



Shoulder examination



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Common symptoms

**Tingling
Numbness**

Pain

**Loss of
movements**

Weakness

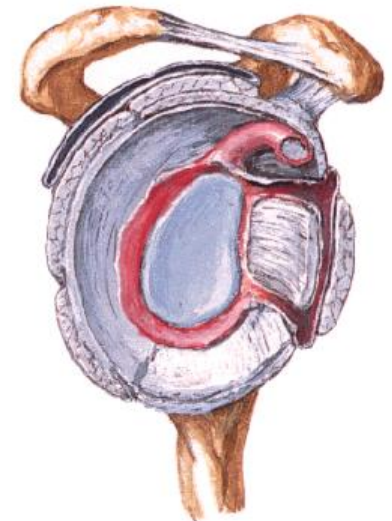
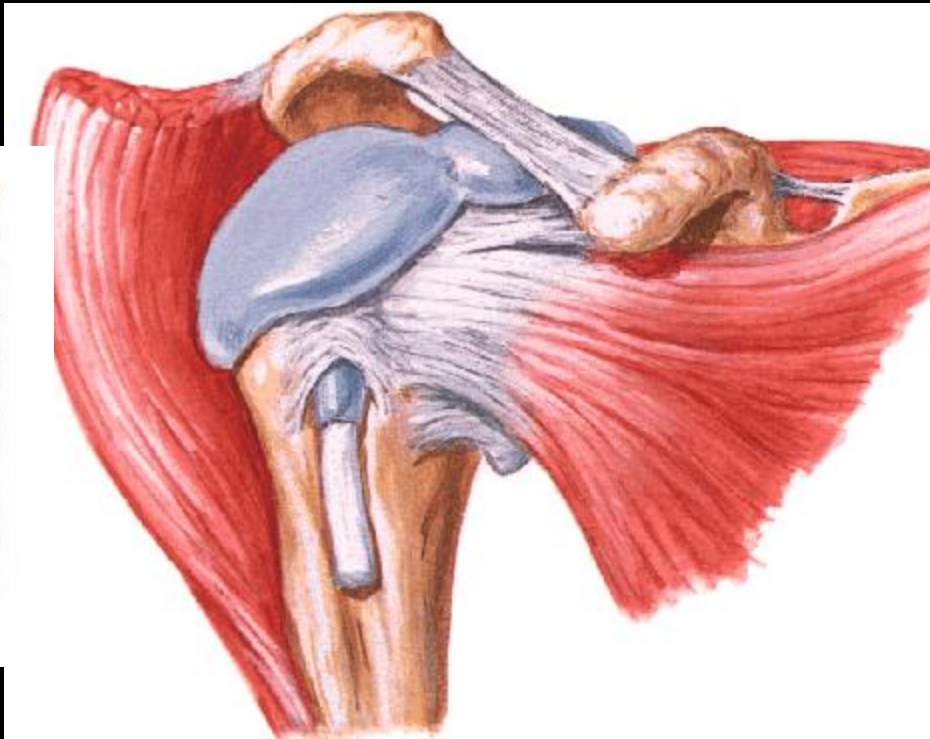
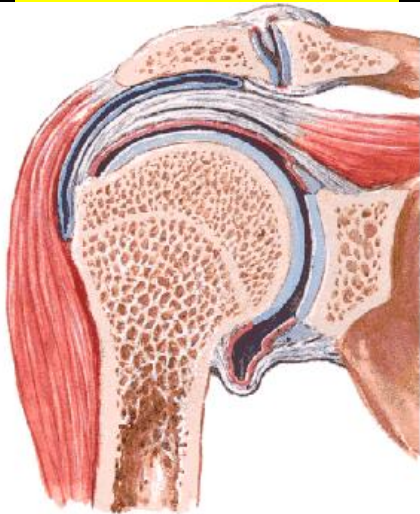


Approach

Joint

Arthritis

Inflamed



dislocation

Inflamed/
rupture

Tendon, rotator cuff

History

Age

Age < 40

Instability

**Rotator cuff
tendinopathy
Calcific tendinitis**

Age >40

**Cuff tears
Adhesive
capsulitis**

**Arthritis
(GH & ACJ)**

History

Duration*

- **Acute:** Calcific tendinitis

 - Infections

 - Trauma

- **Chronic:**

 - Rotator cuff tear / Impingement

 - Frozen shoulder

 - Arthritis

History

Trauma (mechanism)*

- Instability
- Cuff tears
- SLAP



History

Inability to perform certain activities

- Can't throw: SLAP/ Labral lesion
- Can't lift: RC tear/ Frozen shoulder

History

Sports participation

Instability & cuff overuse

- *Overhead sports: baseball, softball, tennis
- *Collision sports: hockey, football, rugby

ACJ arthritis

- *weight lifter

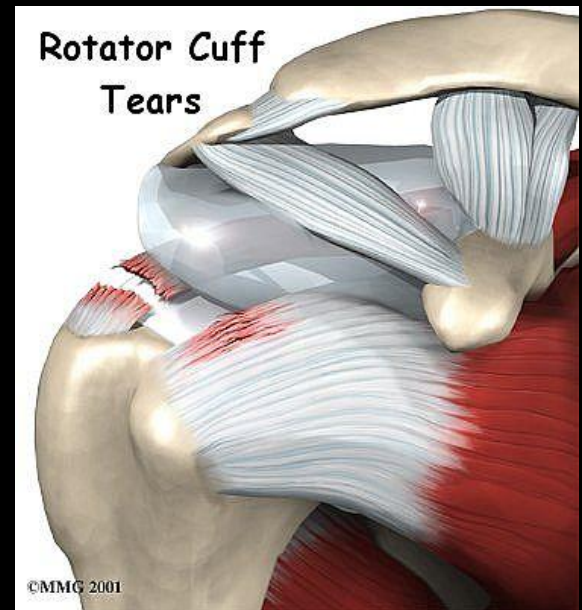
History

Pain*

- Pain at night; can't sleep on shoulder

Rotator cuff tear / Impingement

Frozen shoulder



History

Pain*

■ Pain with overhead activity

Rotator cuff disease

ACJ arthritis

Scapular dyskinesia



History

Pain*

■ Pain localized to top of shoulder**

ACJ Arthritis

ACJ separation



History

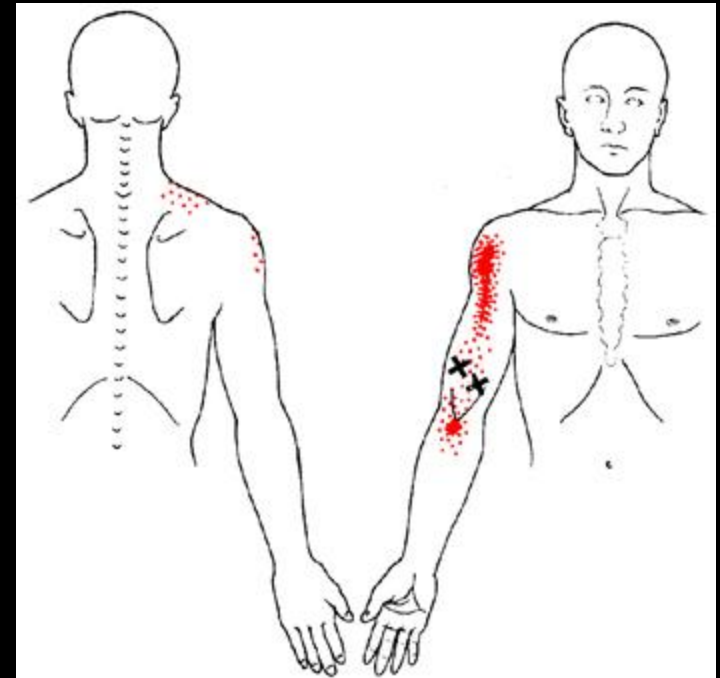
Pain radiation

■ Pain over deltoid and lateral arm

Subacromial bursitis

Adhesive capsulitis

GH arthritis

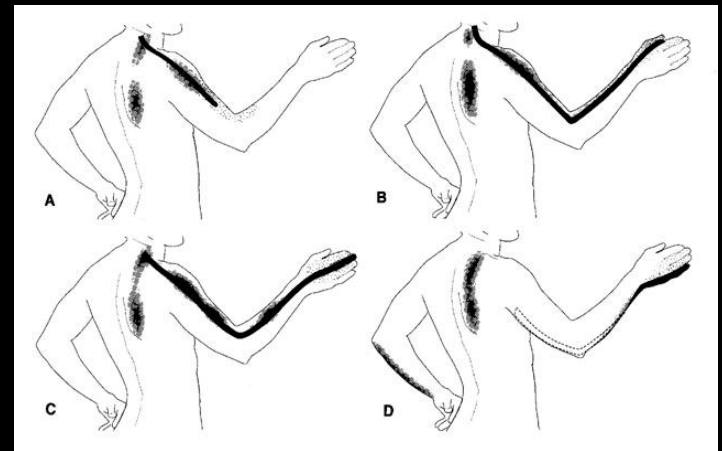


History

Pain*

- Pain &/ tingling sensation; aggravated by lifting arm or weakness

IVDP; C. spine



History

Weakness in lifting arm*

- Rotator cuff tear
- Brachial plexus injury



History

Passive loss of movement*

- GH arthritis
- Adhesive capsulitis



History

Systemic illness

- Diabetes mellitus
- Thyroid disorder
- Epilepsy
- Heart disease

History

Pain

Pathoanatomy

Biomechanics

Stiffness

Frozen
shoulder

Arthritis

Weakness

Cuff tear

Nerve injury

Examination

Look

Feel

Move

Special test

*Undress upper half

Examination

Inspection (front)

Attitude

Muscle wasting

Deformities



Examination

Inspection



Examination

Inspection (back)

Muscle wasting

Deformities

Scapula

Spine



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Examination



Examination



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Examination

Inspection (scapula)



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Examination

Inspection (scapular dyskinesia)



Palpation

- Bony prominences: Tenderness
 - AC joint
 - Bicipital groove
 - Coracoid process
 - Joint line
 - Tuberosities
 - Supraspinous fossa
 - Ligament laxity***



Movements

- Range- active & passive
- Painless or painful
- GH/scapulothoracic



Movements

- Range- active & passive

Movements	Active	Passive	Conclusion
	+	+	Normal / Altered rhythm / referred pain
	-	+	Not stiff / cuff tears
	-	-	Stiff, arthritic

Special test for..

- **Acromioclavicular joint**
- **Impingement tests**
- **Rotator cuff tears**
- **Labral lesions**
- **Bicipital tendon disease**
- **Stability**
- **Others..**



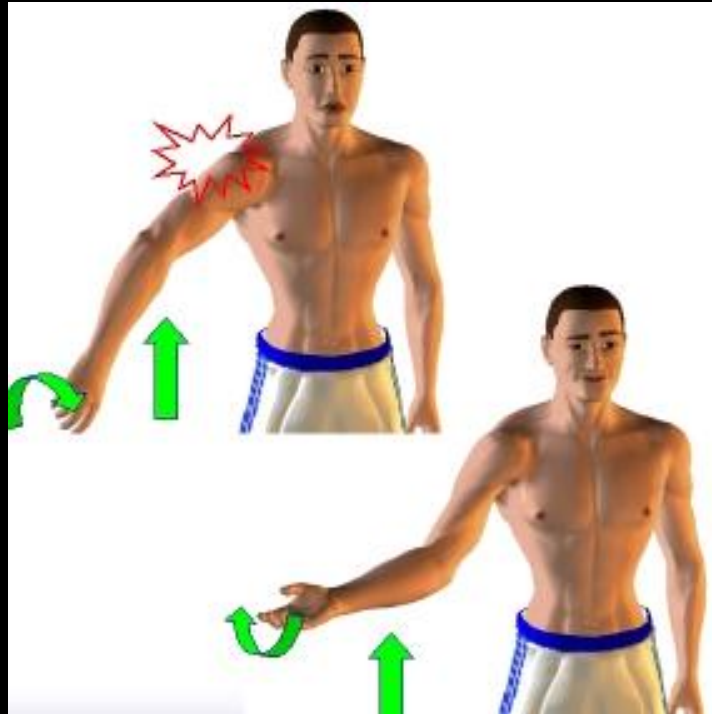
Examination	Associated condition	Sensitivity	Specificity
Muscle wasting (Supra/infraspinatus)	Rotator cuff tear	56	73
Acromio-clavicular tenderness	ACJ arthiritis / chronic sprain	96	10
Resticted ROM	Adhesive capsulitis	86	72
Hawkins Impingement	Impingement/ rotator cuff disorder	72	66
Drop arm test	Large rotator cuff tear	27	88
Empty can supraspinatus	RC involving supraspinatus	44	90
Lift off subscapularis	RC involving subscapularis	62	100
External rotation Infraspinatus strength	RC involving infraspinatus	42	90
Cross body adduction	ACJ arthritis	77	79
Apprehension	GH instability	72	96
Relocation	GH instability	81	92

ACJ

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Impingement

Rotator cuff tear (SS)



Empty & full can test

Full can: Specific for Full thickness cuff tear
Negative in tendinitis & Partial cuff tear

Rotator cuff tear (SS)



Jobe's supraspinatus test



Full can sign

pain + strength

Rotator cuff tear (SS)



Empty and full can test

Rotator cuff tear



Infraspinatus & teres strength

Rotator cuff test

- **Drop arm test (Codman's sign) – for massive rotator cuff tears**

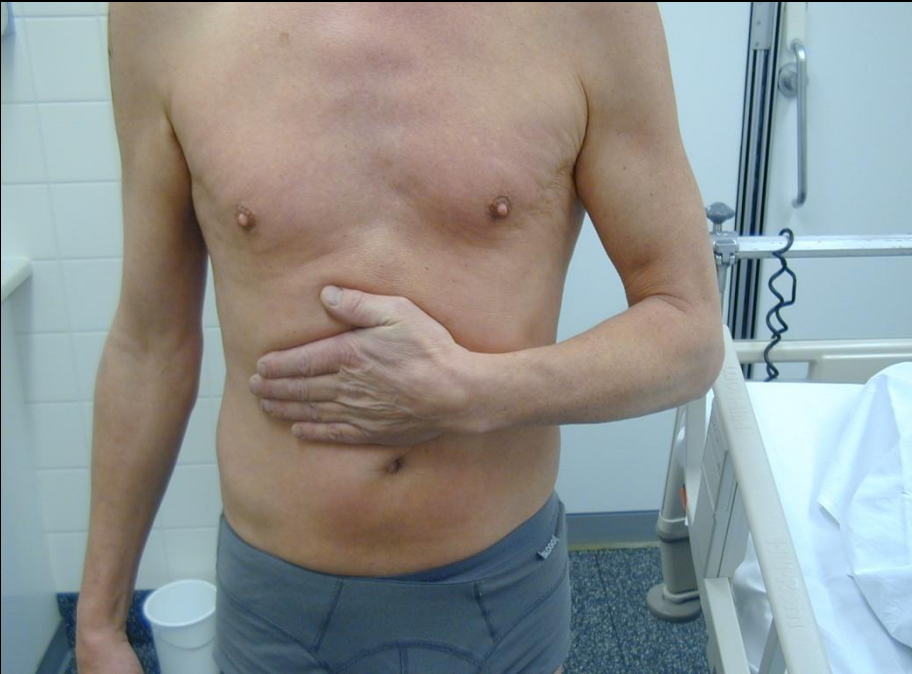
Rotator cuff tear



Gerber's subscapularis lift-off test

Rotator cuff tear

Napoleon / belly press sign



Rotator cuff test

- External & internal rotations in 90° abduction



Crepitus indicates
hypertrophied subacromial bursa
or rotator cuff tear

Bicipital tendon test



Speed's and O'Brien test

Anterior stability test



Apprehension test

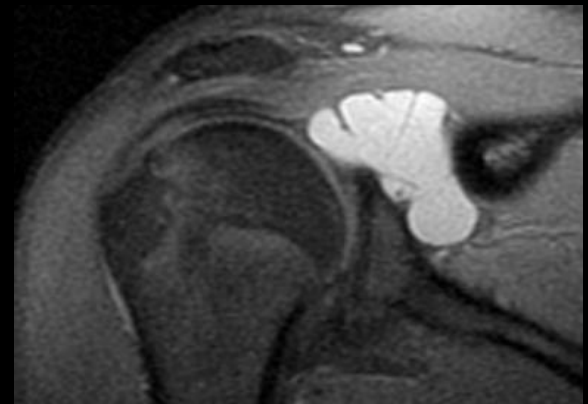
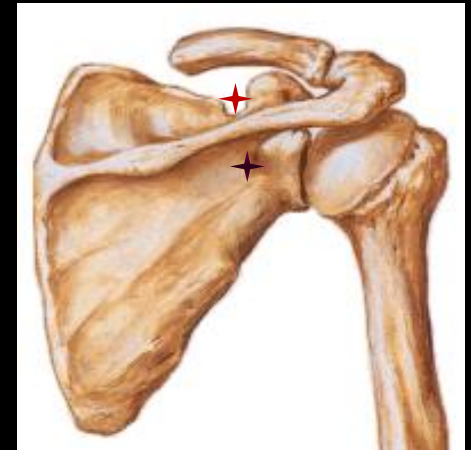
Anterior stability test



Sulcus sign

Compression neuropathy

- Supraspinatus and infraspinatus weakness presents as cuff tear
- However,
 - Neer's -ve
 - Hawkins -ve
 - other cuff test -ve



Compression neuropathy

- Serratus anterior:
Winging (Up & in)



- Trapezius:
Winging (Down & out)

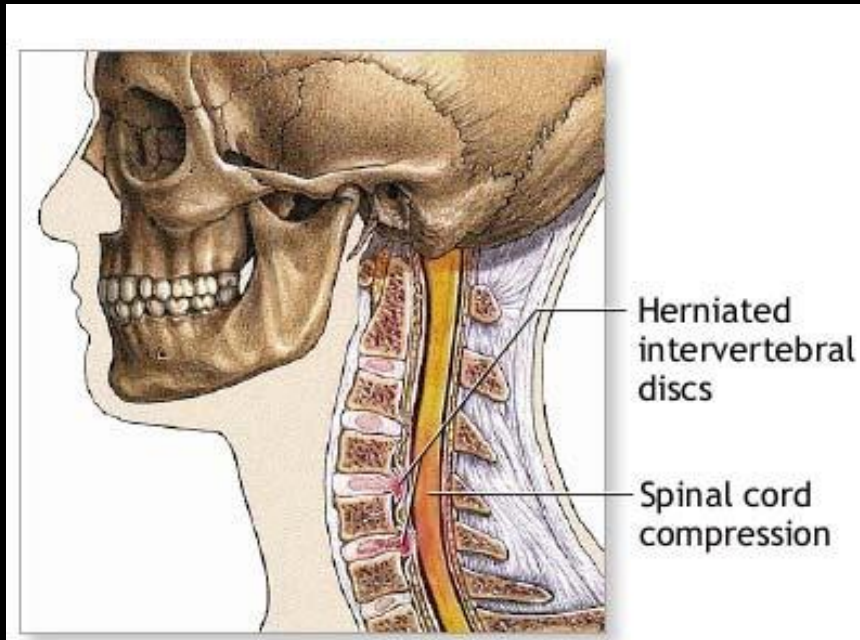


Still no clues

Do examine

- **Cervical spine**
- **Chest**
- **Thoracic outlet**
- **CVS & Abdomen**

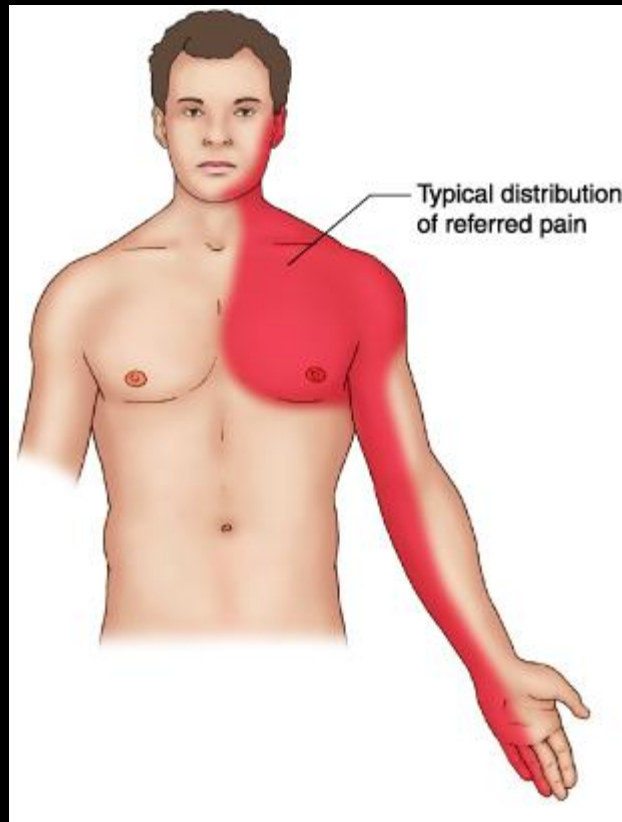
Cervical spine



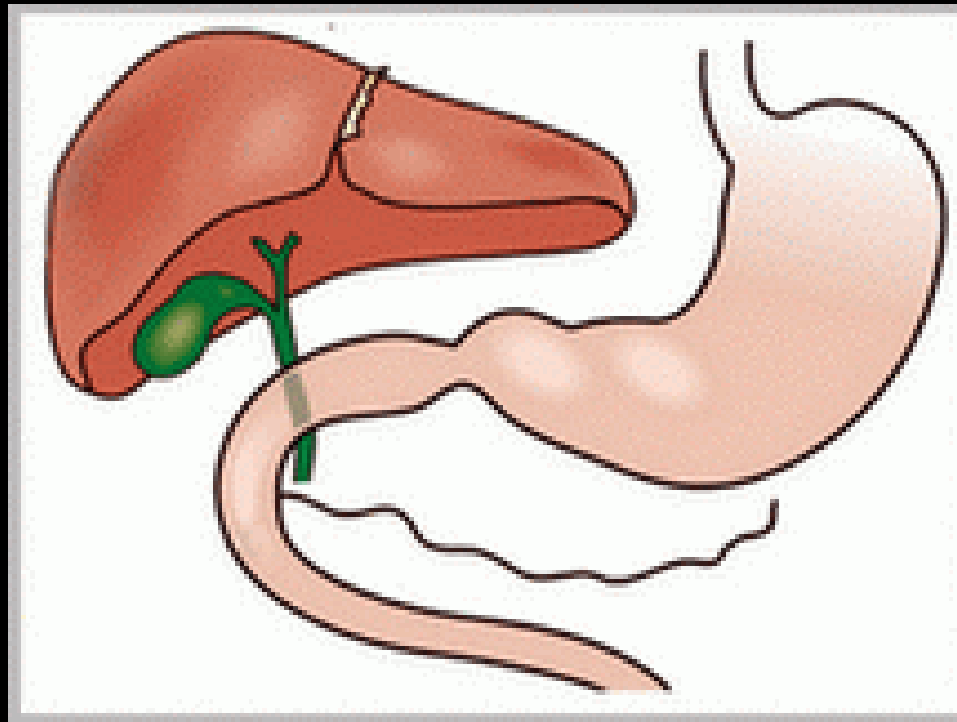
Chest



Heart



Abdomen



Investigations

- X-ray
- USG
- MR scan

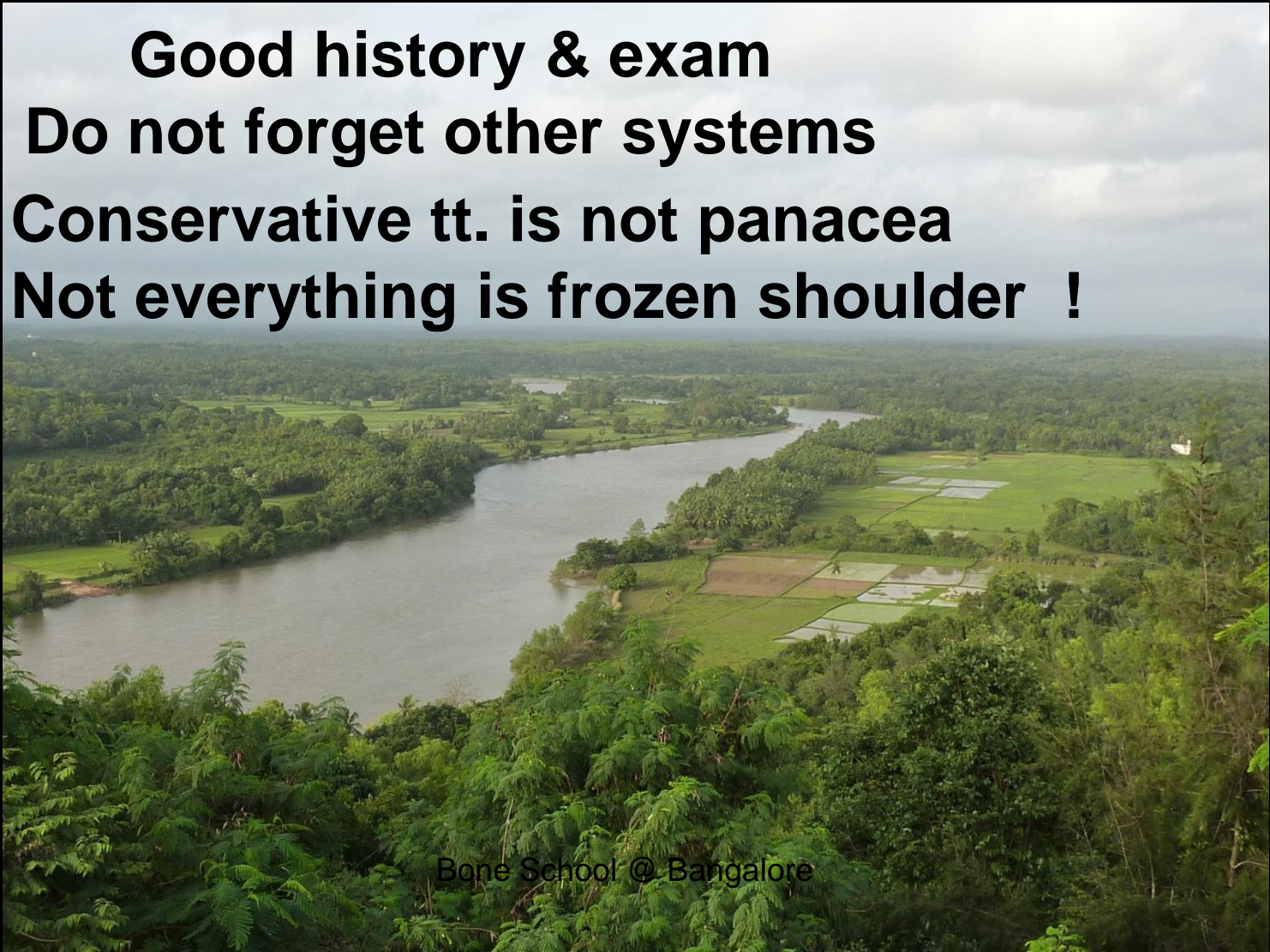
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Take home message

Good history & exam
Do not forget other systems
Conservative tt. is not panacea
Not everything is frozen shoulder !





THANK YOU

ne who @ Bangalore