Low Back Pain Protocols

Introduction: Diagnostic Triage And Management Guidelines

1. Patient Group

Adults aged 18 years and over with routine low back problems.
Patients who have had recent surgery should be referred directly to Secondary Care.

2. Diagnostic Triage and Management Guidelines

Perform diagnostic triage to exclude serious spinal pathology, and distinguish a nerve root problem from simple back pain. See Section 1 for Triage and Management Guidelines. X-ray and MRI guidelines are contained in Section 2.

3. Primary Care Management of simple Backache and Acute Distress

Follow Flow Chart for Primary Care Management of simple backaches, or simple backache with distress in Section 3

C.S.A.G.	Clinical Standards Advisory Committee
DRAM	Distress and Risk Assessment
ESR	Erythrocyte sedimentation rate
FBC	Full Blood Count
MRI	Magnetic Resonance imaging
NSAID	Non-steroidal Anti inflammatory Drug
OT	Occupational Therapy
RTA	Road Traffic Accident

Diagnostic Triage	Management Guidelines
Red Flags – indicate <u>possible</u> serious spinal pathology • Onset under age 20 or over age 55 • Violent trauma: fall from height, RTA • Constant, progressive, non-mechanical pain • PMH – Carcinoma, Systemic Steroids, drug abuse, HIV • Systemically unwell, weight loss • Thoracic pain • Persisting severe restriction of lumbar flexion • Widespread neurological symptoms or signs • Structural deformity	If there are suspicious clinical features or pain not settling, appropriate investigations e.g. FBC, ESR, plain X-rays, MRI should be considered Or Consider emergency referral if acute spinal cord injury or widespread neurological disorder suspected
Cauda Equina Syndrome • Difficulty with micturation • Sphincter disturbance or faecal incontinence • Widespread or progressive motor weakness in the legs or gait disturbance • Saddle anaesthesia about the anus, perineum or genitals	***IMMEDIATELY LIAISE WITH ON-CALL ORTHOPAEDIC TEAM and CONSIDER EMERGENCY REFERRAL / ADMISSION***
Inflammatory Disorders (Ankylosing Spondylitis and related disorders) • Gradual onset before age 40 • Marked morning stiffness • Persisting limitation spinal movements in all directions • Peripheral joint involvement • Iritis, skin ashes (psoriasis), colitis, urethral discharge • Family history	Undertake appropriate investigations e.g. consider FBC, ESR, HLA, B27, RA Factor, X-rays etc. Consider prompt referral into Secondary Care Rheumatology
Simple Backache: Presentation age 20 – 55 years Limbosacral region, buttocks and thighs Pain mechanical in nature – varies with physical activity, varies with time Patient well Prognosis good 90% recover from acute attack in 6 weeks	**<u>X-ray & Secondary Care Referrals</u>** Not routinely required unless **"Red Flags"** are suspected on clinical examination. During initial management practice psychosocial approach this is fundamental to promote positive attitudes to activity and work. Provide reassurance "nothing dangerous" and "expect recovery". **<u>Drug Therapy</u>** Prescribe analgesics at regular intervals not p.r.n. Start with paracetamol. If inadequate, substitute NSAIDs (e.g. Ibuprofen or Diclofenec) and then paracetamol – weak Opioid compound (e.g. Co drydamol/Co proxamol). Finally, consider adding a short course of muscle relaxant (e.g. Diazepam or Baclofen) Avoid strong Opioids if possible. **<u>Bed Rest</u>** Do not recommend or use bed rest as a treatment. Some patients may be confined to bed for a few days as a consequence of their pain but this should not be considered a treatment

Diagnostic Triage	Management Guidelines
	<u>Activity</u> Patients should be advised to stay as active as possible and to continue normal daily activities, increasing progressively over a few days or weeks. If working, advise to stay at work or return to work as soon as possible. **<u>Physiotherapy</u>** If not resolving, consider referral to Musculoskeletal Physiotherapy from 2 weeks. Physiotherapy treatment should be considered for patients who need additional help with pain relief or who are failing to return to normal activities
Simple Backache – Unresolved	Re-assess Review diagnostic triage – consider X-ray, ESR and DRAM assessment Physiotherapy should be considered for patients who have not returned to ordinary activities and work by 6 weeks
Nerve Root Pain • Unilateral leg pain worse than low back pain • Radiates to foot or toes • Numbness and paraesthesia in same distribution • Nerve irritation signs – reduced SLR which reproduces leg pain • Motor, sensory or reflex change limited to one nerve root • Prognosis reasonable 50% recover from acute attach within 6 weeks	* Secondary care referral not required for one month, provided resolving. Give guarded positive messages, conservative management should suffice – but may take a month or 2, full recovery expected – but recurrence possible. Consider appropriate analgesia and refer to Acute Musculoskeletal Physiotherapy Service. Not resolving at 6 weeks consider referral to MSK Tier 2 services or consider orthopaedic opinion if you feel surgery is indicated

Appendix 2

Extracted from the Clinical Standards Advisory Group Guidelines 1994

When to request an X-ray

Plain X-rays of the lumbar spine are recommended for ruling out fractures in patients with acute low back problems when any of the following "Red Flags" are present:

- Recent significant trauma (any age)
- Recent mild trauma (patient over age of 50)
- History of prolonged steroid use, osteoporosis, patient over age of 50

Plain X-rays in combination with FBC and ESR may be useful for ruling out tumour or infection in patients with acute low back problems when any of the following "Red Flags" are present:

- Prior cancer or recent infection
- Fever over 100º F
- IV drug abuse
- Prolonged steroid use
- Low back pain worse with rest
- Unexplained weight loss

In the presence of "Red Flags", especially for tumour or infection, the use of other imaging studies such as bone scan, CT or MRI may be clinically indicated even if plain X-rays are negative.

A bone scan is recommended to evaluate acute low back problems when spinal tumour, infection or occult fracture is suspected from "Red Flags on medical history, physical examination, corroborative lab test or plain X-ray findings. Bone scans are contraindicated during pregnancy. Bone scans will be carried out in Secondary care only

When to Request an MRI Scan

For use for patients requiring short protocol MRI scan, for screening purposes. Other views o full MRIs should be discussed with a Consultant Orthopaedic Surgeon prior to being requested

Short Protocol MRIs

Patients can be divided into 2 broad categories: Back pain with sciatica and back pain without sciatica:

Back Pain with Sciatica

DIAGNOSIS	ACTION
Back pain with sciatica + worrying features such as cauda equina syndrome, or signs suggesting tumour or infection	*Immediate MRI and a consultant referral* If the MRI is normal, no further investigations are needed. Plain films are only required if the MRI suggests the need for them
Back pain with no worrying features	No imaging is required until after 6-8 weeks conservative treatment. If the patient fails to respond and surgery or percutaneous therapy is judged appropriate then the patient should have a full MRI

Back Pain with no significant Radiation

DIAGNOSIS	ACTION
Back pain with no significant radiation. If there is no improvement after 8 weeks *If these patients fail to respond then it is possible to complete the rest of the MRI at a later stage prior to a Consultant referral*	Request a limited MRI utilising a Sagittal T and STIR sequence which should exclude significant pathology ie tumour, infection, pars defects, osteoporotic collapse. As there is no sciatica there is no need to look for compressive symptoms and thus the "shorter" scan *NB: 40% of adults will have disc herniation yet be asymptomatic and therefore to search for this in the absence of clear neurology is often confusing*

These guidelines have been developed from the Oxford Nuffield Scheme

Appendix 3 – Extracted from Clinical Standards Advisory Group Report 1994

Primary Care Management of Simple Backache