

Shoulder Impingement



Eden Raleigh
Orthopaedic Surgeon
Shoulder & Knee Surgery

Ph: 9421 1900 0402697115

dredenraleigh@gmail.com



My Background

- Specialising in Shoulder and Knee Surgery
- Main focus on Arthroscopic/Sports Surgery
- FRACS (2006) Melbourne
- Fellow Guy's & St. Thomas, London
- Fellow Paris Cinq (Paris)
- Fellow PanAm Clinic (Canada)



WHERE AM I?

- 89 Erin St, Richmond (op. Epworth)
- Bounce Healthcare
- Epworth Eastern
- Epworth - Lilydale Consulting Suites
- Berwick



What is impingement?

- Popularised by Charles Neer 1972
- Pathological compression of rotator cuff against the anterior structures of the coracoacromial arch, Anterior third of acromion, CA ligament and AC joint



Definitions

Shoulder Impingement

- Compression and mechanical abrasion of cuff as it passes below the arch during arm elevation

Rotator Cuff Tendinitis

- Encompasses impingement and results from acute cuff overload, intrinsic cuff degeneration or chronic overuse



Rotator Cuff Syndrome

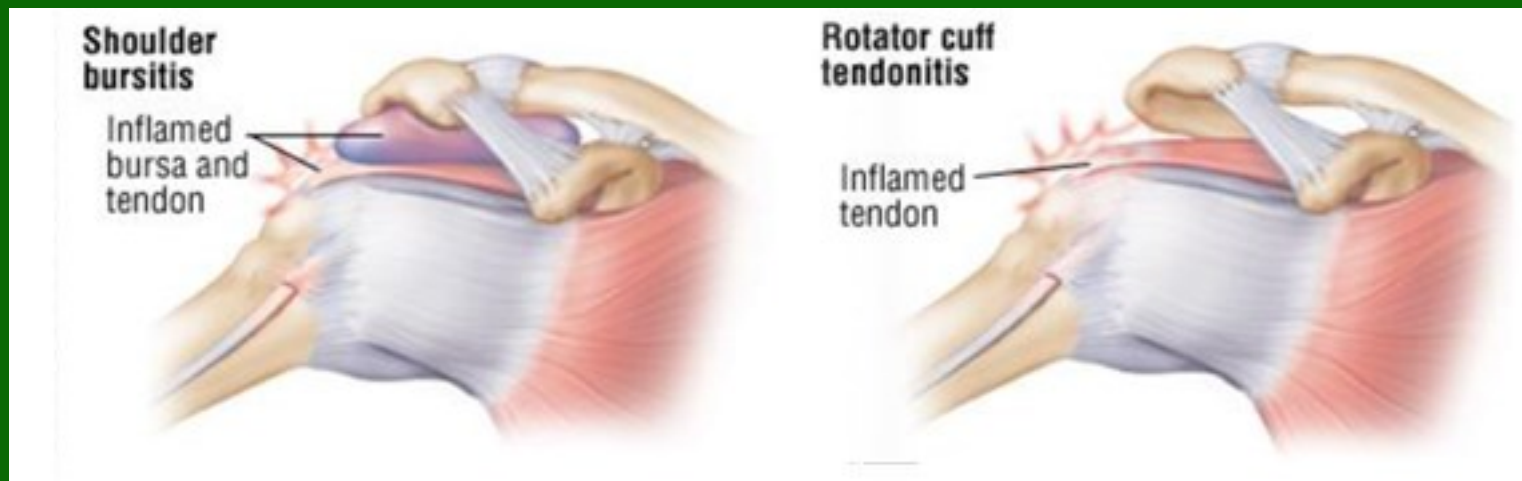
- Term used to describe the process whereby impingement and tendonitis are ongoing simultaneously

Painful Arc Syndrome

- Pain during midrange of glenohumeral abduction, with freedom from pain at extremes of range



- Impingement causes mechanical irritation of the cuff tendons (haemorrhage and swelling)
- This also causes bursitis



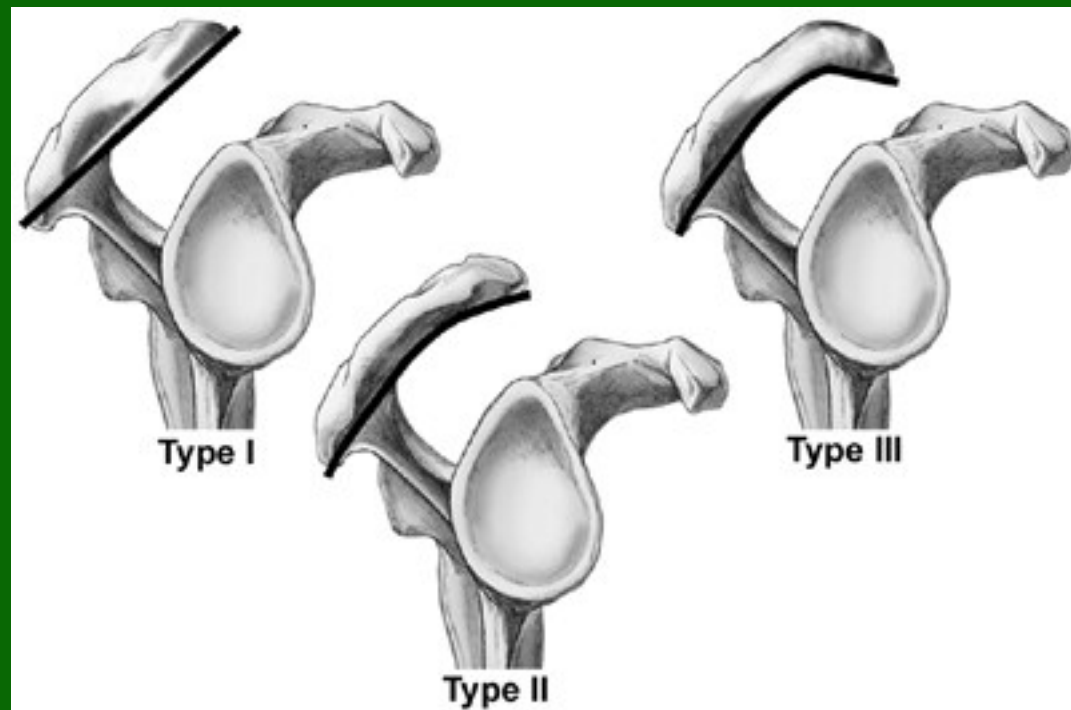
Signs and Symptoms

- Pain, tenderness
- Pain, weakness with active abduction in midrange
- Limited Internal rotation
- Specials tests
- Tenderness to palpation



Factors

- 1. Anatomical



- spur



ACJ Spur



Others

- Poor scapular control
- Occasionally anterior instability
- Postural (forward head, rounded posture)



Internal Impingement

- Overuse (baseball)
- Loose joint
- Instability
- Superior Labrum injury associated
- Muscle imbalance



Stages of Impingement

- Charles Neer further classified Shoulder Impingement Syndromes into 3 stages:
- Stage 1 – Inflammation, hemorrhage, and edema of the tendon.
- Stage 2 – Fibrosing and thickening of the sub-acromial tissue with partial tearing of the supraspinatus tendon.
- Stage 3 – Tearing of the rotator cuff with osteophyte formation



Signs

- Impingement tests ie. Neer and Hawkins-Kennedy



Signs

- Strength testing ie. 'empty can,'



Treatment

- **1. Functional Modifications**
- (Most important)
- Activity stops until can reintroduce pain free



2. Medicines

- Oral Anti-inflam
- Subacromial injections
- Combinations with TENS etc.



3. Physio

- General physio
- Mm
- TENS
- LASER, heat
- Other modalities



TENS Machine



Sourcing Solutions ▾

Services & Membership ▾

Help & Community ▾

One

☰ Categories ▾

Products ▾

What are you looking for...

🔍 Search

👤 Sign In | Join F
My Alibaba

Home > Products > Health & Medical > Medical Devices > Physical Therapy Equipments (293248) 📧 [Subscribe to Trade Alert](#)



⊕ View larger image

ZOOM

cheapest price ever \$6/set Portable TENS machine EA-737B with ear clip selective

FOB Reference Price : [Get Latest Price](#)

500 Set/Sets (Min. Order)

Supply Ability: 20000 Set/Sets per Month

Port: huangpu,guangzhou

✉ Contact Supplier

💬 Leave Messages

❤ Add to Favorites

Payment:



e-Checking

More ▾



STRETCHING EXERCISES



Posterior
Complex



Pectoralis



Internal
Rotator

PREVENTIVE MEASURES

- Perform warm-up exercises & flexibility training
- Exercise the whole kinetic chain, including strength training.
- Avoid abuse (pain-causing situations).



PREVENTING RE-INJURY

- Perform warming-up before & cooling-down after training, for no less than 15 minutes.
- Include stretching ex for the posterior shoulder.
- Perform preventative strengthening exercises for the shoulder twice a week.
- Ensure you take adequate rest & avoid playing too many games in too short period.
- Fatigue plays an important role in occurrence of this kind of injury.



4. Injections

CSI (cortisone) & Hydro

- CSI- Into subacromial space - Steroid/LA
- Hydrodilatation - Into Glenohumeral Joint
- - 40-45ml good results
- What are you treating??



When is CSI the best option

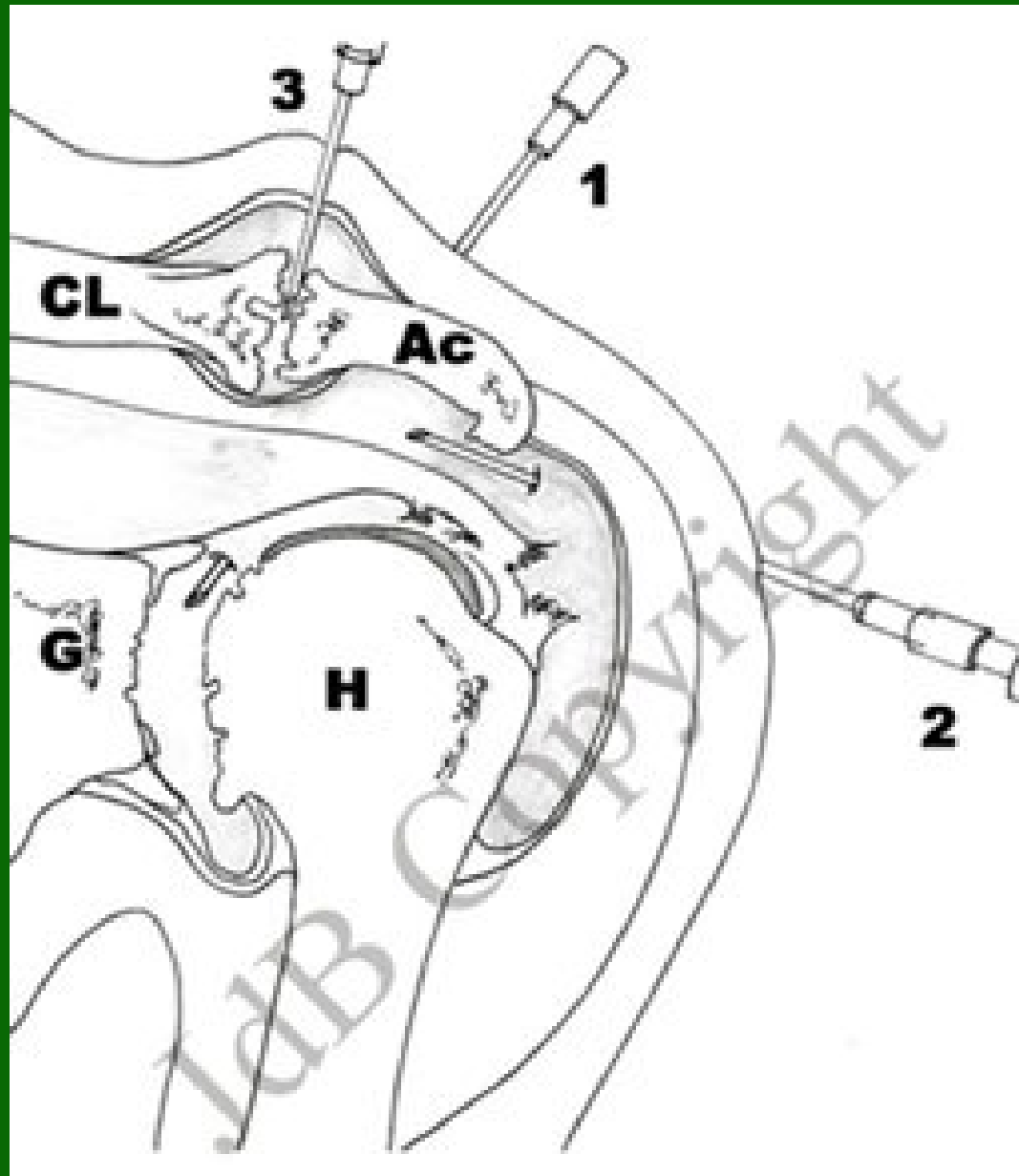
- Impingement pain +/- RCT
- For diagnostic reasons - is this patients pain due to impigment
- - Exclude ACJ, GHJ OA, Labral etc.



When are Hydro's a good idea

- Capsulitis
- Frozen Shoulder
- Stiffness
- Remember, most patients with Impingement/cuff stiffness have the pathology in the subacromial space, and wont respond to hydro.
- If you fix the subacromial space, you can get the shoulder going

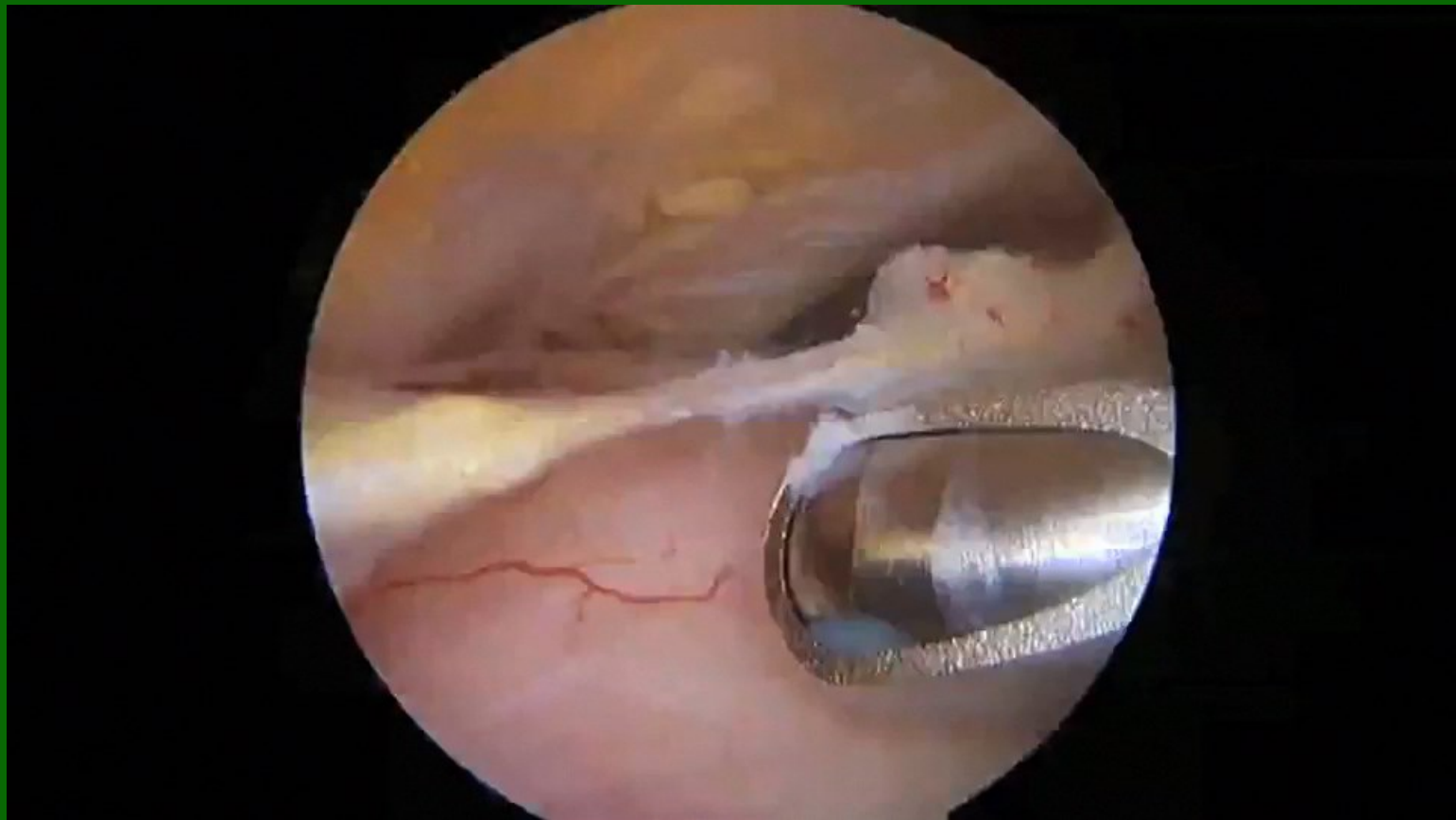




- How Many Injections Can I give?
- How Often Can I give Injections?
- PRP ? Stem Cells?



5. Surgery



Case 1

- 45 year old Man
- Presents with 2 weeks of impingement type symptoms in dominant shoulder
- Last few days of increasing pain and weakness





- **XR:** mild ACJ OA
- **MRI:** Full thickness tear in S.S. - 2cm retraction
- What is the BEST way to tell if his weakness is related to tendon dysfunction or pain?
- A. MRI
- B. XR
- C. Injection with Local Anaesthetic & Re-examine
- D. CT Scan



Diagnostic Injection

- What is the BEST way to tell if his weakness is related to tendon dysfunction or pain?
- A. MRI **X**
- B. XR **X**
- C. Injection with Local Anaesthetic & Re-examine ✓
- D. CT Scan **X**



- Strength testing after lignocaine injection may help to distinguish RC tendinopathy vs. tear



When to Refer?

- 1. Young < 60 yrs
- 2. Active/independent in older pop.
- 3. TRUE WEAKNESS with functional disturbance
- 4. Failure of non-operative therapy



Should I order an xray??

- Osteoarthritis



Bony metastasis

these patients presented with rot cuff tears!!



Rotator Cuff Arthropathy

- When a massive tear is present, the shoulder will sublux superiorly.
- Secondary arthritis will follow



- Thank you
- Questions?

Mr. Eden Raleigh
Orthopaedic Surgeon
Specialising in Shoulder & Knee Surgery
Ph: 9421 1900 0402697115
dredenraleigh@gmail.com

