GP MSK Update

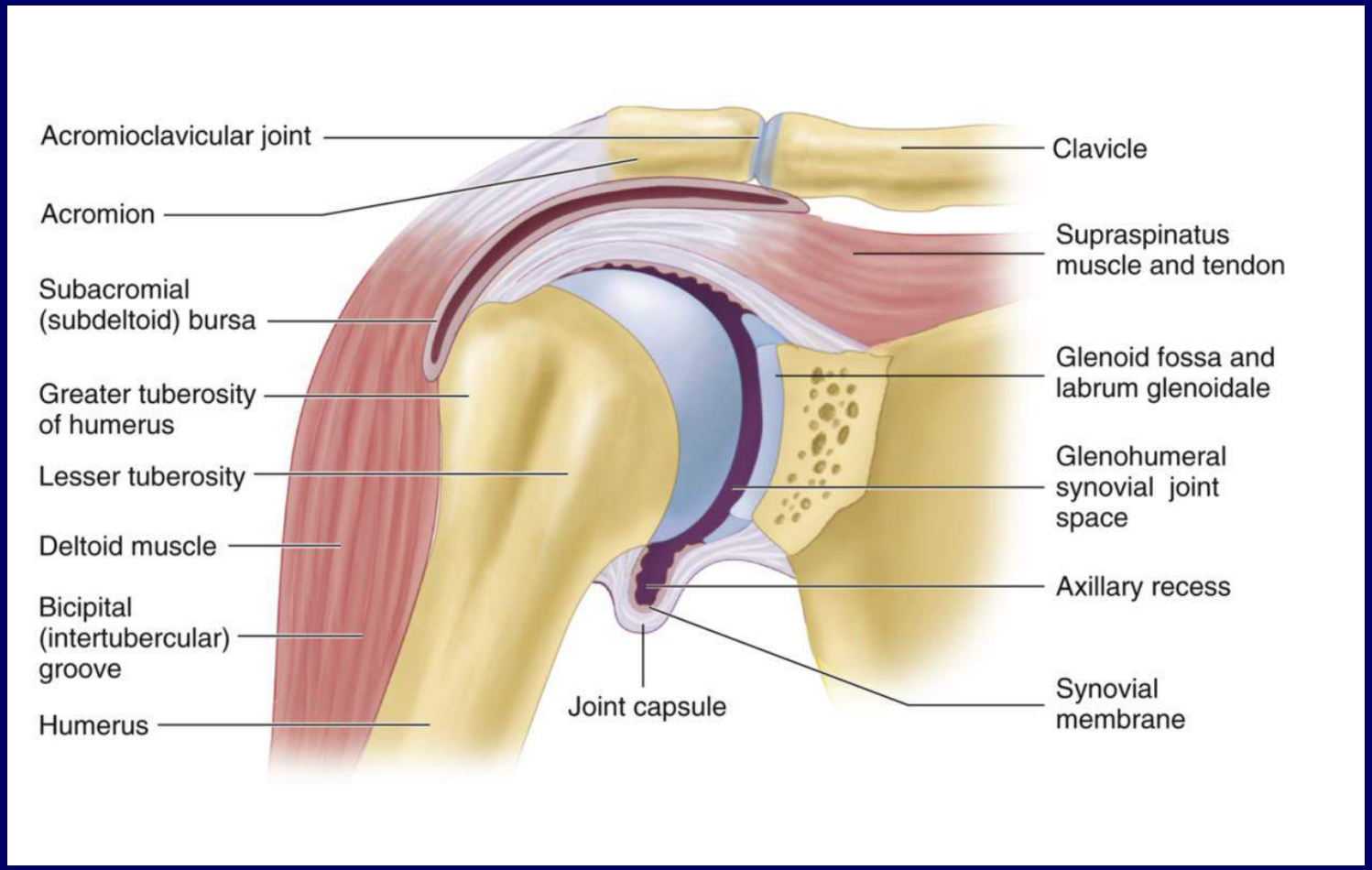
30th November 2016

Overview

- Examination of the shoulder
- Examination of the knee
- Update on LBP
- Miscellaneous MSK problems

Assessing Shoulder Problems in Primary Care

Normal Shoulder Anatomy



Shoulder Diagnoses

1. Impingement (SAPS)
2. Capsulitis (Frozen Shoulder)
3. Rotator Cuff Tear
4. Arthrosis (AC & GH)
5. Instability

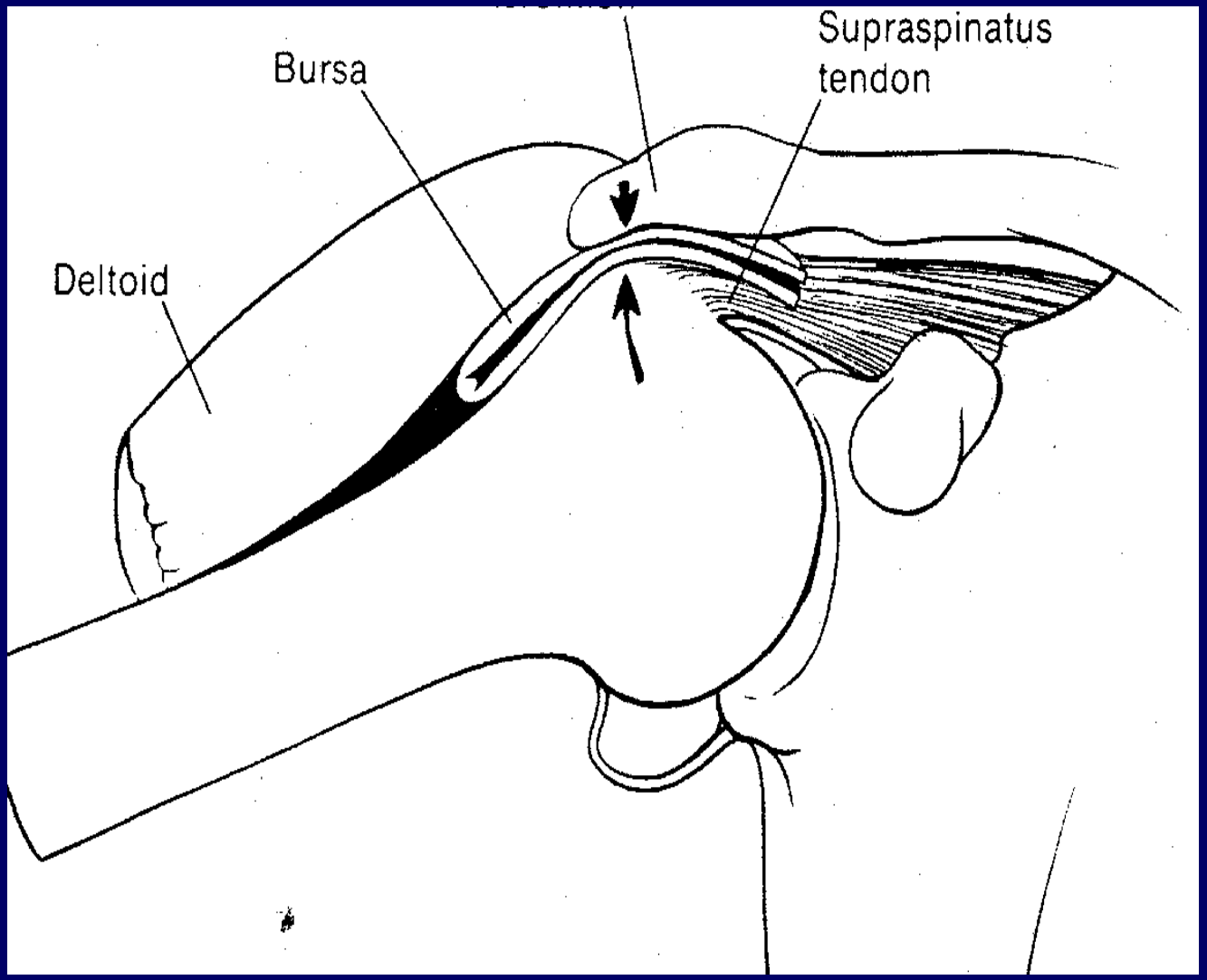
History: Where?

- Neck/shoulder sweep ➔ Cervical
- Superior (well localised) ➔ AC joint
- Deltoid ➔ SA/GH

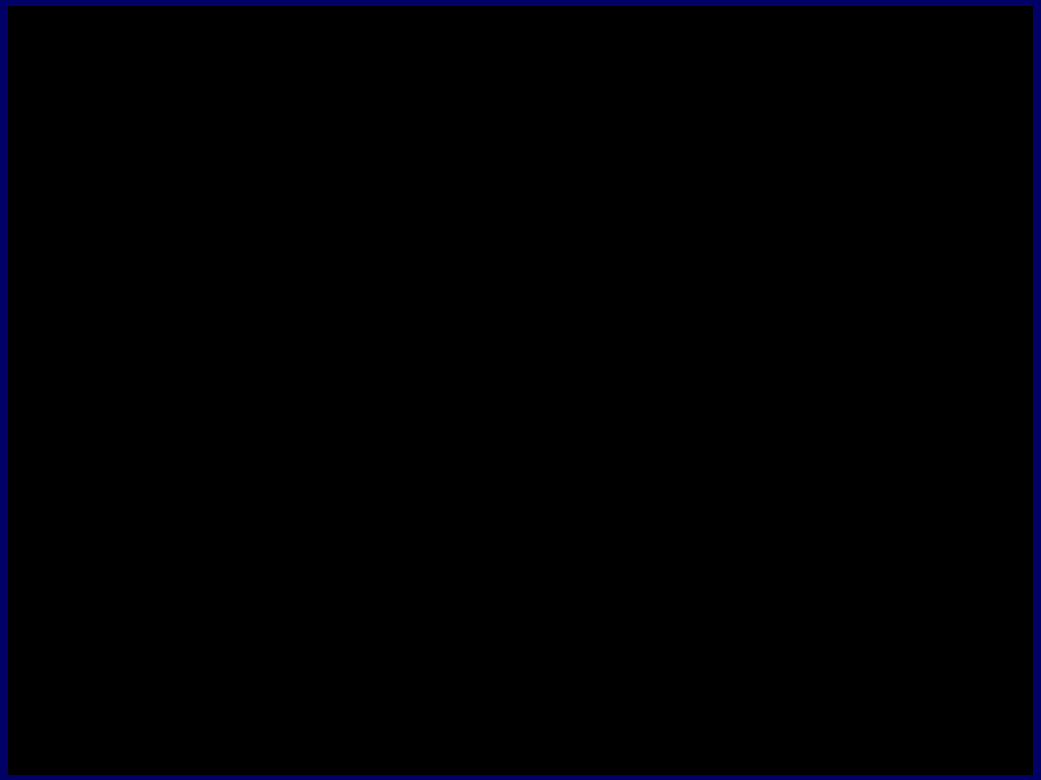
Subacromial Pain Syndrome (Impingement) -SAPS

- aka Supraspinatus Tendinitis, Rotator Cuff syndrome, Subacromial Bursitis etc.
- Middle aged
- Pain in deltoid area
- Painful arc, impingement sign
- +/- Pain on resisted cuff tests

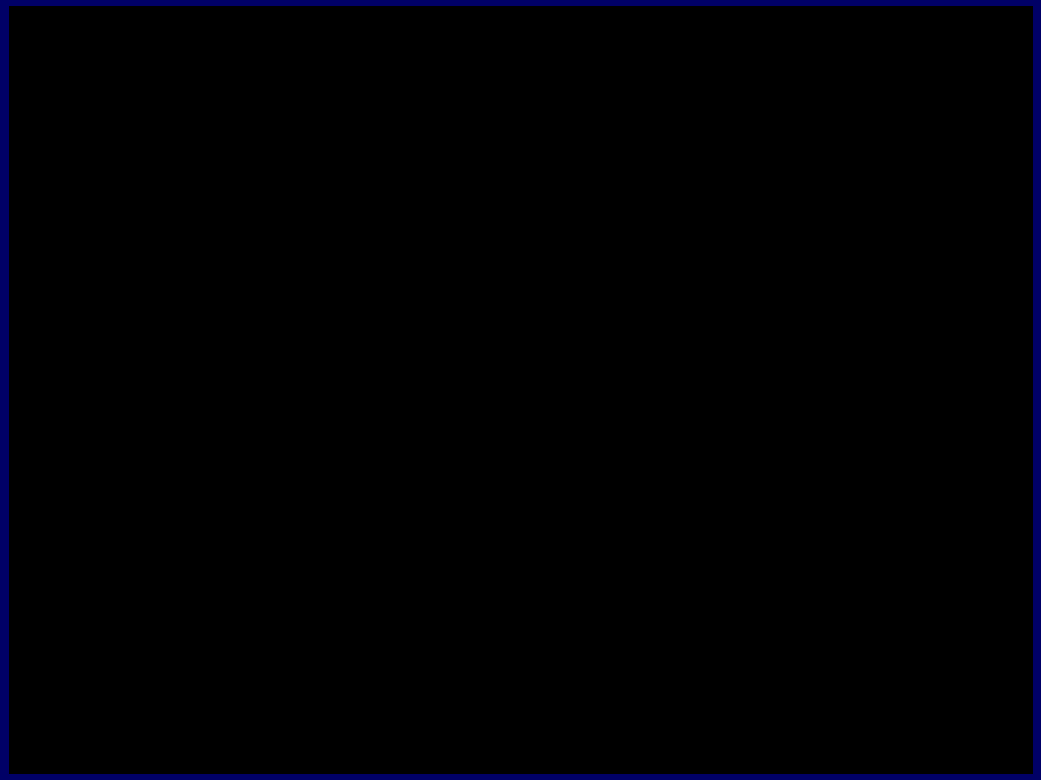
Subacromial Impingement



Hawkin’s test



Neer's Sign



Impingement Management

- Patient Information Leaflet
- Analgesia
- Injection - 20-40mg Kenalog + 5ml 1% lidocaine. (Inject posteriorly under acromion)
- Physiotherapy
- Surgery (SAD)
- www.shoulderdoc.co.uk

Frozen Shoulder

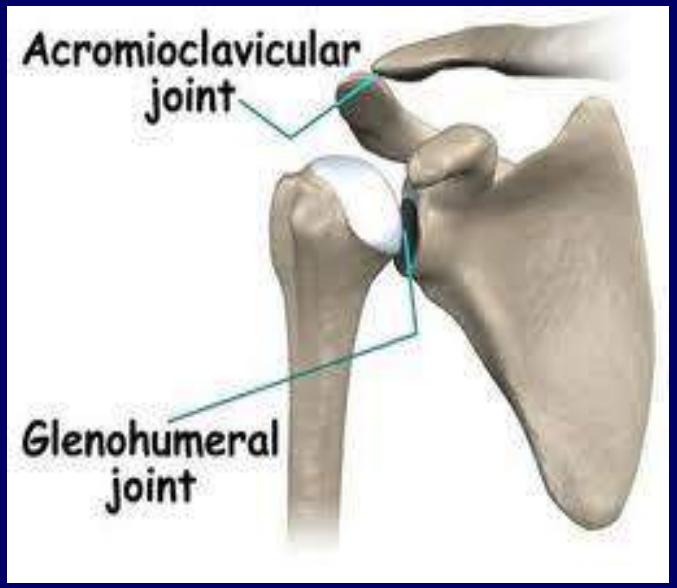
- Middle aged (40-60 years)
- Pain in deltoid area (C5 dermatome)
- Possible radiation towards hand
- Active and passive movements restricted
- Minimal passive lateral rotation (Capsular pattern)

Capsulitis Management

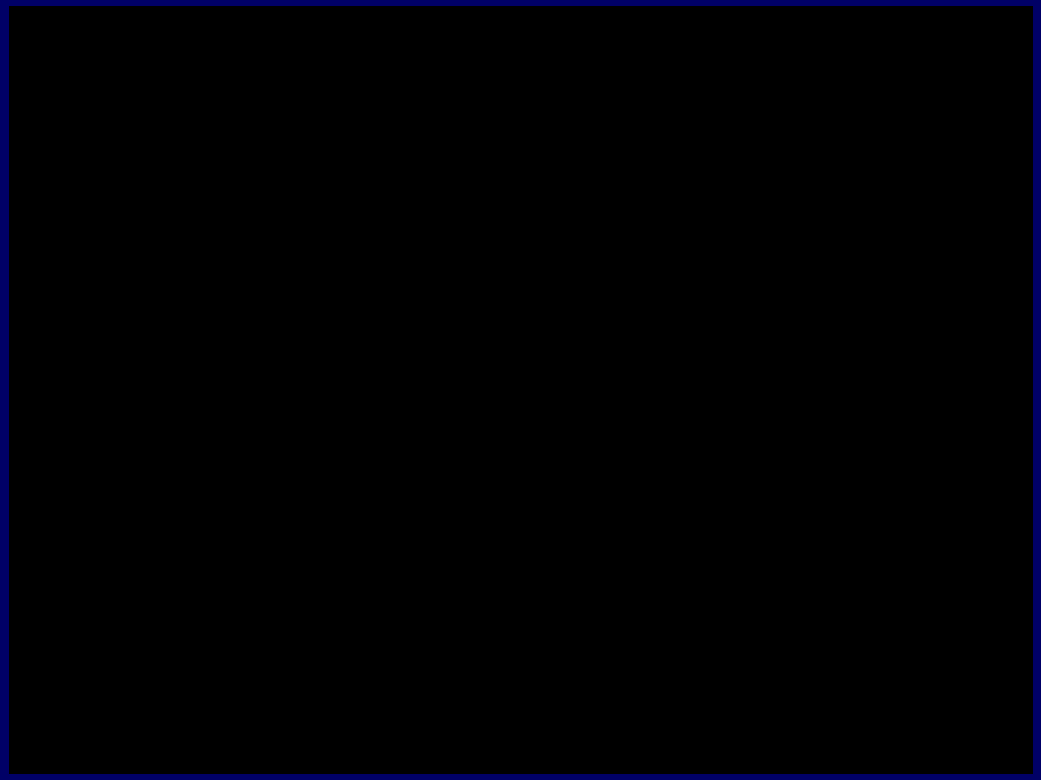
- No X-ray
- Patient Information leaflet
- Analgesia
- Injection (1 ml Kenalog, + up to 10 ml 0.25% Marcain or 1% Lidocaine)
- Physiotherapy
- Surgery

A-C joint

- Sports person (sprain) or the elderly (OA)
- Well localised pain
- “Point to the joint”
- Scarf test and tender over the joint



Scarf test



AC joint OA Management

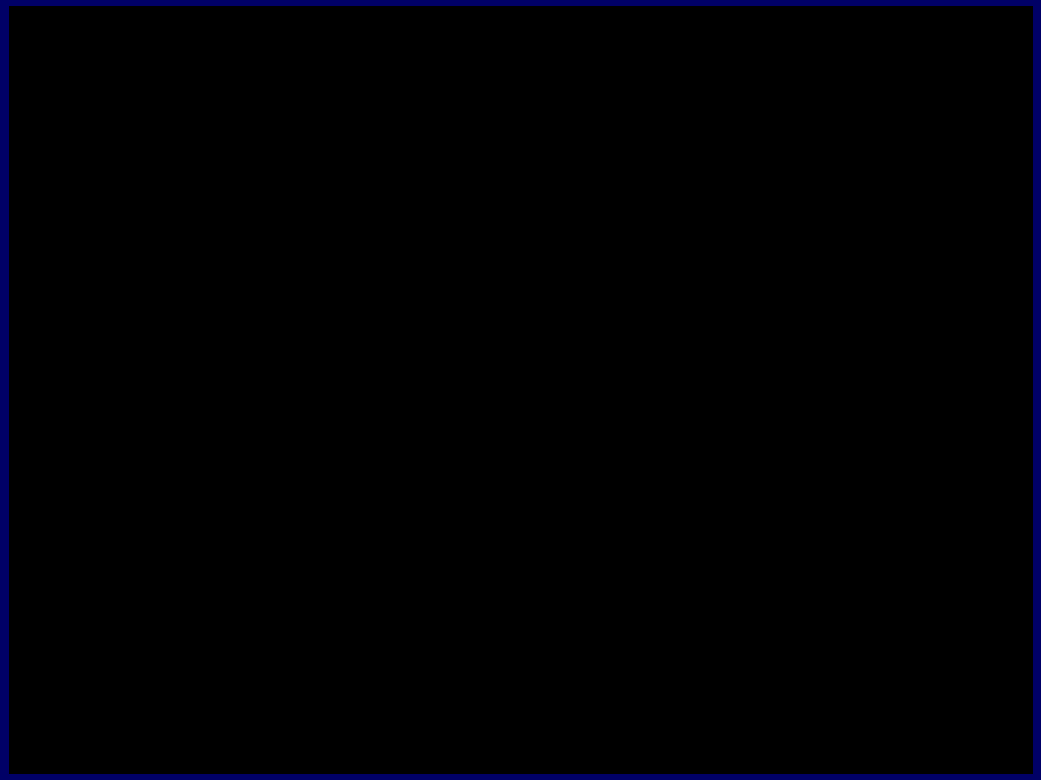
- ? X-ray
- Analgesia
- Injection – difficult. Orange needle. Fingerbreadth in from lateral acromion. 10mg Kenalog + 0.75ml 1% lidocaine
- Surgery

Rotator Cuff Tear

- Severe form of impingement
- Very painful and weak
- Suspect it if sudden or traumatic onset, >60 years or no response to sub-acromial injections
- Get a scan (USS)
- Refer to a shoulder surgeon ??

Rotator cuff tears

Drop Arm test



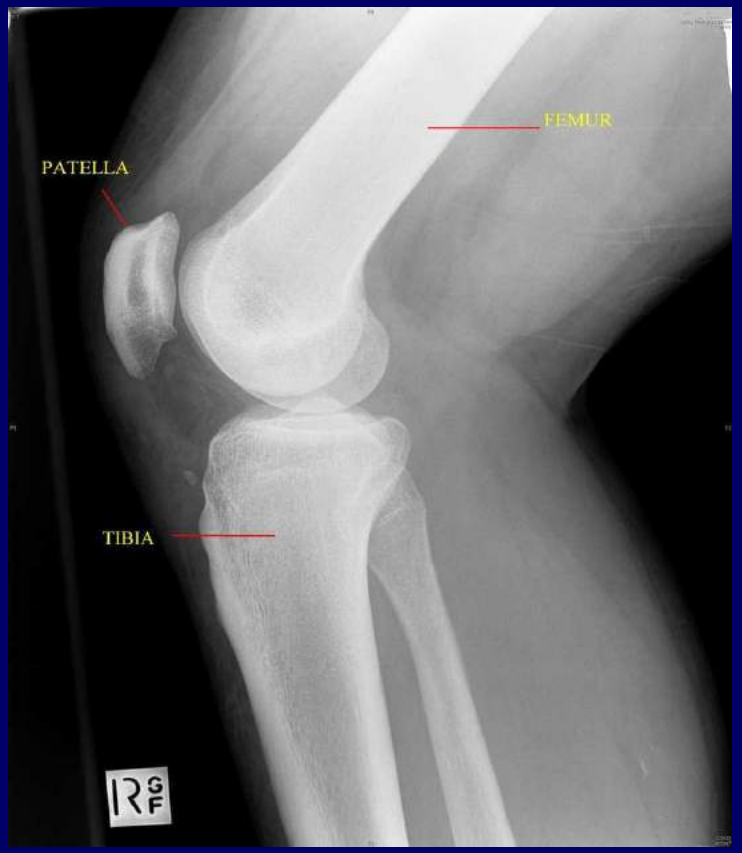
RC Tear Management

- Depends on patient (age, comorbidities and expectations)
- Conservative
- Operative

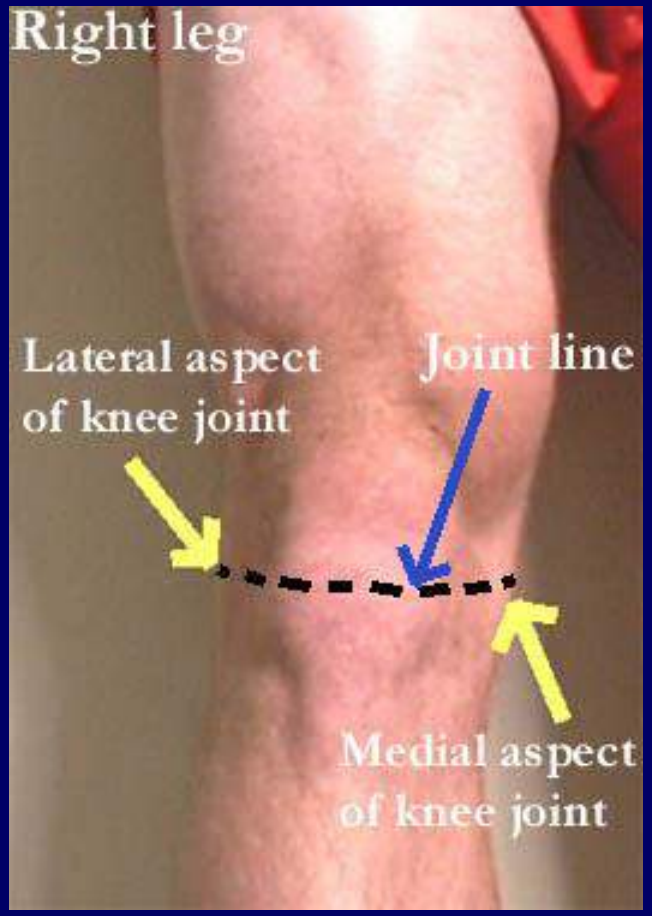
Assessing Knee Problems in Primary Care

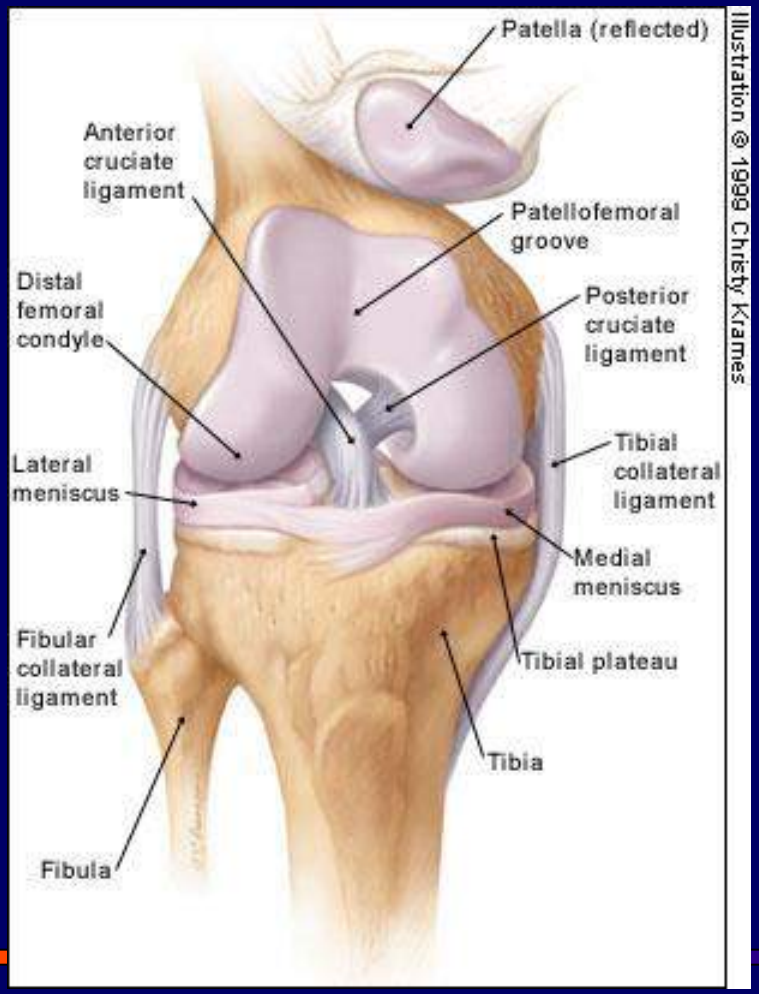
Knee Joint

- 2 main joints
- Tibiofemoral
- Patellofemoral
- 1 minor joint
- tibiofibular



Knee - Surface anatomy





Knee assessment

- History
  - Onset – traumatic (mechanism of injury), acute, insidious
  - Location – diffuse, anterior, medial/lateral
  - Swelling
  - Level of disability

Good history pointers

- Pop/snap/tear-ACL to proved otherwise
- Clicking/locking-probably meniscal-patellofemoral with pseudolocking
- Giving way without pain-ACL
- Giving way with pain-patellofemoral/meniscal
- Patellofemoral pain-vague but anterior
- Meniscal pain-localised to joint line

Anterior Knee Pain

- Common in primary care
- Different causes –
- Patellofemoral
- Osteoarthritis of the patellofemoral joint
- Pre and infra patella bursitis
- Tendinopathies – e.g. Patellar tendinopathy in jumpers-PAIN GETS BETTER WITH EXERCISE INITIALLY

Anterior Knee Pain

- Pain beneath & around patella
- Worse on stairs, kneeling, squatting
- Knee may give way with pain
- “Cinema goers” knee
- Clicking & grating

Anterior Knee Pain -Exam

- Probably has wasting of vastus medialis oblique
- Tenderness on palpating patella (Quadrant Test)
- Resisted quadriceps contraction painful (Clarke's Test)

Ant Knee Pain - Treatment

- Reassurance
- Reduce pain – ice, NSAIDs, taping
- Physiotherapy – strengthening vastus medialis oblique /tight hip rotators / overpronates
- Address extrinsic factors (exercise regime/footwear)

Examination

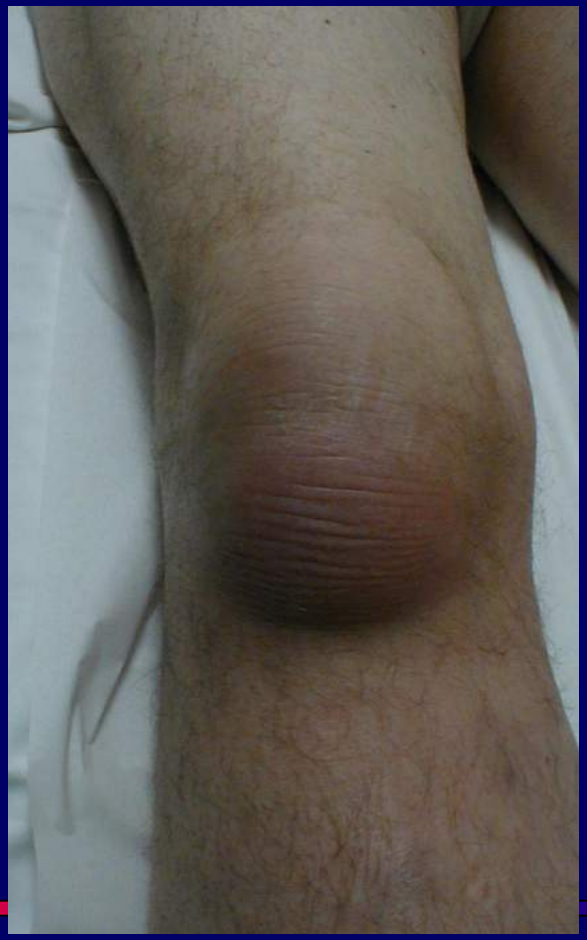
- Look
- Feel
- Move

Knee Examination

- Best in shorts with shoes and socks off
- Observe standing and walking for gait
- Always compare/examine both sides
- Always examine joint above and joint below as they will affect that joint and can refer pain

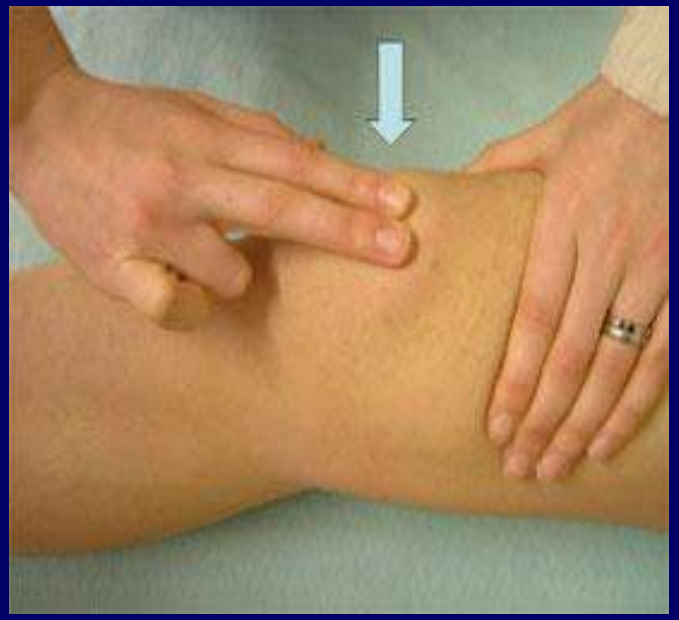
Inspection (ant. + post.)

- Symmetry
- Swelling/ bruising/ scars/ rash/ deformity/ wasting/ bursae
- (Heat)
- Patella position – quads/ extensor apparatus intact?

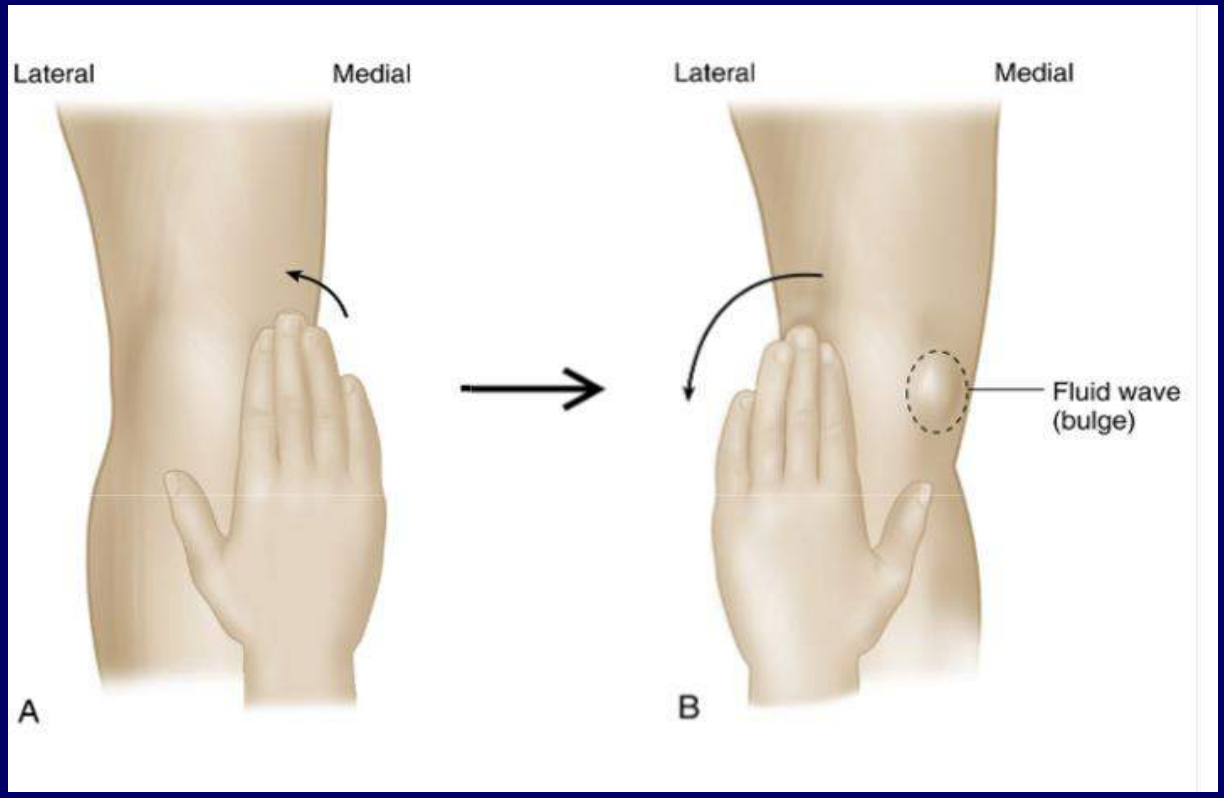


Palpate

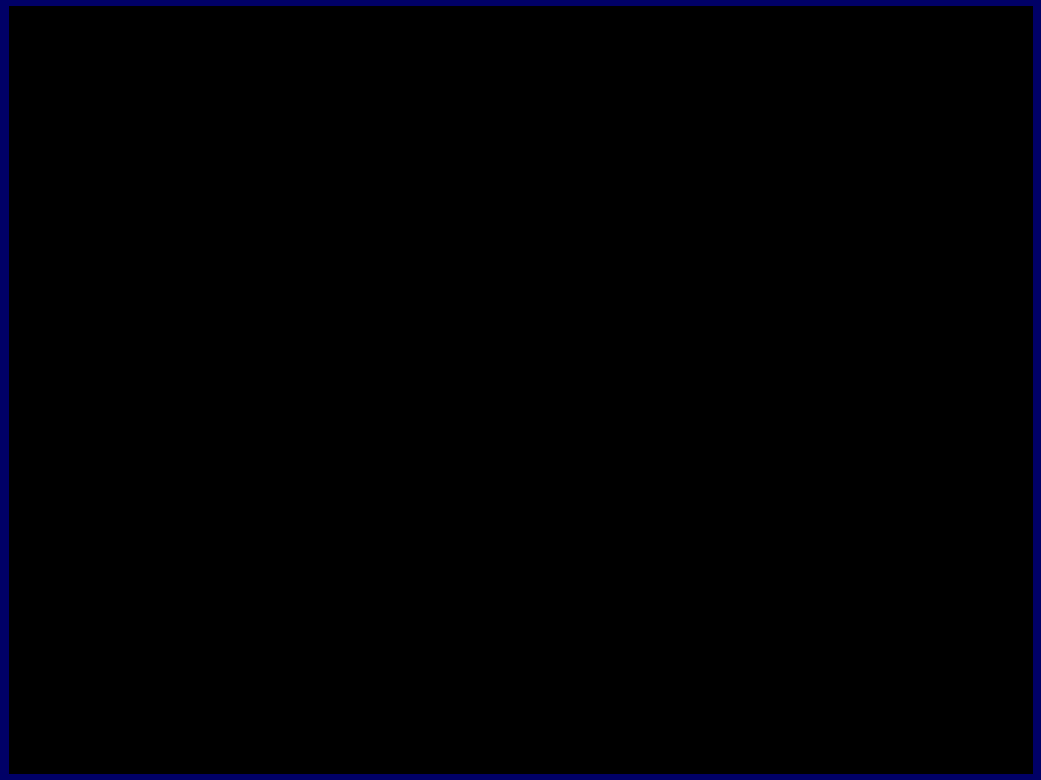
- Effusion – patellar tap
- Fluid displacement
- Tenderness
  - Bend knee – joint line
  - Collateral ligaments
  - Tibial tubercle
  - Femoral condyles



Knee Exam – Sweep test



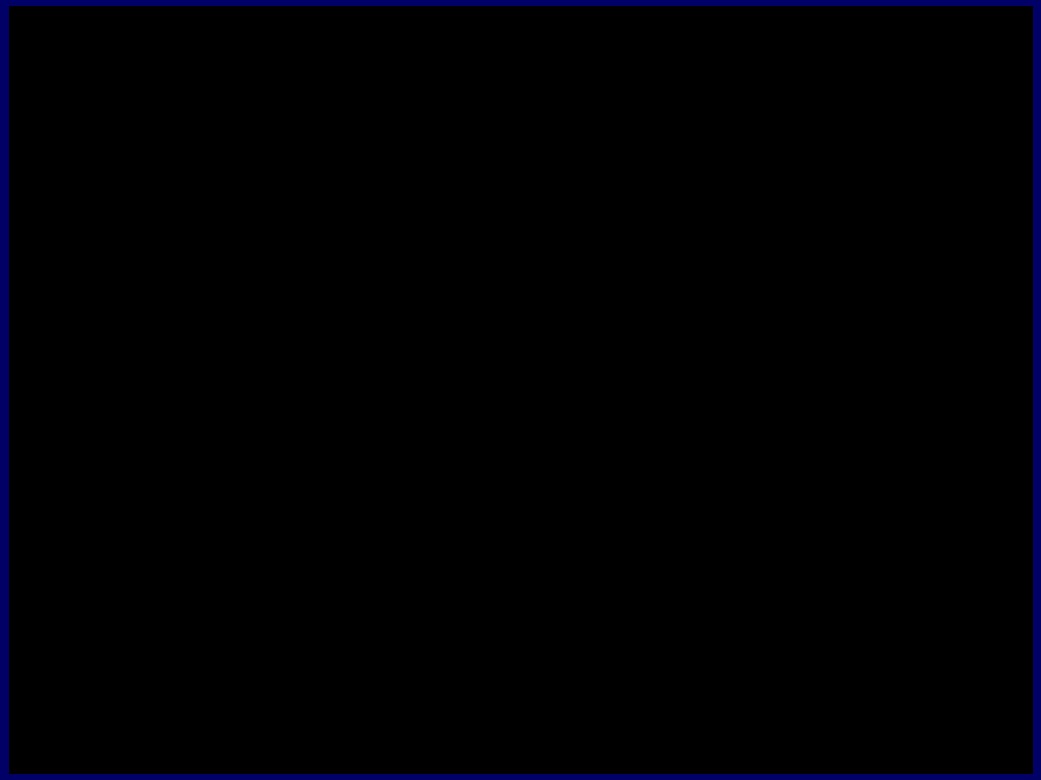
Knee Exam joint line tenderness



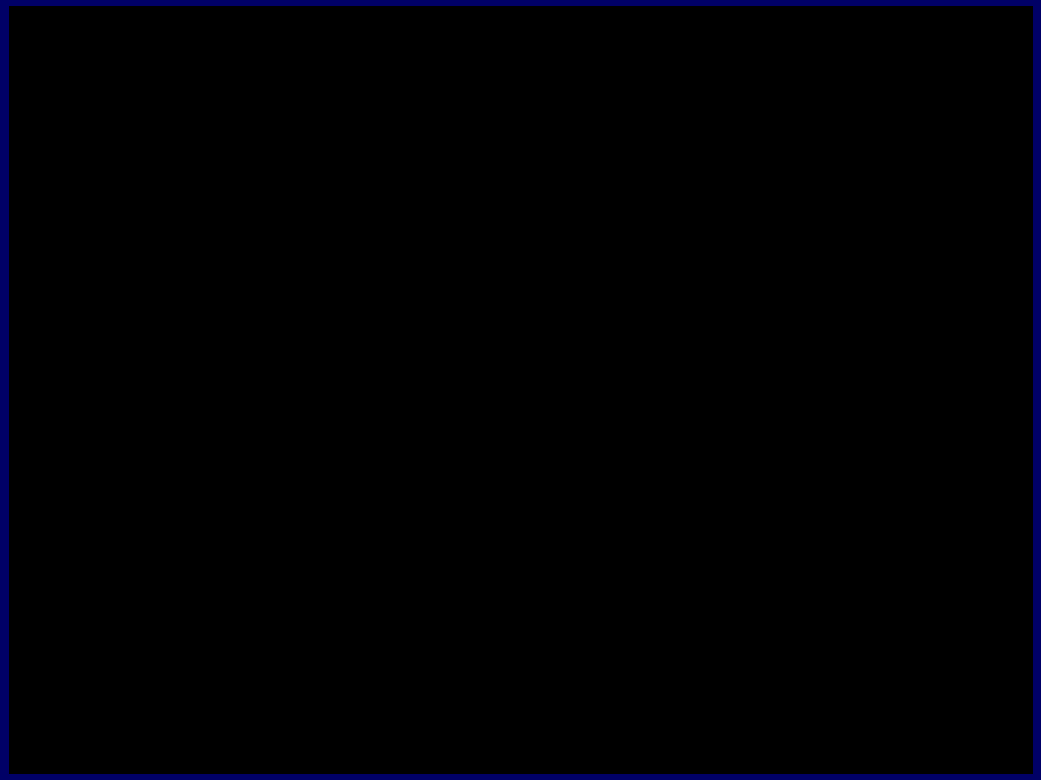
Move

- Active + passive
- Extension – 0 deg (? Hyperextension)
- Flexion – 135 deg

MCL Stress Test



LCL Stress Test

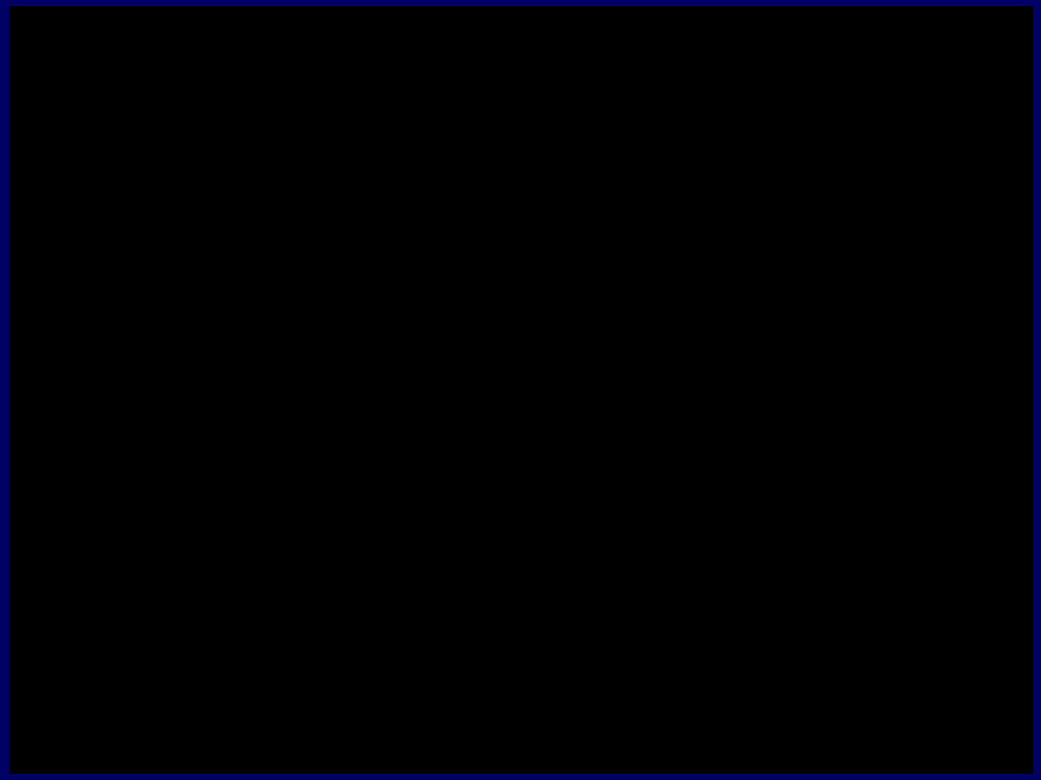


Menisci

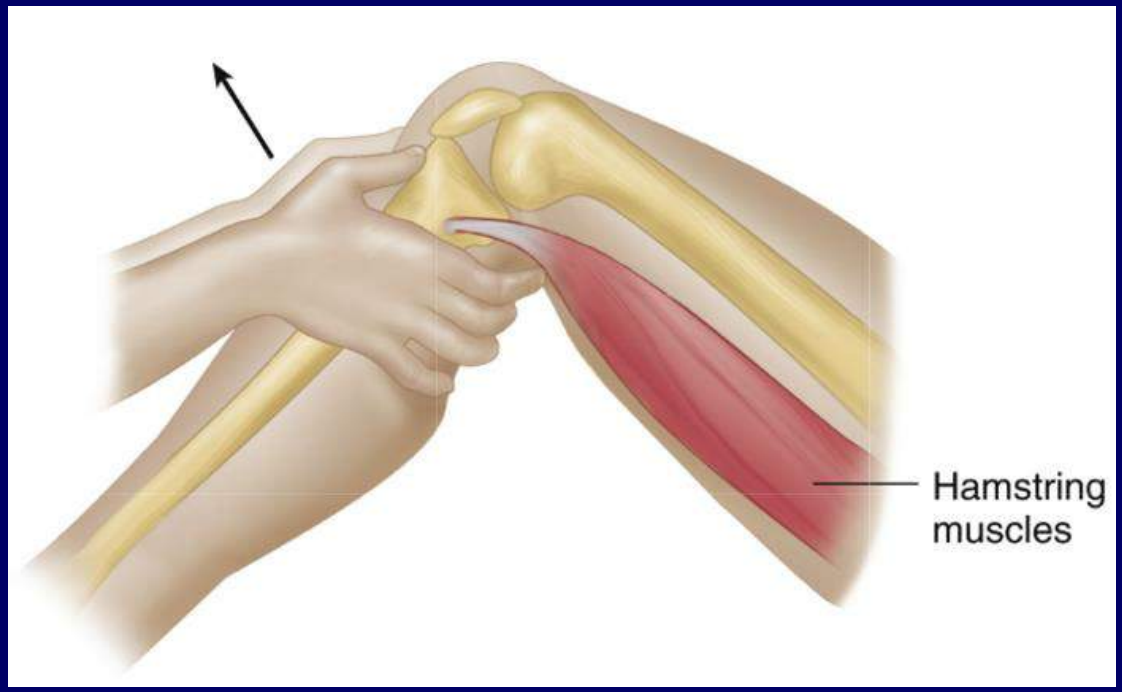
- Feel for clicks, listen for crepitus

- McMurrays test –
  medial + lateral menisci

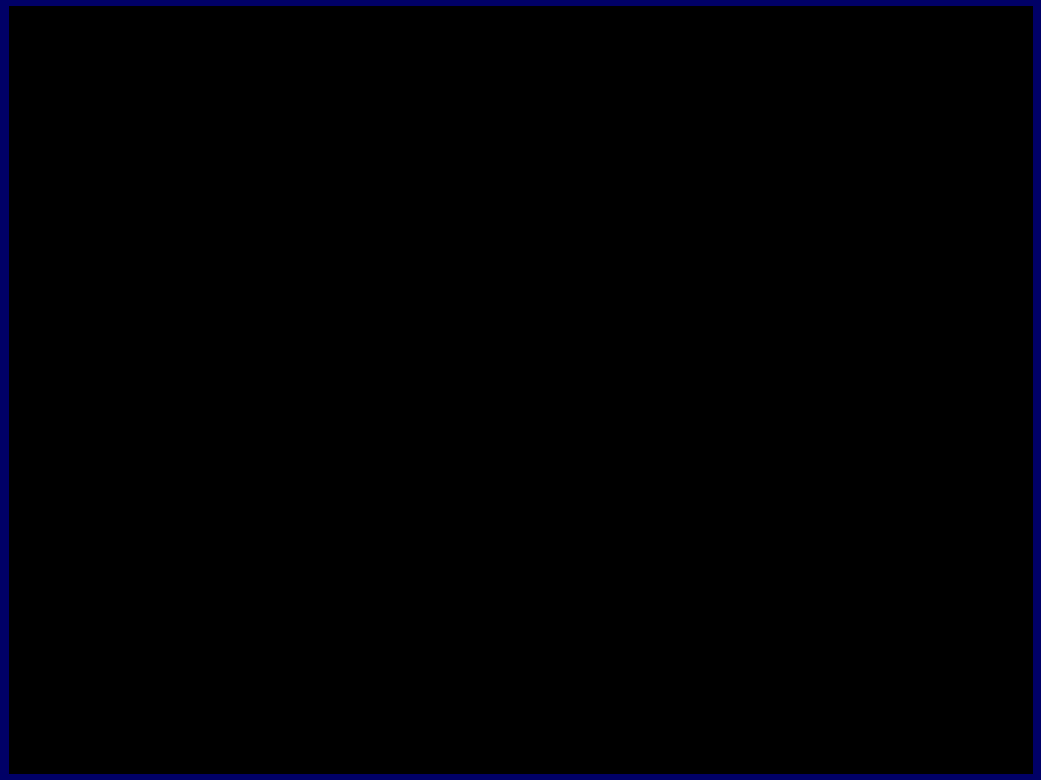
McMurray test



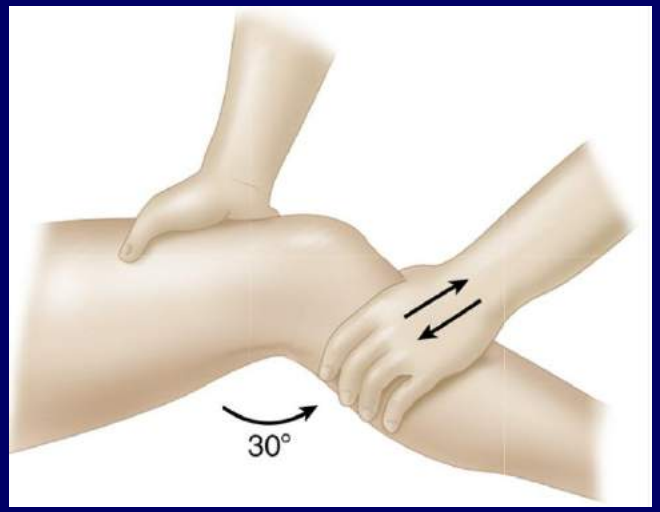
Knee Exam – Ant Drawer



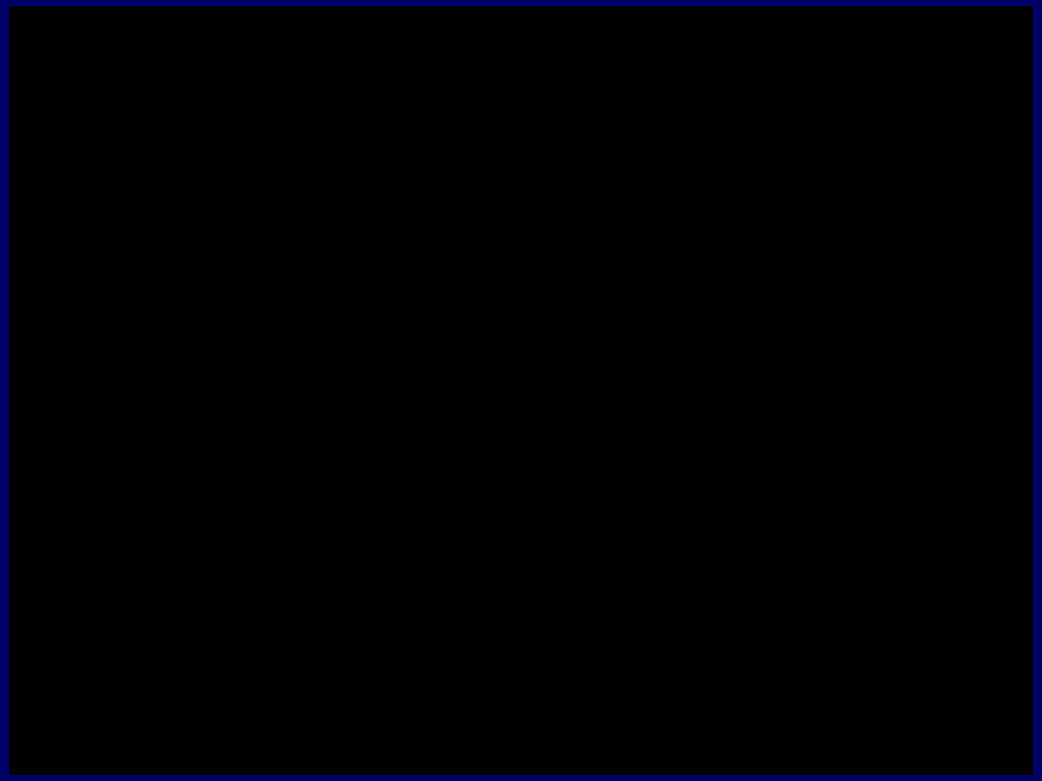
Ant Drawer test



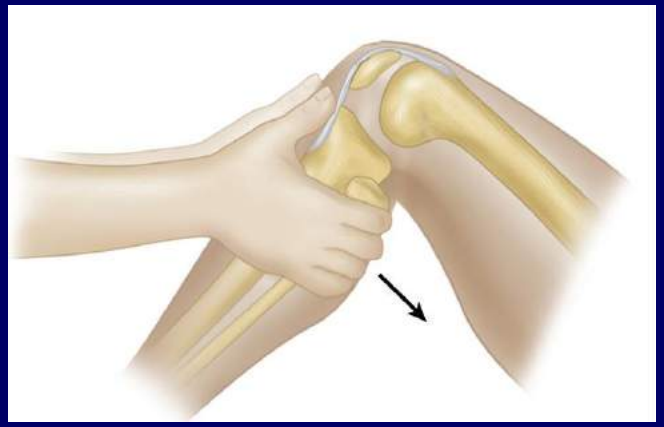
Lachman Test



Lachman test

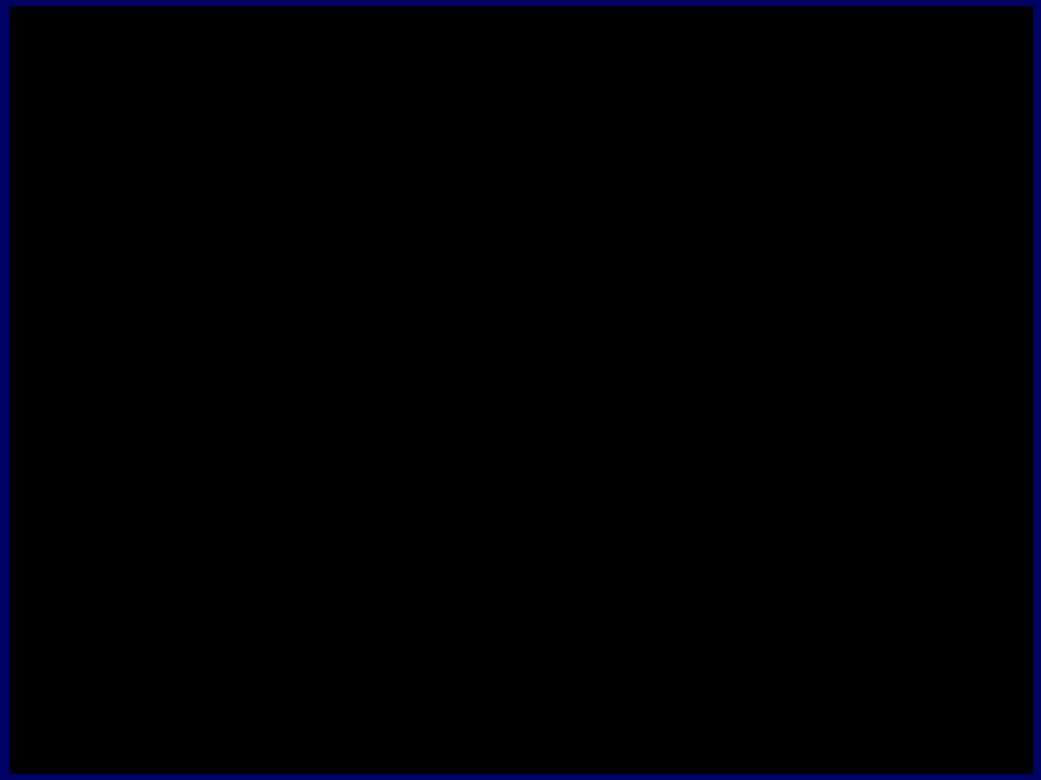


Knee Exam – Post drawer Test



Post Sag Sign

Post Sag Sign



Management

- Osteoarthritis
- Degenerative meniscal tears

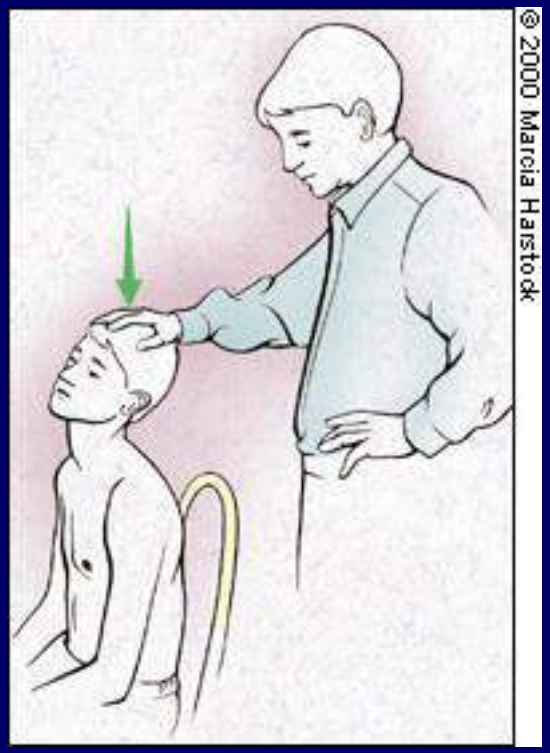
Other common MSK presentations in GP

Tingling Fingers – main causes

- The Neck
- Carpal Tunnel Syndrome
- Ulnar Neuropathy

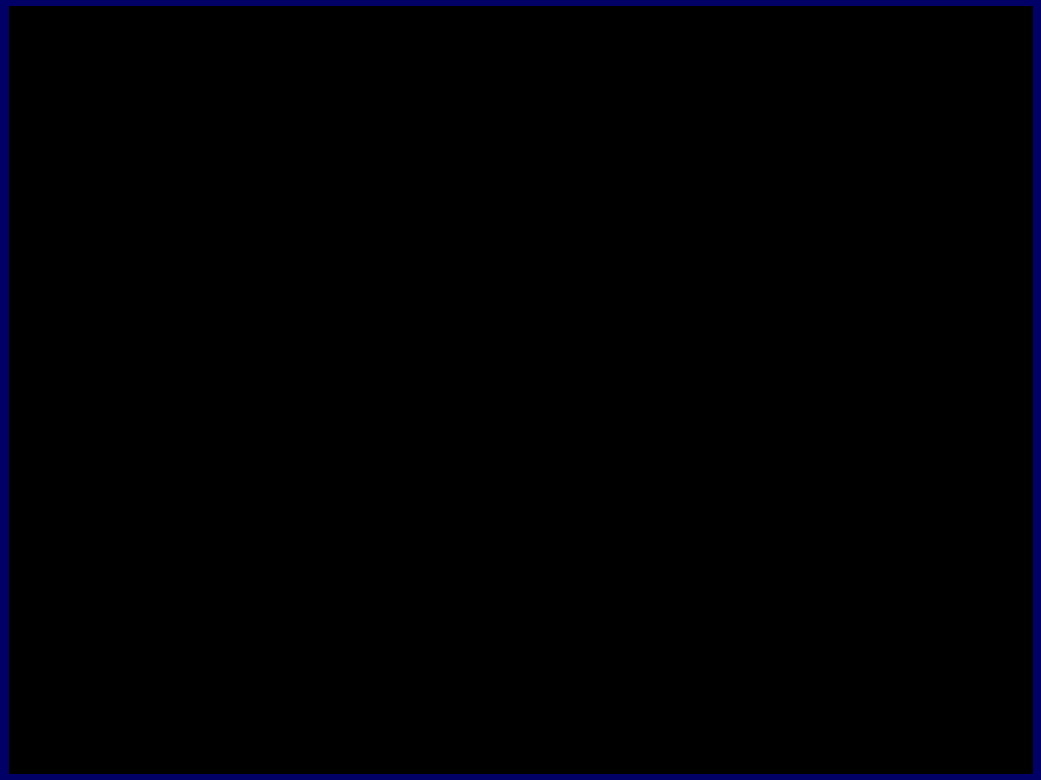
Neck Assessment

Spurling's Test

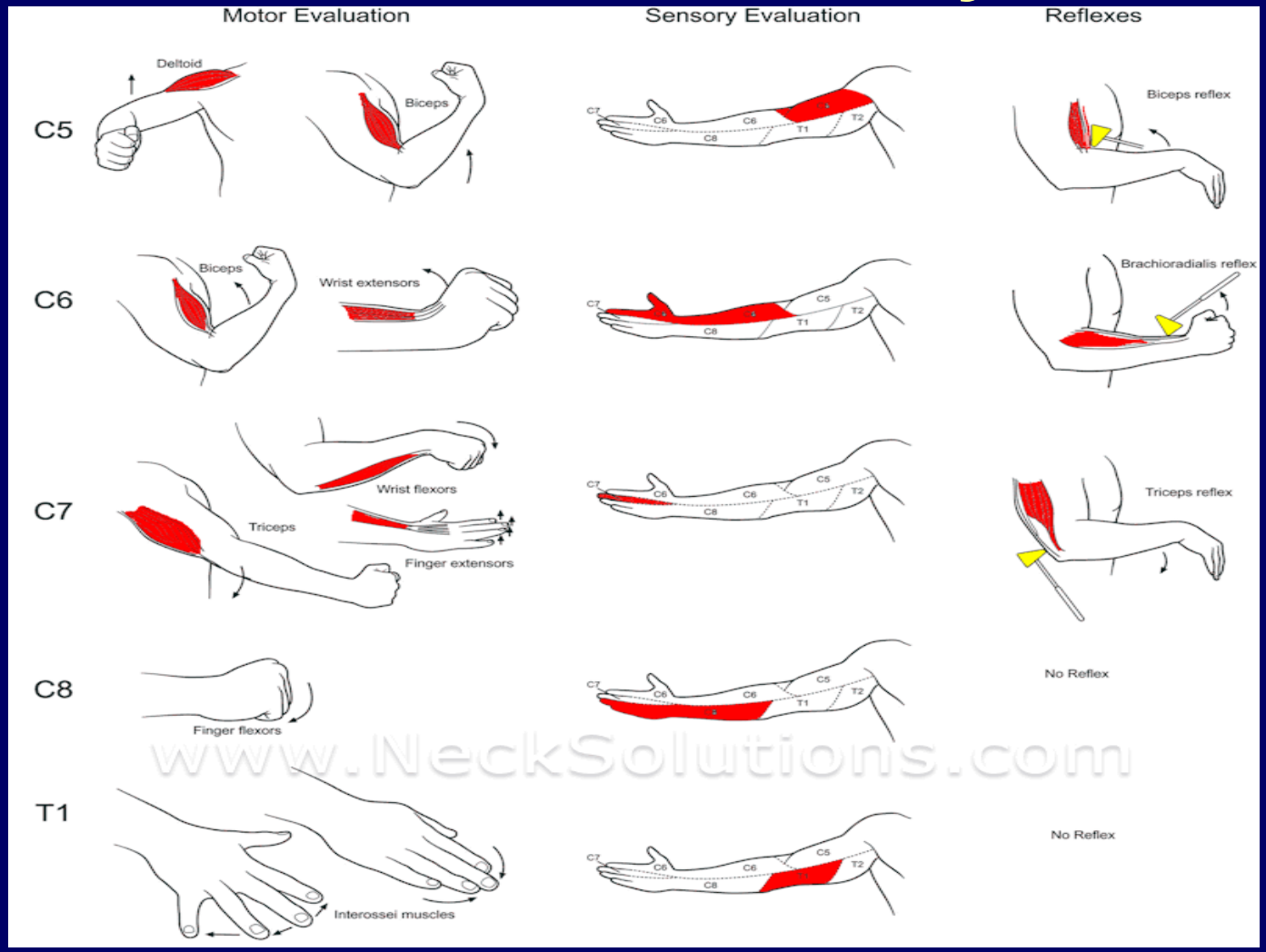


- Tingling associated with neck pain
- Know the dermatomes
- Myotomes

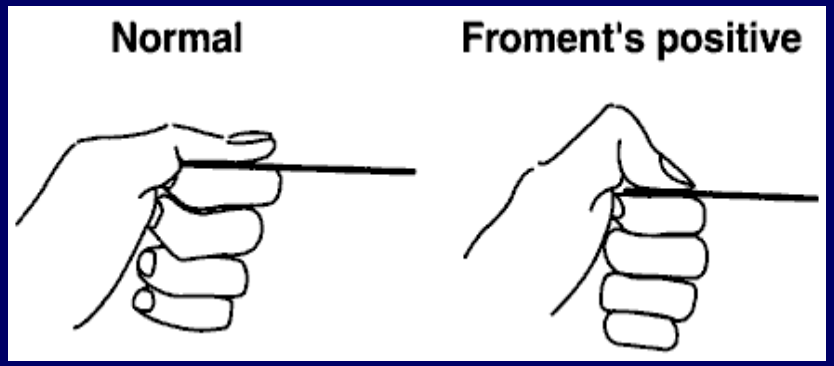
Spurling’s test

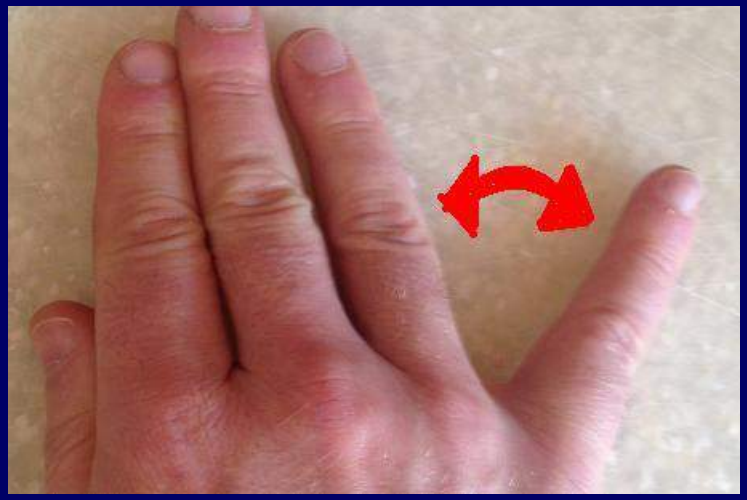


Neck Dermatomes / Myotomes



Ulnar Neuropathy





- Sensory symptoms
- Froment’s Sign
  (Weak adductor Pollicis)
- Wartenberg’s Sign
  (weak finger adductor/eccentric pull of extensor digiti minimi)

Carpal Tunnel Syndrome

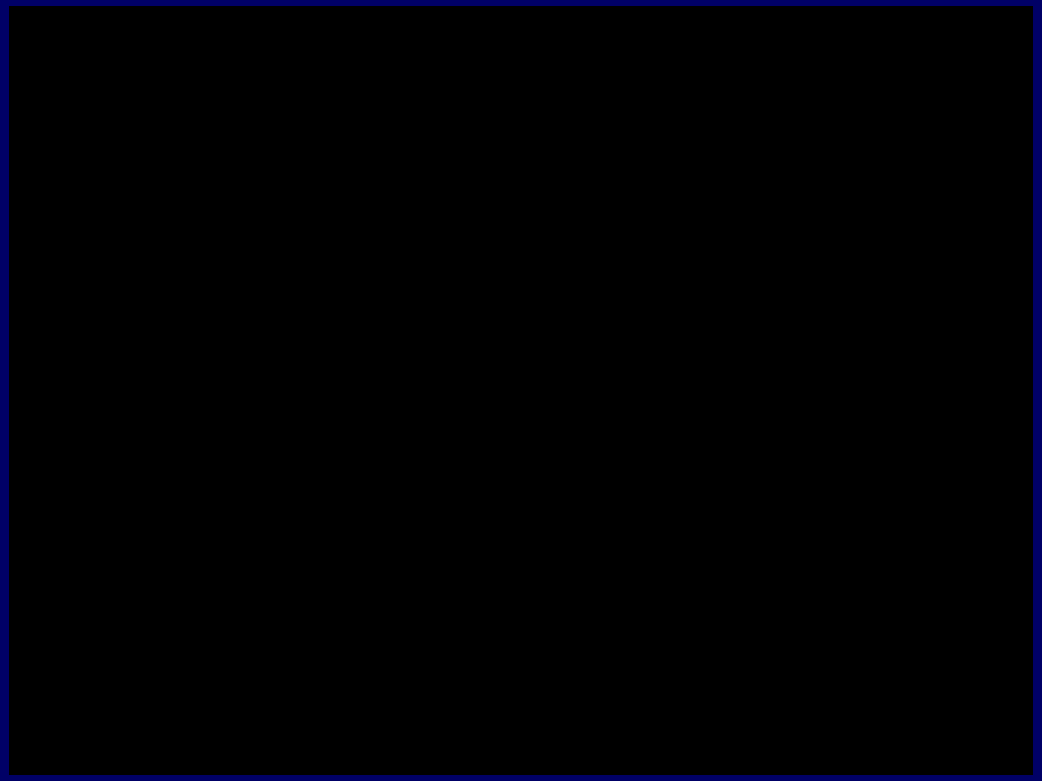
- Idiopathic
- Overuse
- Pregnancy / Hypothyroidism / RA
- Tinel's / Phalen's tests
- Thenar wasting / weak opponens pollicis
- Flexor retinaculum attachments

Carpal Tunnel Syndrome

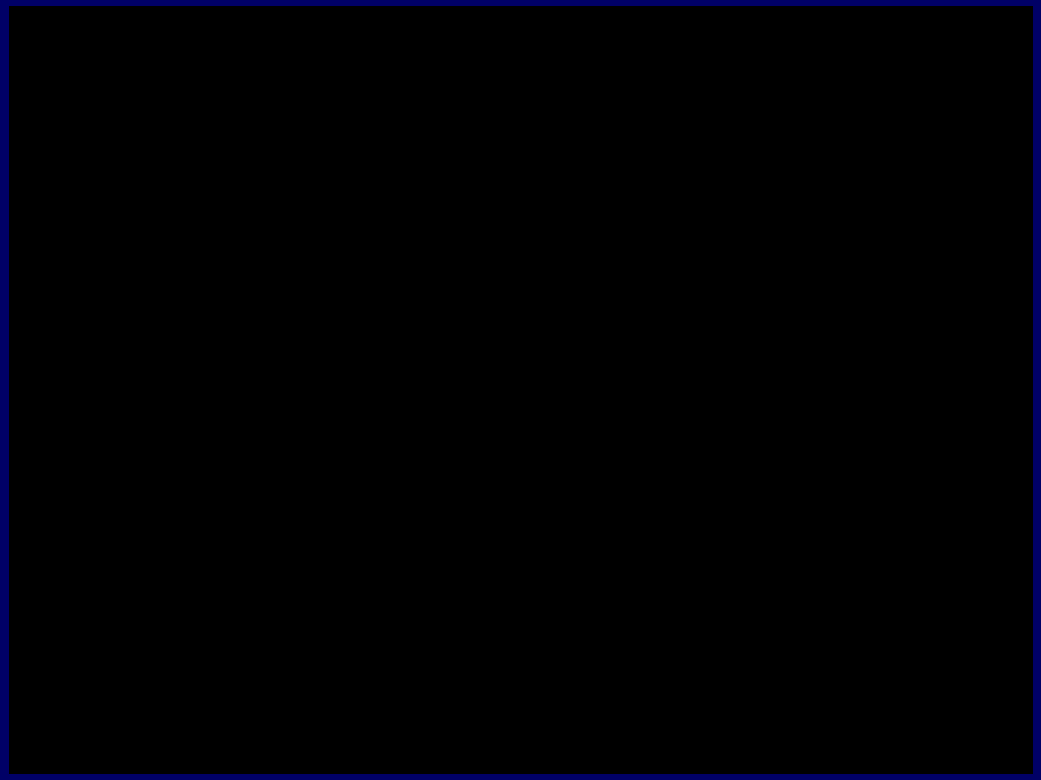
Tinel's Test

Phalen's Test

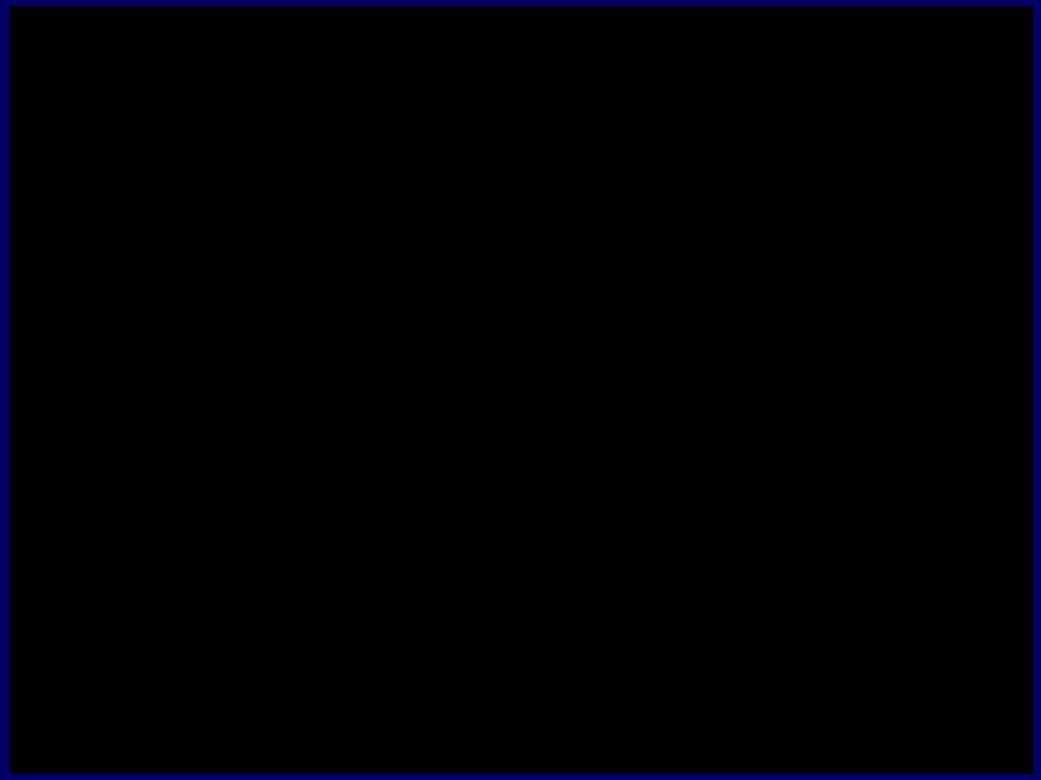
Tinel’s test



Phalen’s Test



Carpal Compression Test

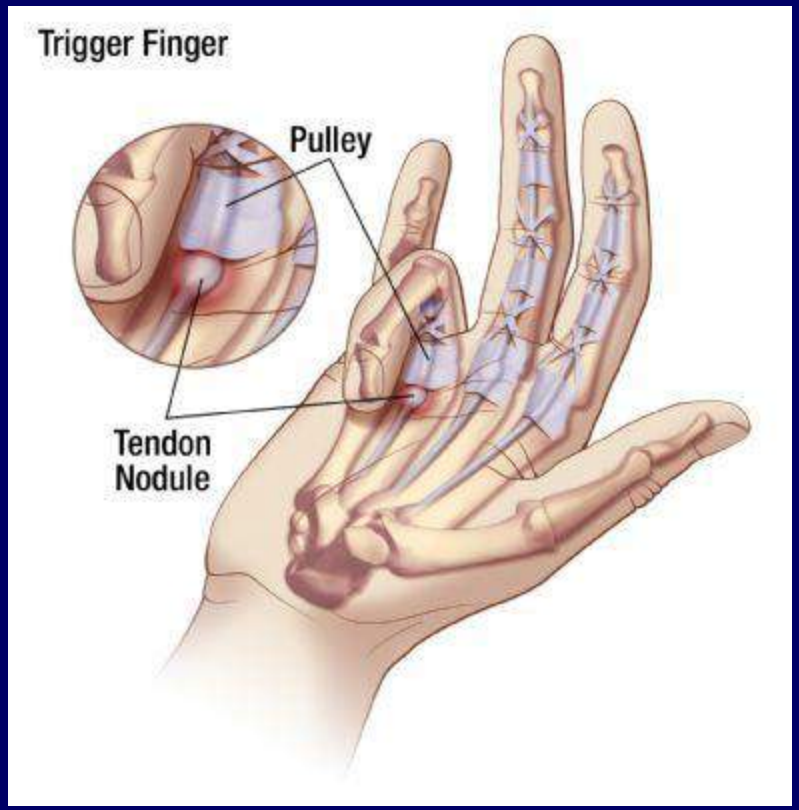


Ganglions

- Cystic, usually tense, swellings associated with tendon sheath or joint.
- F>M
- Most commonly on dorsum of wrist, over scapholunate ligament
- Also seen on palmar wrist, base of finger, or distal interphalangeal joint
- Rarely cause significant pain
- Low clinical priority condition

Trigger Finger

- Usually idiopathic
- May be associated with RA
- Painful clicking / locking – esp am
- Palpable, tender nodule



Dupuytren’s Contracture

- Risk factors include a family history, diabetes, smoking and high alcohol intake
- Small painless nodules in the palm which are palpable
- Flexion contracture of the metacarpophalangeal (MCP) joint and the proximal interphalangeal (PIP) joint towards the palm
- The ring and little fingers are most commonly affected, but any of the digits may be involved
- •Dupuytren's nodules may be painful early in the disease. This is self-limiting and does not respond to surgery.

Managing LBP in GP

“Back pain should be viewed as a chronic problem with an untidy pattern of grumbling symptoms and periods of relative freedom from pain and disability interspersed with acute episodes, exacerbations, and recurrences.”

Croft et al (1998)

Diagnostic Triage (3S's)

- Ordinary (simple, mechanical) backache
  ~95% SIMPLE
- Nerve root pain
  < 5% SCIATICA
- Serious spinal pathology
  < 1% SERIOUS

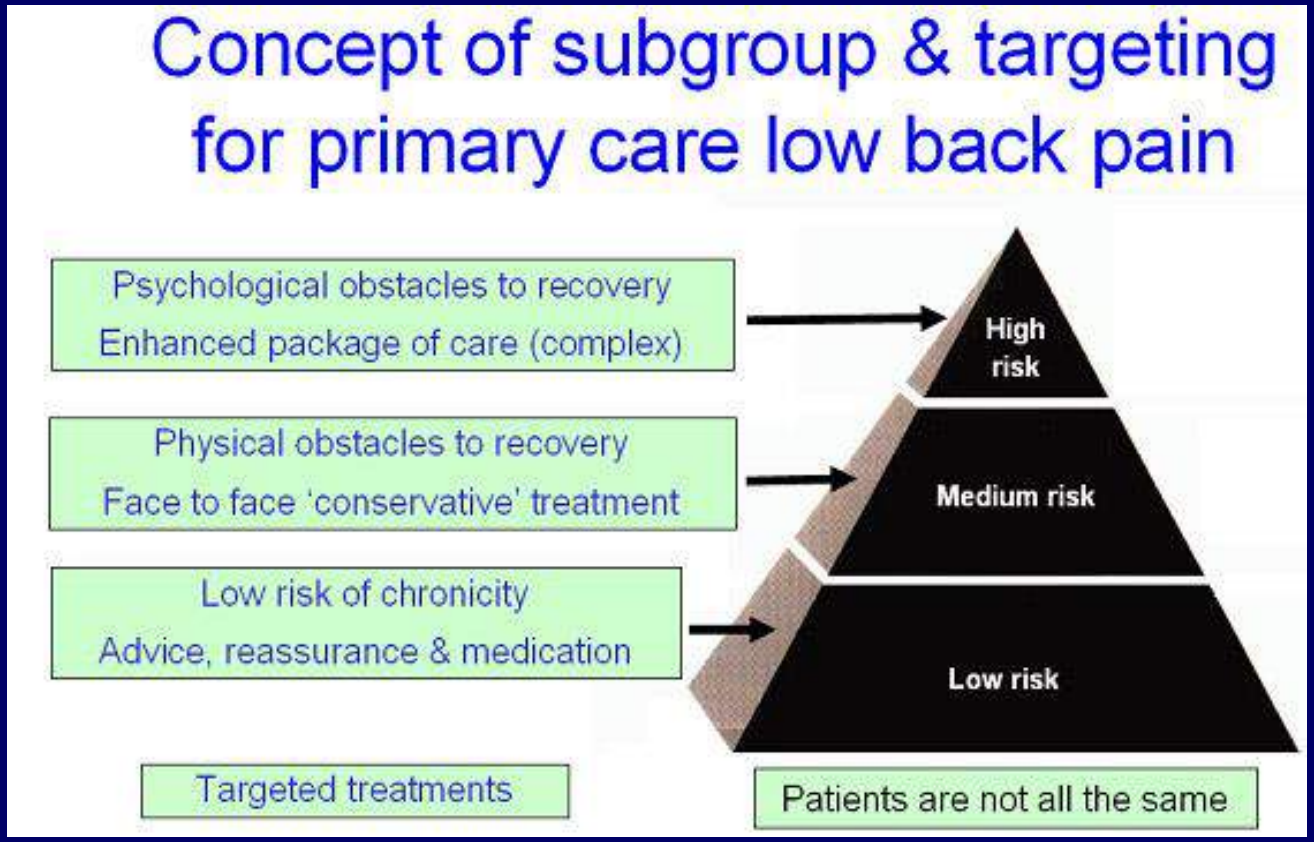
Mechanical (Non-specific) Back Pain

- Well patient
- Variability within and between episodes
- Good prognosis
- 75% recurrence

The History

- Often all you need to make the diagnosis
- Radiation of the pain
- Understand the context of the pain
- Red & Yellow Flags

STarT Back


Concept of subgroup & targeting for primary care low back pain
Psychological obstacles to recovery
Enhanced package of care (complex)
Physical obstacles to recovery
Face to face 'conservative' treatment
Low risk of chronicity
Advice, reassurance & medication
High risk
Medium risk
Low risk
Targeted treatments
Patients are not all the same

STarT Back

The STarT Back Approach

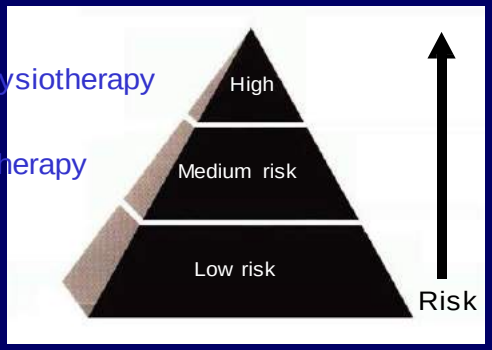
Systematically identify patient's risk for chronicity (using STarT Back Tool)

- One scale that integrates biomedical & psychosocial factors
- Use this to target treatment

Referral to psychologically informed physiotherapy

Referral to standardised physiotherapy

Education, advice & medication



STarT Back Screening Tool

Thinking about the **last 2 weeks** tick your response to the following questions:

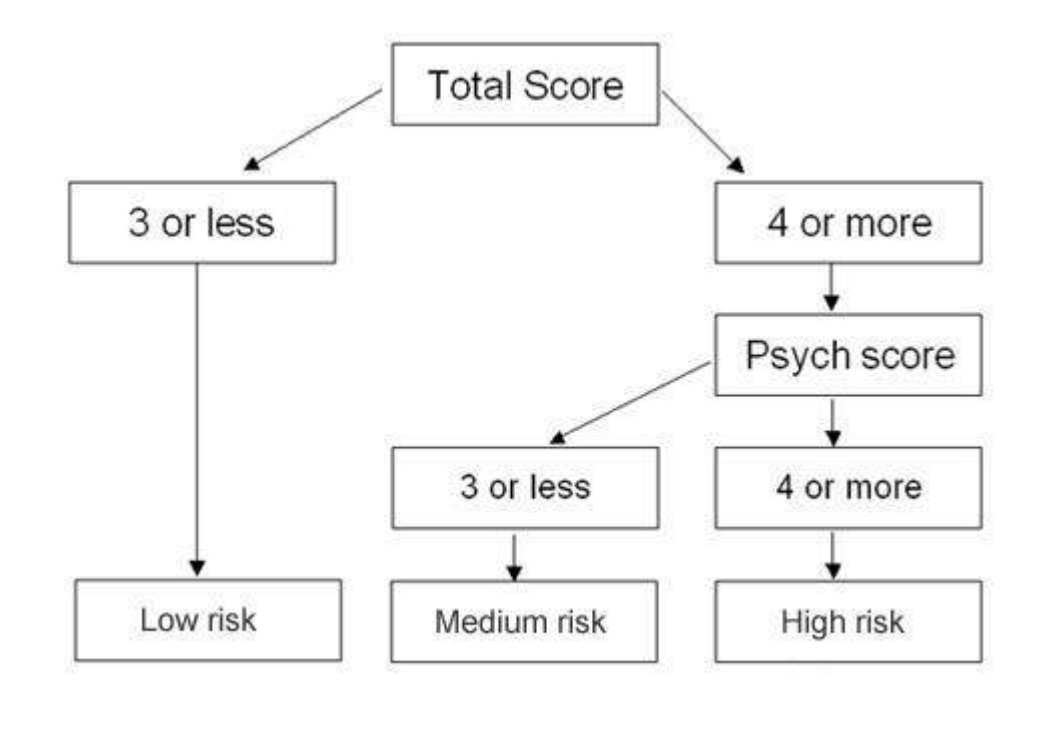
		Disagree 0	**Agree** 1
1	My back pain has **spread down my leg(s)** at some time in the last 2 weeks	☐	☐
2	I have had pain in the **shoulder** or **neck** at some time in the last 2 weeks	☐	☐
3	I have only **walked short distances** because of my back pain	☐	☐
4	In the last 2 weeks, I have **dressed more slowly** than usual because of back pain	☐	☐
5	It's not really safe for a person with a condition like mine to be physically active	☐	☐
6	**Worrying thoughts** have been going through my mind a lot of the time	☐	☐
7	I feel that **my back pain is terrible** and **it's never going to get any better**	☐	☐
8	In general I have **not enjoyed** all the things I used to enjoy	☐	☐

9. Overall, how **bothersome** has your back pain been in the **last 2 weeks**?

Not at all	Slightly	Moderately	Very much	Extremely
☐	☐	☐	☐	☐
0	0	0	1	1

Total score (all 9): _____ **Sub Score (Q5-9):_____**

STarT Back Score



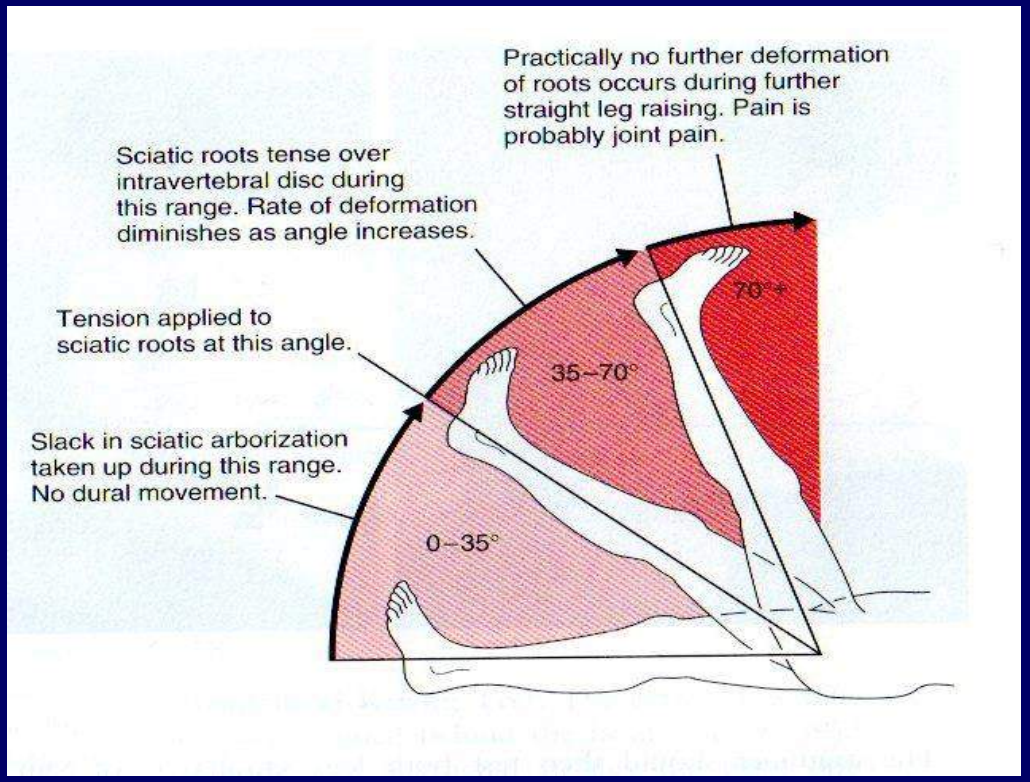
Yellow Flags

- Belief that pain and activity are harmful
- Sickness behaviours e.g extended rest
- Social withdrawal
- Emotional problems (low mood, depression, anxiety, stress)
- Problems / dissatisfaction at work
- Problems with claims or compensation or time off work
- Overprotective family; lack of support
- Inappropriate expectations of treatment

Physical Examination

- Observe (posture, gait)
- Palpate (spinous processes, skin tenderness)
- Range of Movement
- Examine Hips / Trendelenburg
- Special tests;
  - » SLR
  - » Schober Test
  - » Faber Test
  - » Femoral Stretch Test
  - » Clonus / Babinski

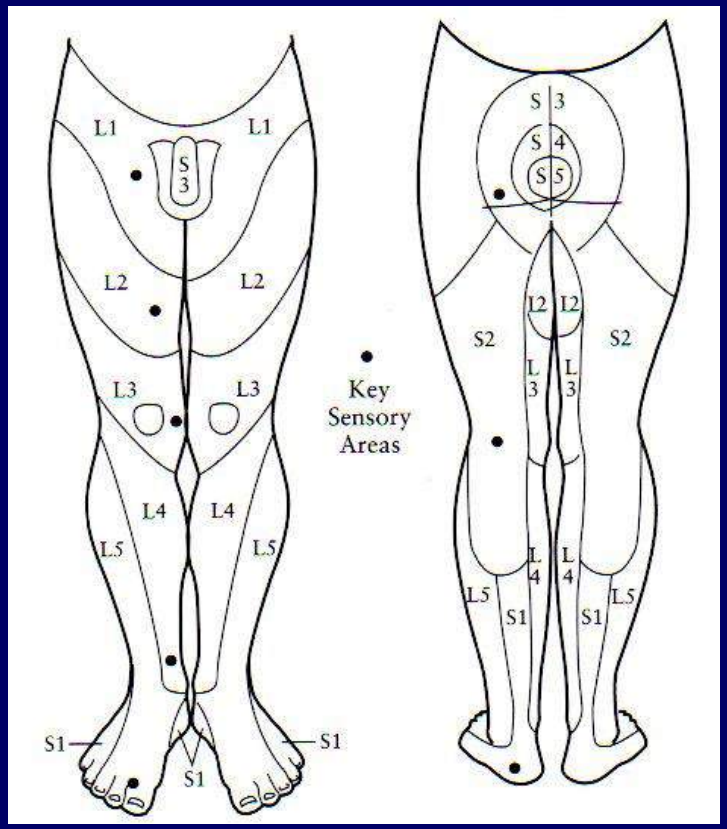
The Straight Leg raise (SLR) Test



Dynamics of SLR. Modified from Fahrni, WS: Can. J. Surg. 9:44, 1966)

Lower Limb Dermatomes

- = Key sensory areas



Myotomes

- L3 – knee extension (Quadriceps)
- L4 – foot dorsiflexion (Tib ant) / Knee jerk
- L5 – big toe dorsiflexion (EHL)
- S1 – foot plantar flexion (gastroc/soleus) / Ankle jerk

Recovery Rates from LBP Episode

- Two days → 30%
- One month → 50%
- Six weeks → 90%
- Twelve months → 97%

Management – key elements

- To recognize possible serious specific causes of pain in lower back
- To relieve pain
- To recognize psychosocial barriers to recovery
- To improve ability to function and alleviate disability
- To prevent recurrence and the development of chronicity (6 week rule)

NICE May 2009

Offer one of the following treatment options, taking into account patient preference:

- an exercise programme
- a course of manual therapy
- a course of acupuncture
- Consider offering another of these options if the chosen treatment does not result in satisfactory improvement.

Management of non-specific LBP and Sciatica NICE 2016

- Assessment of non-specific low back pain and sciatica
  - Risk assessment and risk stratification tools (STarT Back)
  - Imaging

Non-invasive treatments for non-specific LBP and sciatica - Non-pharmacological interventions

- Self-management (tailored)
- Exercise (tailored, ? group)
- Orthotics (belts / corsets / inserts / shoes)
- Manual therapies (consider / part of multi-modal package)
- Acupuncture (No)
- Electrotherapies (US / PENS / TENS / Interferential)
- Psychological therapy (consider / part of multi-modal package)
- Combined physical and psychological programmes
- Return-to-work programmes

Non-invasive treatments for LBP - Pharmacological interventions

- Use oral NSAIDs at the lowest effective dose for the shortest possible period of time (+ gastro-protection)
- Do not offer paracetamol alone
- Do not routinely offer opioids
- Consider weak opioids only where an NSAID is contraindicated, not tolerated or has been ineffective
- Do not offer opioids for managing ***chronic*** non-specific LBP
- Do not offer SSRIs, SNRIs or TCAs
- Do not offer anticonvulsants

Invasive treatments for non-specific LBP and sciatica

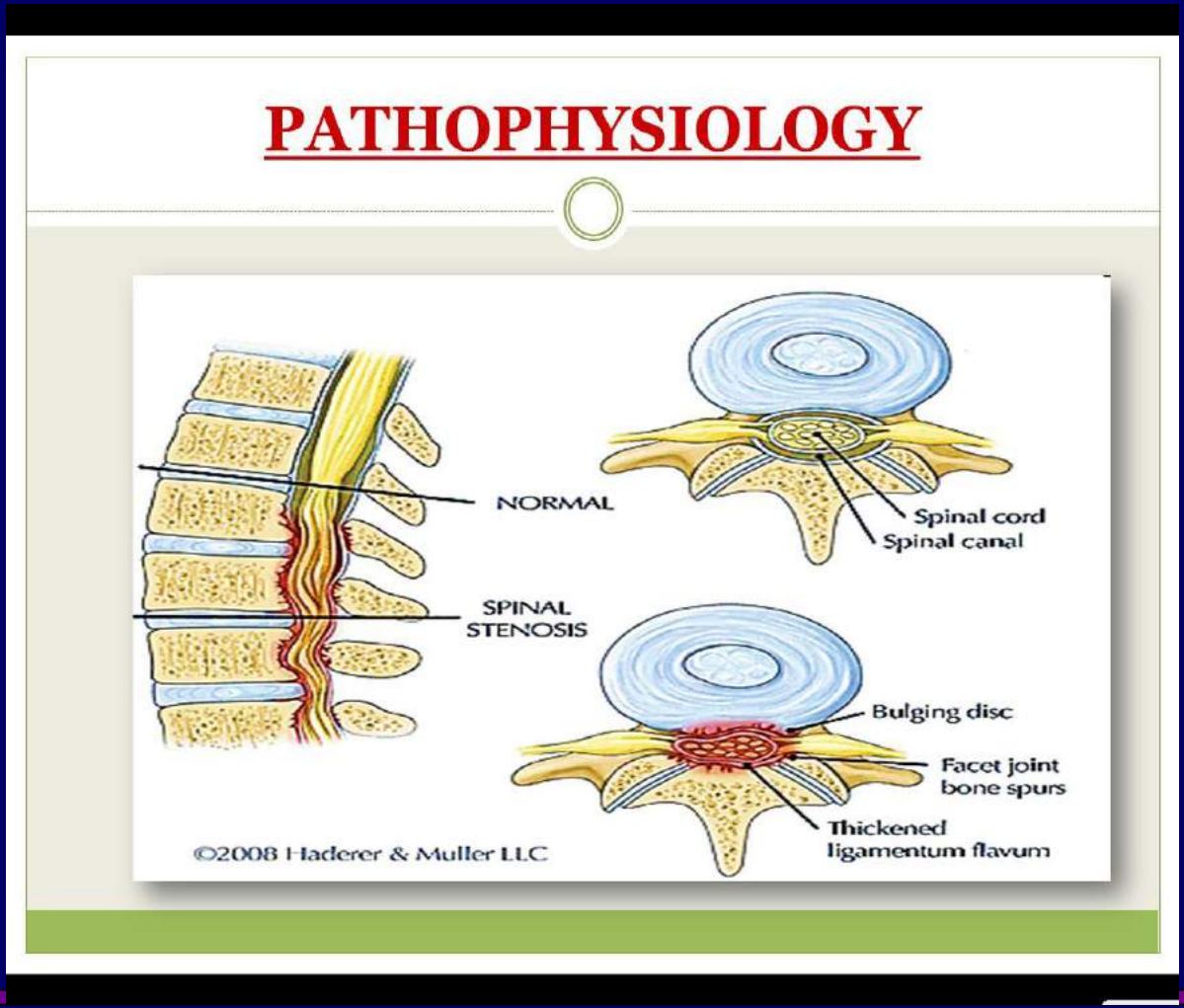
- Non-surgical interventions
  - Spinal injections - no
  - Radiofrequency denervation (facet joints)
  - Epidurals (acute sciatica)

Invasive treatments for non-specific LBP and sciatica

- Surgical interventions
  - Spinal decompression (unresolving sciatica)
  - Spinal fusion - No
  - Disc replacement - No

Do not allow a person's BMI, smoking status or psychological distress to influence the decision to refer them for a surgical opinion for sciatica

Spinal Stenosis



What to Tell Patients

- Most of us will get back pain.
- It does not make much difference whether male or female, young or old, tall and thin or short and fat.
- There is little evidence to suggest that LBP is ever work related.

What to Tell patients

- Back pain is a symptom not a disease
- The cause is rarely detected
- Most episodes occur spontaneously