



# SHOULDER ARTHROSCOPY

Dr Santosh S  
2<sup>nd</sup> year pg (Ortho)

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# CASE I

- **Name:** Mr. xxxx
- **Age:** 49 yrs
- **Sex:** Male
- **Address:** Nalgonda
- **Chief complaints:**

Pain in right shoulder since a year,  
unable to do over head activities  
such as comb his hair, reaching attic  
etc.



## **HISTORY OF PRESENTING ILLNESS**

- Patient was apparently normal a year back, when he had a RTA.
- Since then, complains of pain over right shoulder lateral aspect.
- Pain is intermittent, dull aching, non radiating, aggravated by overhead activities and relieved on taking rest and analgesics.
- Patient is unable to lift heavy objects with his right upper limb.



- **PAST HISTORY:**

Not a known case of diabetes mellitus, hypertension, asthma or tuberculosis.

- **PERSONAL HISTORY:**

Not significant.

- **FAMILY HISTORY:**

Not significant.



# GENERAL PHYSICAL EXAMINATION

- Patient is moderately built and nourished.
- No pallor, icterus, cyanosis, clubbing , lymphadenopathy and edema.
- Pulse: 82/min
- B.P: 130/90 mmHg
- CVS: S1, S2 heard, no murmurs
- RS: Normal vesicular breath sounds heard



# LOCAL EXAMINATION

## **INSPECTION:**

- Contour appears similar to the opposite side.
- Both scapulae at same level.
- No swelling, scars, sinuses.
- No gross muscle wasting.



## **PALPATION:**

- No local raise of temperature.
- Localised tenderness over the angle of acromion .

## **MOVEMENTS:**

Movements in the right shoulder are painful and restricted.

Abduction: 40 degree (Normal: 180 deg)

Flexion: 60 degree (Normal: 90 deg)

Extension: 30 degree (Normal: 45 deg)



# **LIST of SPECIAL TESTS for Rotator Cuff Pathologies.**

- Full can test- Supraspinatous.
- Empty can test- Supraspinatous.
- Drop arm test – Supraspinatous.
- Lift-off test- Subscpularis.
- Hornblower's test – Teres minor.
- Hawkins-kennedy test- Impingement.
- Belly compression test- Subscapularis.



# EMPTY CAN TEST

**PURPOSE:** A positive test indicates a tear to the supraspinatus tendon or muscle.

**DESCRIPTION:**

The patient elevates the arms to 90 degrees and horizontally adducts 30 degrees to the scapular plane with thumbs down to the empty can position.

Test is positive if it elicits pain and/or weakness.



# FULL CAN TEST

**PURPOSE:** To assess the supraspinatous pathology.

**DESCRIPTION:**

The patient elevates the arms to 90 degrees and horizontally adducts 30 degrees to the scapular plane with thumbs up to the full can position.

Apply a downward force just proximal to the patient's wrist while the patient resists.

Test is positive if it elicits pain and/or weakness.



# DROP ARM TEST

**PURPOSE:** To test for Rotator cuff tears (supraspinatus).

**DESCRIPTION:**

Patient is seated with examiner to the front.

Examiner grasps the patient's wrist and passively abducts the patient's shoulder to 90 degrees.

Examiner releases the patient's arm with instructions to slowly lower the arm.

Test is positive if the patient is unable to lower his or her arm in a smooth, controlled fashion.





# PROVISIONAL DIAGNOSIS

**ROTATOR CUFF TEAR with  
secondary Adhesive Capsulitis of  
RIGHT SHOULDER**

# MRI

- Shows the supraspinatous tendon at about 5.19mm from its insertion to humerus shows a ***small partial tear*** involving its inferior aspect (humeral surface).





# PRE OP INVESTIGATIONS

- Hb: 14gm%
- RBS: 96mg/dl
- TLC: 12000/cumm
- Platelet count: 2.4lakhs/cumm
- RFT: WNL
- BT, CT: Normal
- HIV, HbsAg: Negative
- ECG: WNL
- Chest X-ray: Normal



# PLAN OF SURGERY

**DIAGNOSTIC SHOULDER  
ARTHROSCOPY /  
ROTATOR CUFF REPAIR.**



# OPERATIVE FINDINGS

- The clinical, radiological(MRI), and diagnostic arthroscopy confirms partial rotator cuff tear of right shoulder.
- Debridement of frayed edges with subacromial decompression followed by mobilization done under anesthesia.
- Rotator cuff tear not repaired in view of Partial thickness tear.



# Partial thickness tear of supraspinatous tendon



# FOLLOW UP

- **3<sup>rd</sup> POD:** Patient discharged with arm sling pouch.
- **10<sup>th</sup> POD:** Suture removal with wrist, elbow and pendulum exercises.
- **3 weeks:**
  - **Range of movements:**
    - Abduction: 90 deg
    - Flexion: 70 deg
    - Extension: 35deg



## CONT...

- **6 weeks:**

- Encourage functional movements within pain limits.
- Rotator cuff strengthening and closed chain exercises.

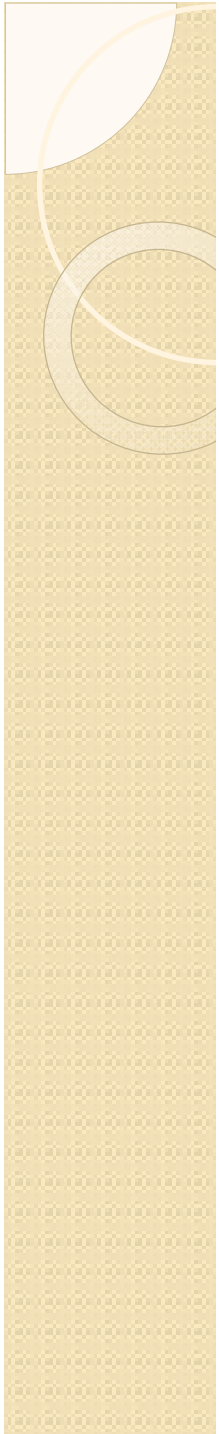
### **Range of movements:**

Abduction: 180 deg.

Flexion: 90 deg.

Extension: 45deg.

NAME	AGE/ SEX	C/O	CLINICAL DIAGNOSIS	MRI FINDINGS	ARTHROSCOPI FINDINGS
Mr Sathaiah	45/male	Pain over left shoulder since a month, followed by RTA.	Rotator cuff tear/ adhesive capsulitis.	Partial tear of supraspinatous tendon.	Minimal fraying articular surface bursal surface no
Mrs Pannik	37/Female	H/o slip and fall , C/o pain over left shoulder for 6 months.	Rotator cuff tear	Complete tear of supraspinatous tendon.	2cm complete of the supraspinatous tendon .
Mr Anjaiah	52/Male	H/o assault a month back.	Adhesive capsulitis / Rotator cuff tear.	Partial thickness tear of supraspinatous tendon.	Bursal side part thickness tear no
Mr Ramulu	71/male	H/o hit by a bull while	Rotator cuff tear	Full thickness tear of	3.5cm fullthickr tear of



**THANK YOU**

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