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GPCME Low back pain Workshop 2012

LOW BACK & LEG PAIN

History of Pain

Site	Distribution
Quality	Duration
Periodicity	Intensity
Aggravating factors	Relieving factors
Effects on ADLs	Associated symptoms
Onset	Previous similar symptoms
Previous treatment	Current treatment

Red Flag conditions

Fracture
Major trauma
Minor trauma associated with osteoporosis
- age >50
- corticosteroid use

Cancer

Weight loss	LR	2.5
Age > 50yo		2.7
PAST HISTORY		15.5
Failure to improve		3.1
Prolonged pain		2.6
ESR >50		15.3
Haematocrit <30%		15

Infection
Fever LR 13-41

History of:
- skin infection
- iv catheters
- UTI

Ankylosing spondylitis

Chest expansion <2.5cm		LR	9.0
4 out of 5 of -	morning stiffness	LR	6.3
	improved with exercise		
	onset <40 yo		
	slow onset		
	duration >3 months		

Management of Acute LBP

Investigations - none unless Red Flags

Address patient concerns

"I hurt" Explain	Analgesics	Injection	Manual therapy
"I can't move" Explain	Stretch	Activate	
"I can't work" Enquire	Explain	Encourage	Resume
"I'm scared" Enquire	Explain	Rationalise	Coping strategies

Review

Cauda equina syndrome

Bilateral or unilateral sciatica
Bladder or bowel dysfunction
Anaesthesia or paraesthesia in perineal region or buttocks
Significant lower limb weakness
Gait disturbance
Sexual dysfunction
Mx admit hospital; surgery within 72 hours

Neurological Examination

Gait - walking on heels (L5)
walking on toes (S1)
SLR - positive if <30-40 degrees; leg pain
Reflexes - knee L3-4, ankle S1-2
Power - knee ext L3-4, ankle-toe ext L4-5, eversion L5-S1, plantarflex S1-2
Sensation - dermatomes
Most common L5 or S1 distribution

Radicular Pain Management

Mild pain - analgesics, allow spontaneous resolution
Persistent or severe pain
severe distress
disability
- Early imaging - XR, MRI
- TFI (TransForaminal Injection of steroid)
- Surgery

Validated sources of chronic low back pain

lumbar intervertebral discs - prevalence 40%

zygapophysial joints (Z joints) = facet joints - 10 -15% younger injured workers; 40% older non-injured population

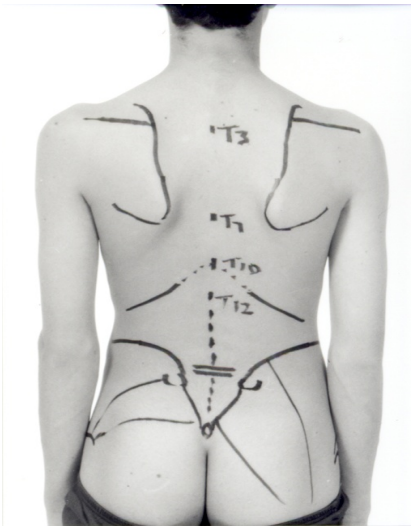
Sacroiliac joints - 15 -20%

Procedures for investigation of chronic LBP (ISIS protocol)

provocation discography

zygapophysial joint blocks (Medial Branch Blocks)

sacroiliac joint blocks



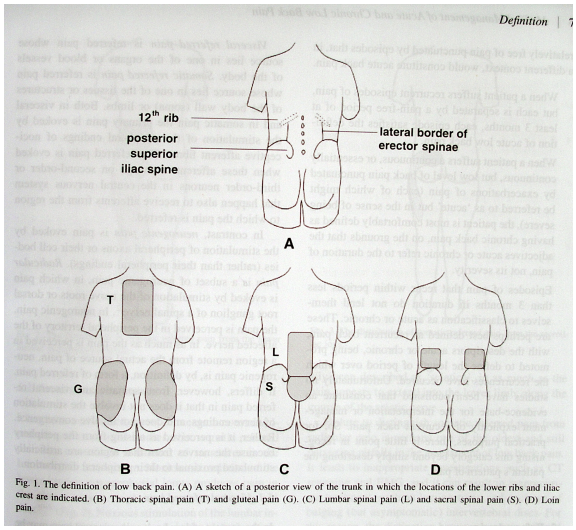


Fig. 1. The definition of low back pain. (A) A sketch of a posterior view of the trunk in which the locations of the lower ribs and iliac crest are indicated. (B) Thoracic spinal pain (T) and gluteal pain (G). (C) Lumbar spinal pain (L) and sacral spinal pain (S). (D) Loin pain.

FEATURE	RADICULAR PAIN	SOMATIC REFERRED PAIN
Distribution	entire length of lower limb, but below knee > above knee.	Anywhere in lower limb, but Proximal > distal.
Pattern	narrow band, travelling quasi segmental but not related to dermatomes; not distinguishable by segment	wide area, Relatively fixed in location quasi segmental but not dermatomal; not distinguishable by segment. Boundaries difficult to define, but Centroid identifiable.
Quality	shooting, lancinating, perhaps like an electric shock	dull, aching, Perhaps like an expanding pressure
Depth	deep as well as superficial.	deep only, lacks any cutaneous quality

Table LR.2.10. The distinguishing features of lumbar radicular pain and somatic referred pain.