The Stiff Shoulder

Ms. Ruth Delaney, FRCS
Consultant Orthopaedic Surgeon
Associate Professor, UCD

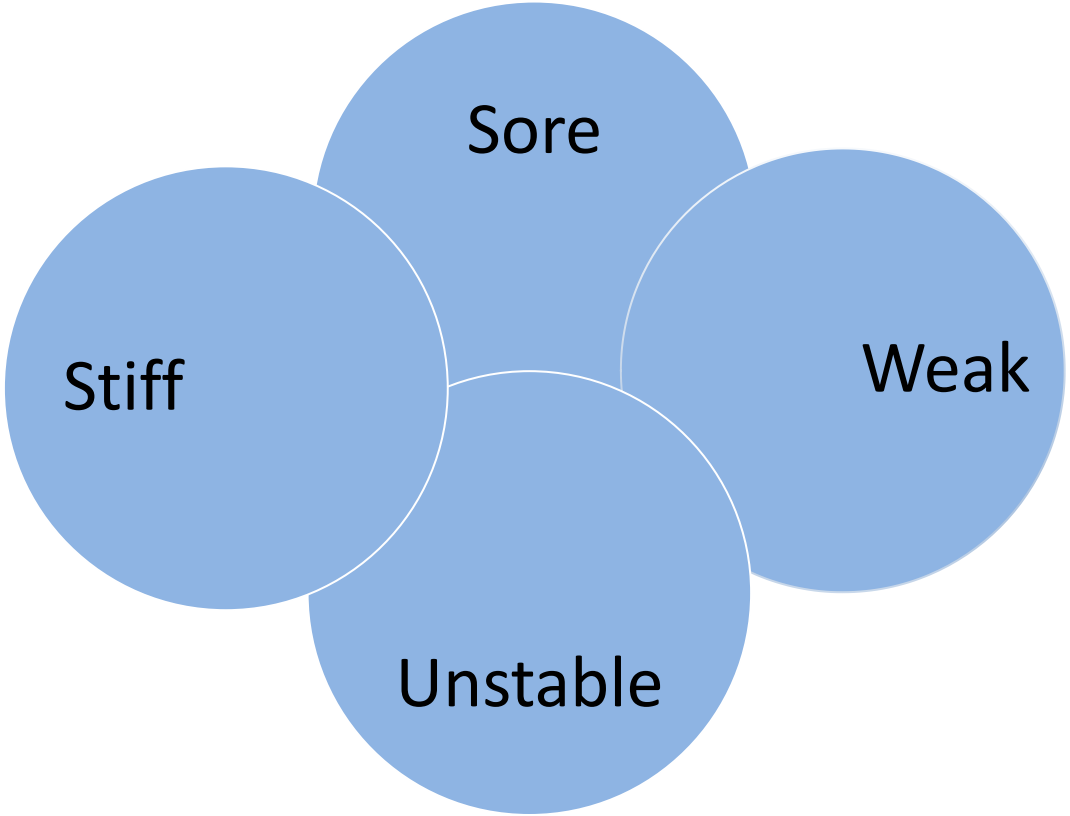
Dublin Shoulder Institute

Beacon Hospital
THIS IS MODERN MEDICINE

Disclosures

- BeeMed: stock
- Lynch Medical Supplies: grant support
- Precision OS: stock, scientific board member
- Stryker: consulting fees, design surgeon
- Tekno Surgical: grant support

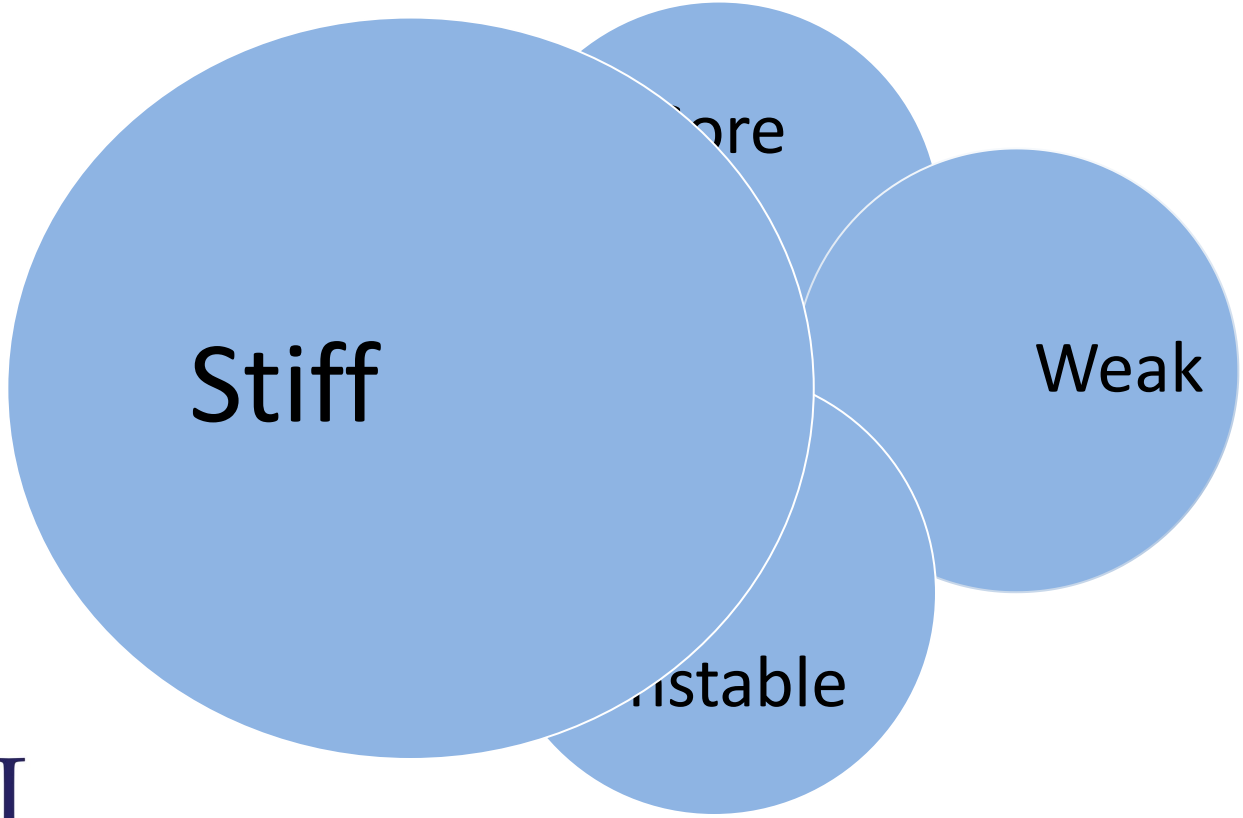
Shoulder Symptoms



Dublin Shoulder Institute

Beacon Hospital

Shoulder Symptoms



Dublin Shoulder Institute

Beacon Hospital

Stiff Shoulder

- Active and passive ROM limited
- Painful or painless
- Main differential: glenohumeral arthritis vs frozen shoulder

→ X-Ray!

Dublin Shoulder Institute

Beacon Hospital

Stiff Shoulder

- Other differentials:
  - Post traumatic
  - Secondary capsulitis e.g. cuff tear, post dislocation
  - Non-shoulder pathology – stroke, Parkinsons etc.

Dublin Shoulder Institute

Beacon Hospital

Stiff Shoulder: History

- Age
  - Idiopathic frozen shoulder typically 40s, 50s (but not always)
  - OA typically older (but not always)
- Onset
  - Timing
  - Trauma
- Consistent or Fluctuating
  - Aggravating/Relieving factors
- Pain
  - Location
  - Night pain

Stiff Shoulder: Exam

- Painful limitation of active ROM vs true passive ROM stiffness
- Crepitus
- Differentiate stiffness from weakness/pseudoparalysis
  - Check passive ROM
  - Purely weak/pseudoparalytic patient will have full PROM
  - Pain may inhibit this
  - Capsular end feel vs guarding

Stiffness vs Weakness

- This is not "frozen shoulder"!

- Pseudoparalytic shoulder / Profound weakness
  - in this case due to massive cuff tear secondary to dislocation
  - Dislocation reduced in ED
  - Cuff tear missed
  - Presented 6 months later

Dublin Shoulder Institute

Stiff Shoulder: Imaging

- X-ray
  - Too often neglected in the Irish system
  - **Better** than MRI for some things: OA, calcific tendinitis, fractures, AC joint injuries etc.
  - Age **70 or over** should have **X-ray first**

    (and only MRI if has failed conservative management, does not have Xray evidence of massive irreparable cuff tear, and would actually consider surgery)

Imaging

- MRI

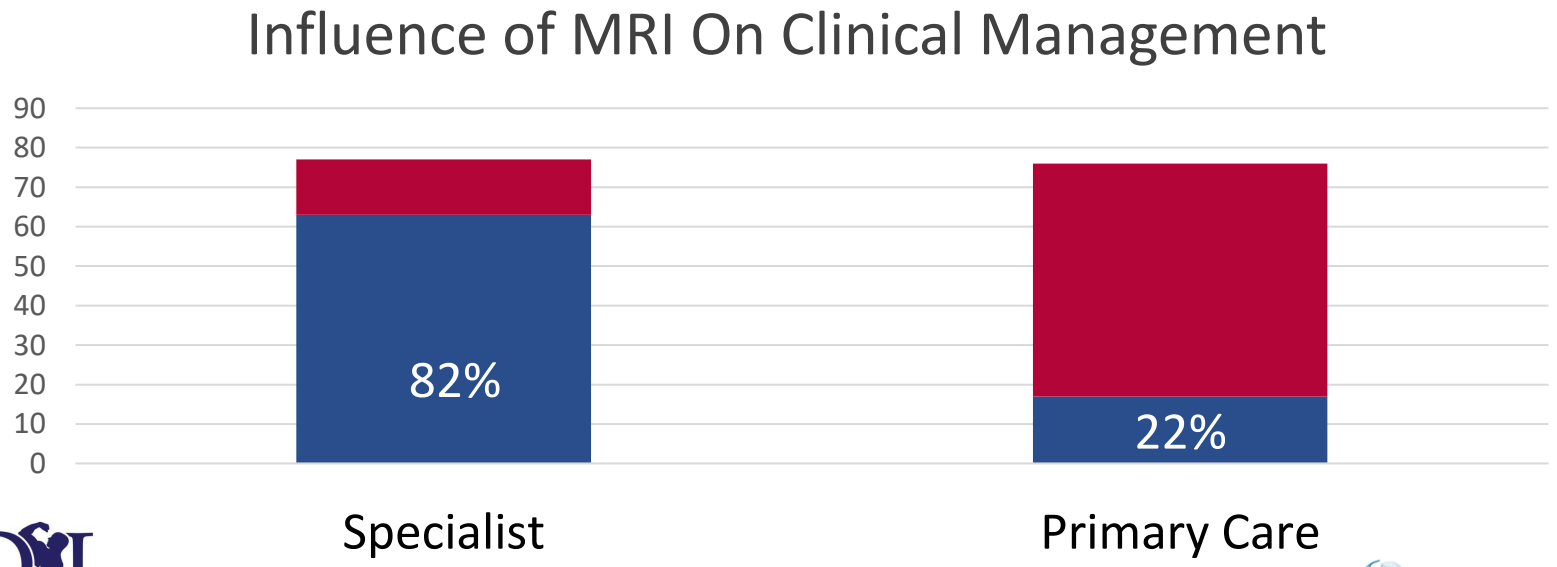
Irish Journal of Medical Science (1971 -)
https://doi.org/10.1007/s11845-020-02379-0

ORIGINAL ARTICLE

Check for updates

Rational use of shoulder MRI in the private setting: specialist-ordered MRIs influence clinical management significantly more often than primary care physicians

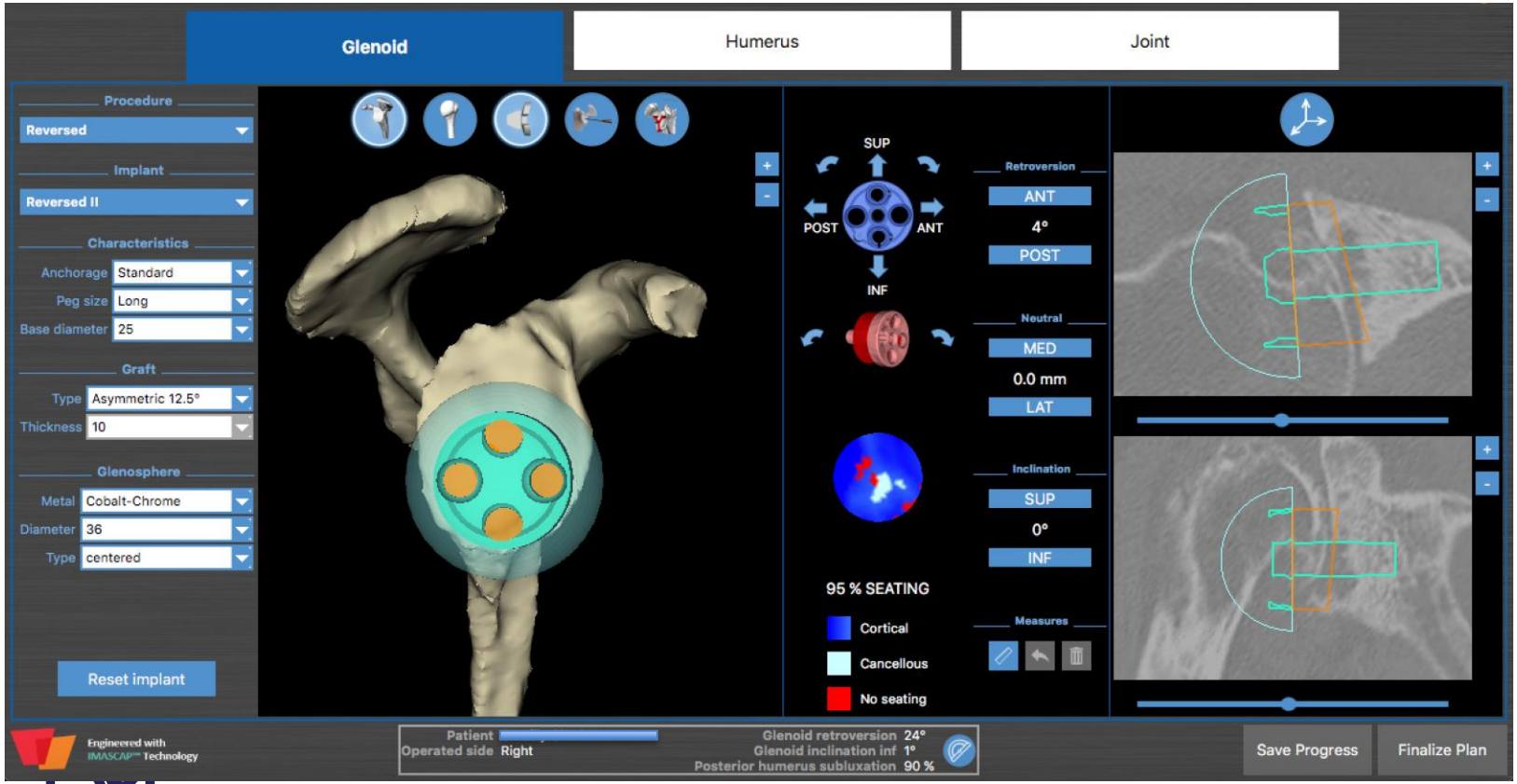
Rossa Devlin [1] · Ruth A. Delaney [2]



Dublin Shoulder Institute

Beacon Hospital

Imaging: CT Scan



Dublin Shoulder Institute

Beacon Hospital

Stiff Shoulder: Management

- Adhesive Capsulitis

- **Clinical** diagnosis – confirmed with normal X-ray

- Beware of normal, age-related changes on MRI

- Findings that are unlikely to be causing symptoms:
  - Partial rotator cuff tears/Tendinosis (= rotator cuff wear)
  - Labral tears in patients >40 with no instability history
  - SLAP tears

Stiff Shoulder: Management

- Adhesive Capsulitis

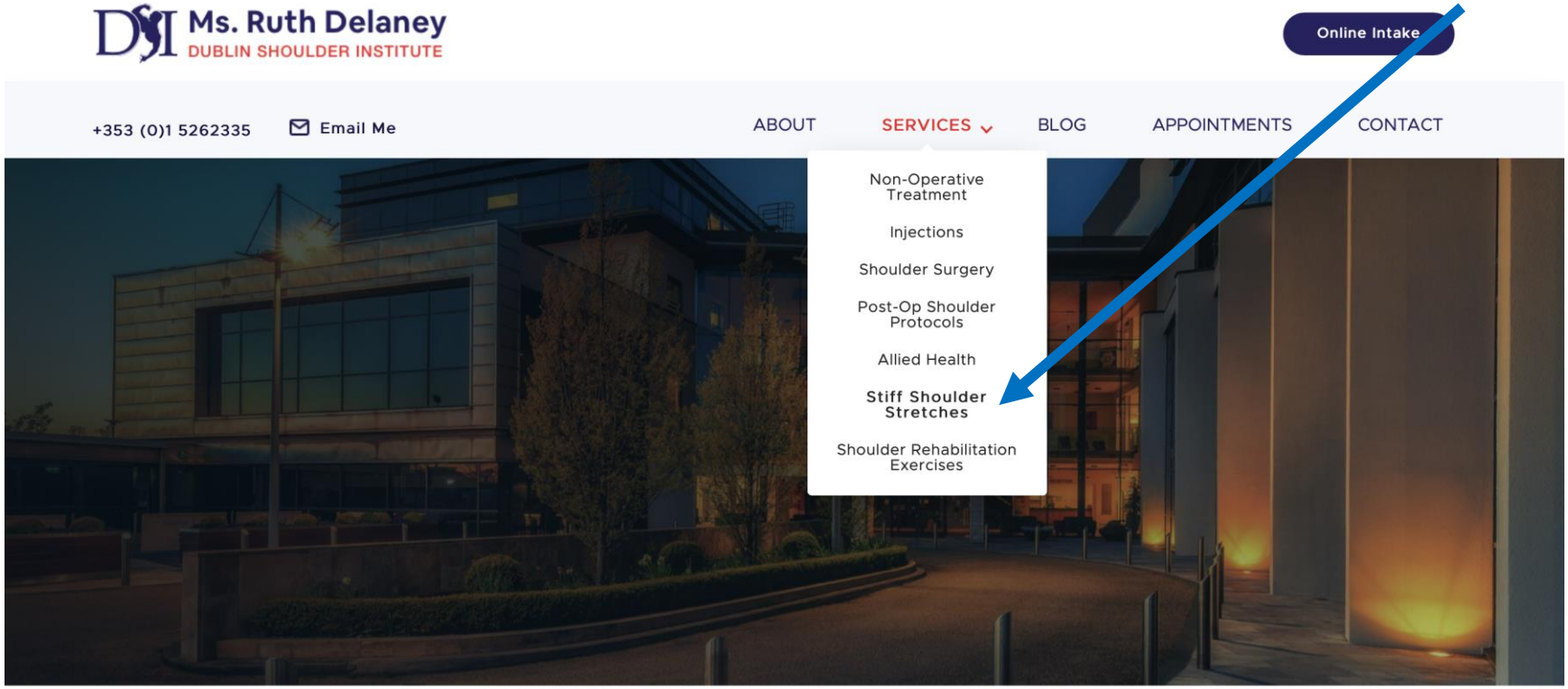
1. Pain management
   - Anti-inflammatories (non-steroidal, steroids)
   - Heat in AM/before stretches, ice in PM

2. GENTLE stretching
   - Max 5/10 discomfort with stretches
   - Stretch in a heated pool
   - Usually best without formal physio
   - Do not immobilize, no sling!

95% + cases will resolve with the above measures

Stiff Shoulder: Management

- Adhesive Capsulitis



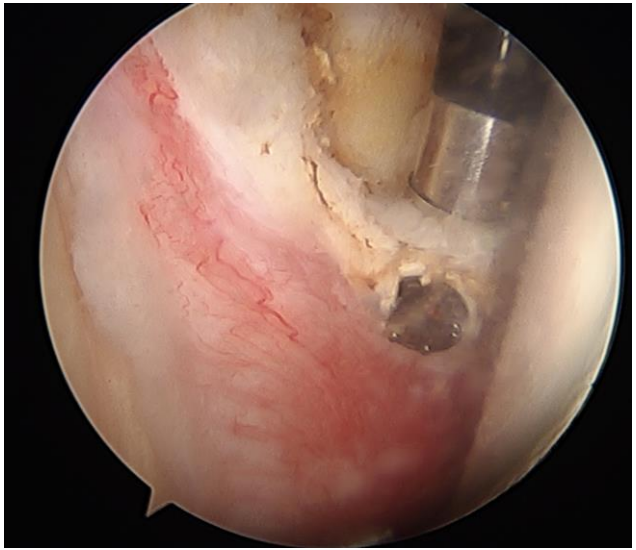
Services

Stiff Shoulder: Management

- Adhesive Capsulitis

- Minority of cases may need arthroscopic capsular release

- Manipulation under anaesthesia



Dublin Shoulder Institute

Beacon Hospital

Adhesive Capsulitis

The impact of the COVID-19 pandemic on frozen shoulder incidence rates and severity

Joachim Demyttenaere, MD[a,*], Oisin Martyn[b], Ruth Delaney, MB BCh BAO, MMedSc(Sports Med)[c]

J Shoulder Elbow Surg 2022

- Relative increase of 39.8% in idiopathic FS presentations
  - March 2020 – Jan. 2021 *vs.* March 2019 – Jan. 2020
- No significant difference in severity level or response to treatments

Dublin Shoulder Institute

Beacon Hospital

Adhesive Capsulitis

www.dublinshoulder.com/blog

Dublin Shoulder Institute

Beacon Hospital

Stiff Shoulder: Management

- Glenohumeral Osteoarthritis
  - Definitive Management is total shoulder arthroplasty

    Anatomic vs Reverse

  - Limited Role for Physio

    May aggravate pain

  - Pain Management

    Oral analgesia, NSAIDs

    Activity modification

    Corticosteroid injections

    Viscosupplementation injections

    Suprascapular nerve blocks (PRP??)

Dublin Shoulder Institute

Beacon Hospital

Shoulder Arthroplasty

Dublin Shoulder Institute

Beacon Hospital

Shoulder Arthroplasty

Dublin Shoulder Institute

Beacon Hospital

Take Home Messages: Stiff Shoulder

- Stiffness ≠ painful active limitation ≠ weakness
- Xray
- Frozen Shoulder: anti-inflammatory strategies, gentle stretching only
  (minority may need arthroscopic capsular release – not MUA!)
- Arthritis: shoulder replacement if symptoms impacting life & willing to consider surgery
  (otherwise can try pain management)

Dublin Shoulder Institute

Beacon Hospital

Thank you

www.dublinshoulder.com

Beacon Hospital