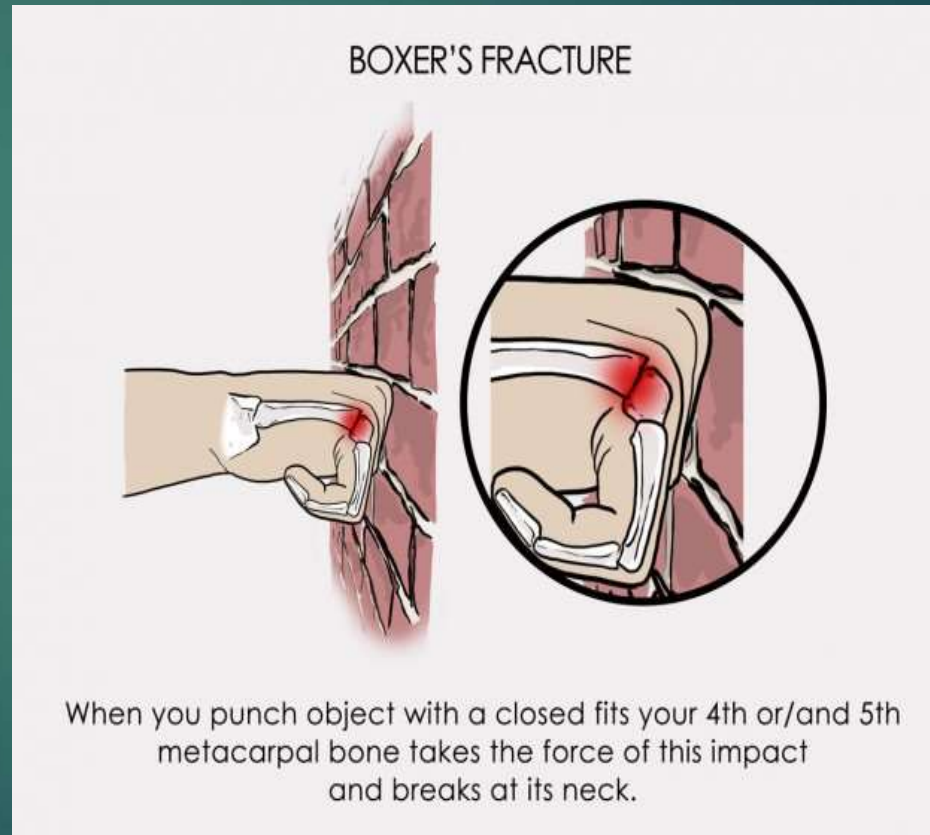
- ▶ Wrong Techniques
- ▶ Not using Protective gears
- ▶ Overuse
- ▶ Lack of Flexibility
- ▶ Hydrations
- ▶ Sleep Deprivation
- ▶ Psychological Factors

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- ▶ **General Warm-Up:** Specific cardiovascular exercises (skip, jog, bike, etc) to elevate the heart rate and prepare the body for athletic movement
 - ▶ **General Pattern Exercises:** Athletic movements that mimic training and sport-specific skilled tasks (i.e. shadow boxing, lunge, cross-over, foot work, evading attacks, etc
 - ▶ **Local-Regional Exercises:** Targeted exercises for head/neck, trunk/shoulders, low back/hips (core), hand/wrist, and foot/ankle designed to reduce risk of injury.

EXERCISE GUIDELINES	GENERAL WARM-UP	GENERAL PATTERN EXERCISES	LOCAL-REGIONAL EXERCISES
Time	5-10 Minutes	5-10 minutes	10-15 minutes
Intensity	<65% Maximum Heart Rate	<75% Maximum Heart Rate	<75% Maximum Heart Rate
Purpose	<p>Increase core temperature to prepare for training</p> <p>Offset rigidity or stiffness from occupation, driving or other unrelated activity</p>	<p>Facilitate control and coordination of basic movement patterns typically used in training and boxing</p>	<p>Focus on regions that have a higher vulnerability to injury with boxing and the associated training</p> <p>The exercises are to promote control, coordination, and compliance-mobility that will enhance awareness of the area and reduce risk of future injury</p>
Options	<p>Skipping, jogging laps, stationary bike, treadmill</p>	<ol style="list-style-type: none"> 1. Upper & Lower Body Rolling Pattern 2. Side-Lying Trunk-Shoulder Mobility Protocol 3. Single Arm Latissimus Dorsi Pull Down with Contralateral Neck Rotation 4. Walking Lunge Patterns 	<ol style="list-style-type: none"> 1. Head/Neck <ol style="list-style-type: none"> a. Cervicothoracic Mobility Protocol b. Trunk Rotation with Neck Resistance 2. Trunk/Shoulders <ol style="list-style-type: none"> a. Bear Crawl 3. Low Back/Hips (Core) <ol style="list-style-type: none"> a. Dynamic Nordic b. Modified Pallof 4. Hand/Wrist <ol style="list-style-type: none"> a. Quadruped Wrist Mobility Protocol 5. Foot/Ankle <ol style="list-style-type: none"> a. Single Legged Heel Drops b. Short Foot with Forward Lean

Boxers Fracture

Fractures of the Fourth or & Fifth metacarpal neck



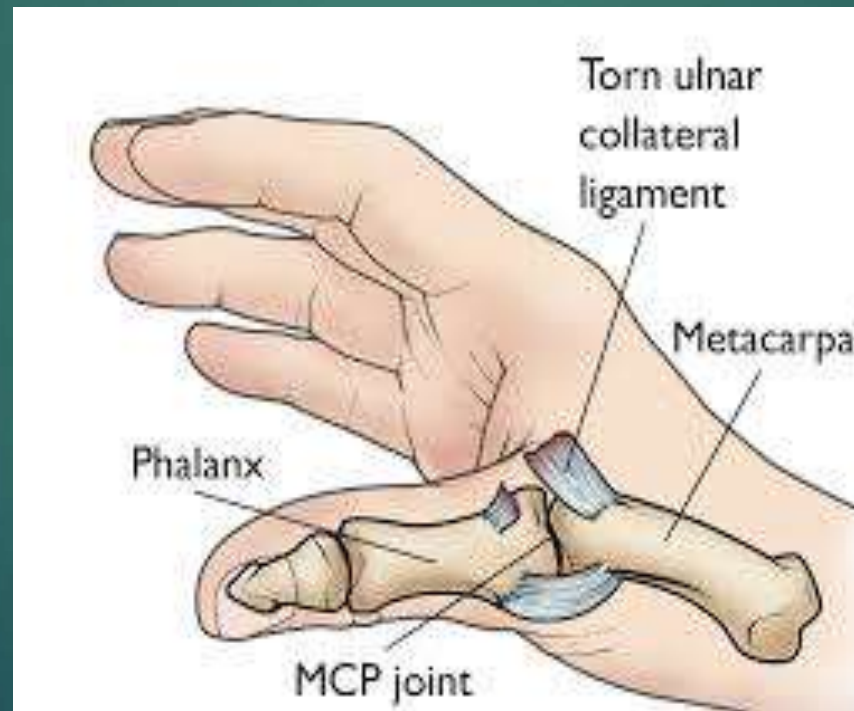
Boxers Knuckle

Extensor hood of the second to the fifth MCP joints



Skiers Thumb

Tear of the Ulnar collateral ligament (UCL) of the Metacarpophalangeal joint of Thumb



CARPAL BOSS

Subluxation of one or more Metacarpal bases



▶ Finger Splint Hand Brace :



▶ Skiers Thumb:



Fifth Metacarpal Fracture Rehabilitation Exercises



Wrist range of motion
A and B



Wrist range of motion
C



Opposition stretch



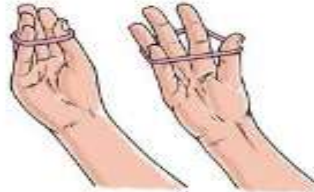
Wrist flexion



Wrist extension

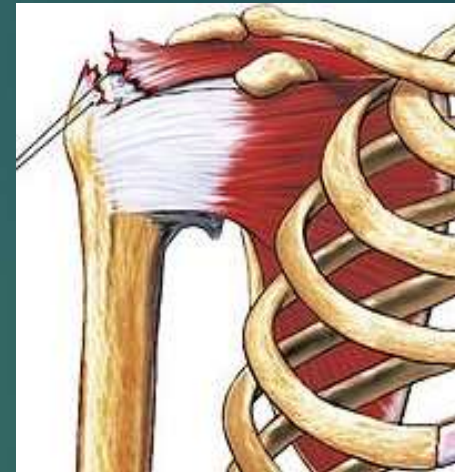
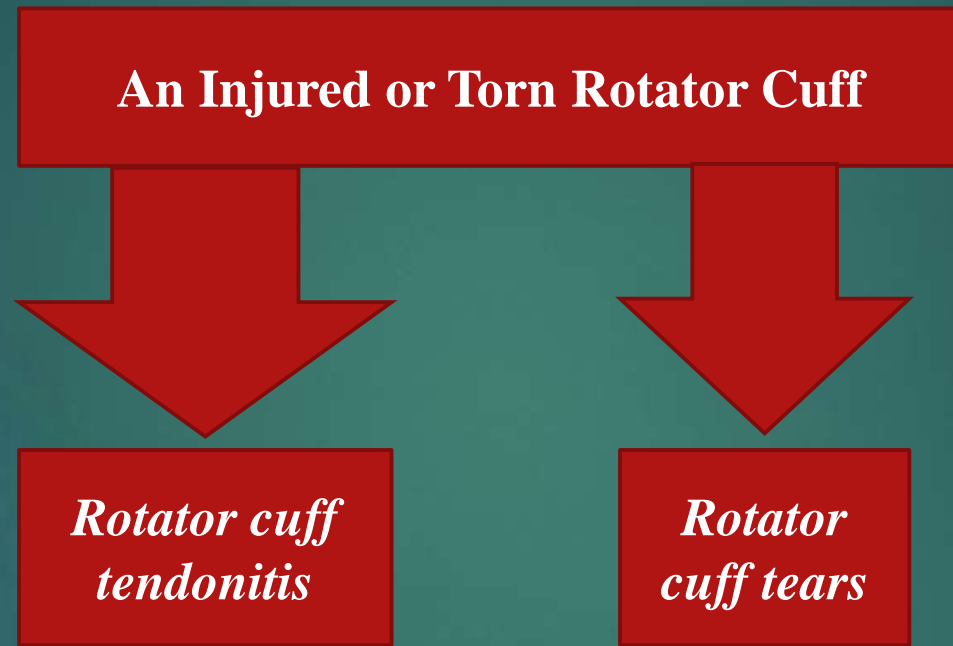


Grip strengthening



Finger spring

Shoulder Injuries in Boxers



Sub Acromial Bursitis

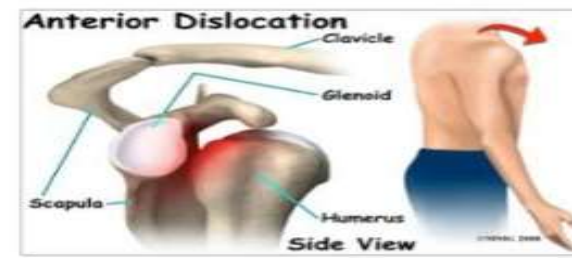


Torn Labrum

Anterior
Dislocation

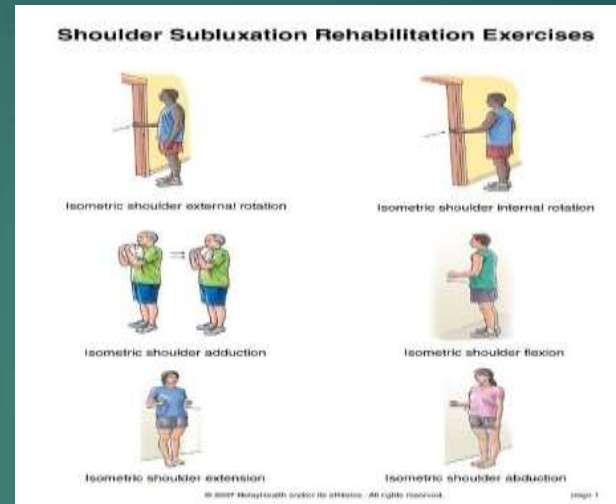
Posterior
Dislocation

Inferior
Dislocation



Shoulder Rehabilitation Exercises

► Isometric exercises



► Mobility exercises



- ▶ Shoulder stability exercises
- ▶ **Dynamic shoulder exercises**
- ▶ **Functional shoulder exercises**



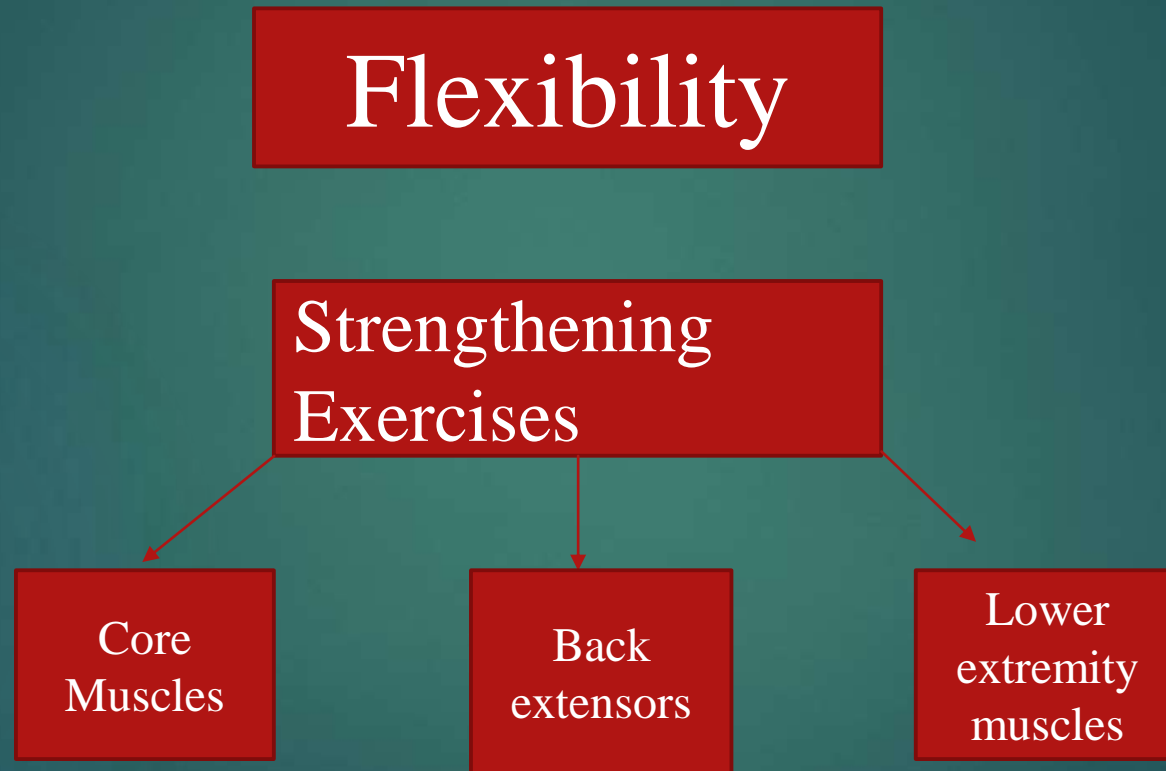
Injuries of Neck

- ▶ Cervical Strain (Whiplash)
- ▶ Neck Pain
- ▶ Cervical Instability
- ▶ Fracture and Subluxation

Back Injuries

- ▶ **Lower Back Injury:** Repeated rotation when throwing punches
- ▶ **Upper Back Injury:** impact or overuse

Management of Back injuries



NECK

DAREBEE WORKOUT
© darebee.com
3 sets | 2 minutes rest

IN COLLABORATION WITH **NHS** choices



10 back and forth tilts



10 side-to-side tilts



10 neck rotations



10-count press

10-count press



10-count alternating side press



10-count alternating chin press

Low Back Pain Exercises



Standing hamstring stretch



Cat and camel



Quadruped arm/leg raise



Pelvic tilt



Partial curl



Extension exercise



Gluteal stretch



Side plank