

ESP Clinics - An Approach to Elbow Pain

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Objectives:

- Formulate the key questions leading to the proper diagnosis
- Examine the elbow
- Define the main investigative modalities
- Treat the problem, including injection techniques

History

- Is the key!
- Each question should have specific purpose that affects decision-making
- **7 “Questions”**
- **Question 1: Demographics** (Age, Handedness, Occupation) – How old are you? What hand do you write with? What do you do for a living?
- **Question 2: Duration/Onset/Trauma** – When did the pain start? What were you doing? Has the pain gotten worse or better? (Acute, Chronic, Gradual, Progressive)
- *****Question 3: Location** - Point with 1 finger where the pain is the worst?
- **Question 4: Severity** - Does the pain keep you up at night? What % of normal is your elbow?
- **Question 5: Precipitating factors** – What activities make your pain worse? What activities are you unable to do because of the pain?
- **Question 6: Treatment** – Have you had any treatment? – NSAIDs, Physio, Injection
- **Question 7: Associated symptoms** – Do you have any numbness or tingling in your hand or neck pain?

Physical Examination

Inspection – swelling, ecchymosis, deformity, incisions

Palpation – posterior radiocapitellar joint, lateral epicondyle, ECRB origin, radial tunnel, medial epicondyle, flexor/pronator origin, ulnar nerve – cubital tunnel (proximal/distal/against resistance)

ROM

- Active – Flexion/Extension/Pronation/Supination
- Place hand on elbow w passive ROM – crepitus

Strength – Biceps. Triceps, Pronation, Supination, Wrist flexion/extension, Finger extension

Special tests

- Posterior radiocapitellar plica
- Anterior radiocapitellar plica

- Hook test
- Posterolateral rotatory instability
- Moving valgus stress test
- Tennis elbow shear test

Neurovascular exam

Ulnar nerve – tenderness, location (located, subluxed, dislocated), Tinnels

Elbow Imaging

Plain Xrays – AP, lateral, oblique

- Always with trauma – radial head, coronoid, dislocation, fracture
- AP – alignment, joint space
- Lateral – concentric, congruent

U/S – usefulness dependent on ultrasonographer

CT – best for evaluation of trauma, osteoarthritis

MRI – best for ligament injuries. Not that valuable for lateral epicondylitis – limited correlation of MRI finding with clinical symptoms

When to refer for orthopaedic assessment?

Acute:

- Fractures or dislocation of elbow joint
- Acute traumatic triceps avulsion
- Distal biceps rupture

Chronic:

- Lateral epicondylitis/epicondylosis - failure of conservative treatment – 3- 6 months, cortisone injection, functional limitations, pain
- Distal biceps rupture
- Recurrent elbow instability
- Elbow OA – terminal extension pain, limited range of motion
- Post traumatic contractures – non functional range of motion, plateau > 6 months
- Olecranon bursitis – failed conservative treatment/recurrence
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