



Supplementary Materials

Table S4. Diagnostic Recommendations from guidelines for lumbar radicular pain.

Physical examination	Guideline*	Specifications	Consistency	Clinical Inference
Femoral stretch test	NASS	Insufficient evidence for recommendation	inconsistent	none
	NBPN	Suggested		
	PARM	Suggested		
Straight leg test	NASS	Recommended	Consistent	Should do
	PARM	Recommended		
	IHM	Strong recommendation		
	NHG	Important to do		
	ACP-APS	Should be done		
	NBPN	Recommended		
Crossed straight leg test	NASS	Recommended	consistent	Should do
	PARM	Recommended		
	IHM	Strong recommendation, high specificity and low sensibility		
	NHG	Important to do		
	NBPN	Recommended		
Muscle testing	NASS	Recommended	Common/consistent	Should/could do
	PARM	Suggested: knee extension, foot dorsi and plantarflexion, toe dorsiflexion		
	IHM	Recommended; foot plantar and dorsiflexion, knee extension strength, toes dorsal flexion		
	NHG	Important to do		



	ACP-APS NBPN	should be done; knee, great toe and foot dorsiflexion Strong recommendation		
Sensory testing	NASS PARM IHM ACP-APS NBPN	Suggested; foot sensibility Recommended Should be carefully considered; foot Should be done; distribution of sensory symptoms Weak evidence	Common	Could do
Reflex tests (ankle and knee tendon)	PARM NBPN ACP-APS NASS	Suggested Weak evidence Recommended insufficient evidence to make a recommendation	Inconsistent	None
mapping pain distribution	PARM IHM	Recommended Strong recommendation	Consistent	Should do
Slump test	PARM NASS	Suggested Insufficient evidence to make a recommendation	inconsistent	None
Wasserman test	PARM IHM	Suggested Should be carefully considered	Consistent	Could do
Steppage	PARM IHM	Recommended; Immediate referral for surgical evaluation Recommended; requires immediate surgical evaluation	Consistent	Should do



Congruence of signs and symptoms	PARM	Recommended	Consistent	Should do
	IHM	Strong recommendation		
Diagnostics Imaging				
<i>Routinely offering imaging in primary care or absent of red flags</i>	KCE	Do not offer	Consistent	Do not do
	ICSI	Should not routinely recommend		
	NICE	Do not offer In a non-specialist setting, consider in specialist settings		
	ACOE M	Routine CT not recommended		
	CCGI	Avoid unless serious underlying pathology suspected		
	ACR NBPN	CT/MRI/X-ray/X-ray myelography usually not appropriate if no prior management Do not offer		
	<i>Computed Tomography (CT)/ Magnetic resonance imaging (MRI) routinely in first 4–6 weeks</i>	ICSI	Should not routinely recommend	Consistent
ACOE M		Not recommended		
NHG		advice against in primary care		
PRAM		Not recommended unless highly painful sciatica or progressive motor deficit		
IHM		Not recommended if no highly-painful sciatica or progressive motor deficit		
NBPN		Do not offer		



CT when history and physical examination findings consistent with disc herniation, after 4 – 6 weeks of low back pain if surgery is considered, severe or progressive neurologic signs and symptoms present

NASS

CT/CT myelography recommended

Consistent Should do

VA/Do
d

Recommended

TOP

If MRI is contraindicated

PRAM

Strongly endorsed

ACOE

Recommended

M

IHM

Recommended

ACP-

Only if patients are potential candidates for surgery or epidural steroid injection

APS

NBPN

If MRI is contraindicated

ACR

Usually appropriate when underlying diseases present

May be appropriate when surgery or intervention candidate

MRI when history and physical examination findings consistent with disc herniation, radiculopathy persists after six week, if surgery is considered, severe or progressive neurologic signs and symptoms present, where an epidural glucocorticosteroid injection is being considered

NASS

Recommended

Common Should do

VA/Do
D

Recommended

TOP

Consider



	NBHD	Only when recent lumbar nerve root lesions after careful consideration		
	EG	Recommend for evaluation of radicular symptoms		
	PRAM	Strongly endorsed		
	ACOE	Moderately recommended		
	M			
	IHM	Recommended		
	ACP-APS	Only if patients are potential candidates for surgery or epidural steroid injection		
	UMHS	May be reasonable to perform		
	NBPN	Recommended, if severe persistent symptoms and referral to surgery is considered		
	ACR	Usually appropriate when underlying diseases present		
		May be appropriate when surgery or intervention candidate		
	ACP	suggested immediately when severe neurologic deficits		
Others				
EMG	EG	Not established	Inconsistent	None
	PRAM	Not recommend in the first four weeks of low back pain		
	ACOE	Recommended where CT or MRI is equivocal and ongoing pain		
	M	Not recommended when no significant leg pain or numbness		
	IHM	Not recommended in first 4 weeks		
	UMHS	Should be performed If no improvement at ≥ 3 weeks and MRI not diagnostic		



<i>Sensory nerve somatosensory evoked potentials (SEP)</i>	NASS	Suggested as an adjunct to cross-sectional imaging	Inconsistent	None
	DLE-DWC	Not recommended to identify radiculopathy		
<i>Discography</i>	ACOE M	Moderately not recommended	Inconsistent	None
	DLE-DWC	May be indicated when unremitting pain > 3 months and non-invasive imaging not diagnostic		
	NBPN	Not recommended (do not contribute to diagnostic accuracy)		
<i>Diagnostic medial branch block</i>	APS ACOE M	no recommendation not recommended	Inconsistent	None

* Table 1 provides the extensive names of the included guidelines.



Table S5. Therapeutic recommendations from guidelines for lumbar radicular pain.

Non-Invasive Treatment	Guide-line*	Specification	Consistency	Clinical Inference
Bed rest	ACOE M	Not recommended	Inconsistent	None
	PARM	Not recommended (except for 2-4 days in severe cases)		
	IHM	Better not do, except 2-4 days in case of major sciatica		
	NHG	Can be considered for few days		
	NBPM	Not recommended, unless to relieve pain		
Physical activity	NBHD	Consider encouraging	Common	Should do
	PARM	Recommends remaining physically active		
	IHM	Recommend continuing usual everyday life activities		
	ACP- APS	Advice to remain active		
	NICE	Provide, promote and facilitate		
	NHG	Advice dosed physical activity		
	NBPN	Should be encouraged		
Educational care	NICE	Provide information on the nature sciatica	Consistent	Should do
	ICSI	Should receive		
	NHG	Discuss the condition		
	ACP- APS	Provide		
	NBPN	Provide information on the nature sciatica		
Multidisciplinary approach/rehabilitation program/ Psychological therapy	NICE	Consider psychological therapy as part of a treatment package	Common	Could do
	KCE	Consider		
	UMHS	In patient at risk for chronic disability at 6 weeks and disabled		
	NBPN	Consider when risk of becoming chronic and psychosocial risk factors		
Alternative medicine <i>Acupuncture</i>	ICSI	Should be considered	Inconsistent	None
	PARM	Recommended in acute pain		
	ACOE M	Not recommended		
	IHM	Not effective		
	NICE	Do not offer		
	KIOM	Recommended		
	NBPN	Not recommended		
	Manual therapies			

<i>traction</i>	NASS	Insufficient evidence to recommend	Inconsistent	None
	KCE	Do not offer		
	PRAM	Not recommended		
	ACOE	Moderately not Recommended		
	M			
	DLE-DWC	Not recommended		
	NICE	Do not offer		
	NBPN	Cannot be recommended		
	APTA	Uncertain, a subgroup will benefit		
	<i>manipulation/mobilisation/soft-tissue techniques</i>	NASS		
		No evidence for improve functional outcomes		
KCE		Consider		
ICSI		Should be considered		
NBHD		Consider joint mobilization		
PARM		Suggested in acute pain		
ACOE		Recommended when no neurological deficit		
M				
DLE-DWC		Generally accepted and well established intervention		
IHM		Contraindicated		
NICE		Consider only as part of a treatment package		
NHG		Not recommended		
CCGI		Conditionally recommended > 3 months pain		
NBPN		Manipulation should not be used in the acute phase, could be considered as short-term pain relief when persistent symptoms		
APTA		Should consider		
<i>Message</i>		PRAM	Not recommended	Inconsistent
	ACOE	Could do		
	M			
	IHM	Do not do		
	NBPN	Not recommended		
Devices (e.g. belts, corset, foot orthotics etc.)	NICE	Do not offer belts, corsets, foot orthotics, rocker sole shoes	Consistent	Do not do
	KCE	Do not offer belts or corsets, foot orthotics, rocker sole shoes		
	ACOE	Shoe insoles and lifts are not recommended		
	M			
	ACOE	Kinesiotaping and taping are not recommended		
M	Belts and corset are not recommended			
NBPN				
Exercise/physical therapies	KCE	Consider an exercise program	Consistent	Could do
	ACOE	Moderately Recommended		
	M			

	NBHD	Weak/conditional recommendation		
	CCGI	Conditional recommendation for patients with chronic (> 3 months) leg pain		
	NBPN	Can be used as a tool to activate inactive patients		
	APTA	Can consider flexion exercises		
Electrotherapies				
<i>TENS/PENS/interferential therapy</i>	NICE	Do not offer TENS/PENS/interferential therapy	Consistent	Do not do
	KCE	Do not offer TENS/PENS/interferential therapy		
	PRAM	TENS not recommended		
	ACOE	TENS/PENS generally not recommended, only recommended for select use		
	M	TENS not useful		
	IHM	TENS not useful		
Therapeutic ultrasound	NBPN	Not recommended		
	KCE	Do not do	Inconsistent	None
	PARM	Recommended		
	NICE	Do not offer		
Heat/Cold/Infrared therapies	ICSI	Heat and Cold therapies may be used for pain relief	Inconsistent	None
	PRAM	Heat not recommended in acute pain		
	UMHS	Heat may be reasonable to perform in initial visit		
	ACOE	No recommendation for infrared therapy		
	M	No recommendation for infrared therapy		

Pharmacological interventions

Paracetamol	KCE	Do not routinely offer	Inconsistent	None
	PARM	Recommended in acute pain		
	ACOE	Recommended when NSAIDs are contraindicated		
	M	Recommended when NSAIDs are contraindicated		
	IHM	Could be useful to reduce pain		
	UMHS	Opinion of expert panel		
	NHG	Offer as first choice		
	NBPN	Start with		
Non-steroidal anti-inflammatory drugs (NSAID)	KCE	Consider	Inconsistent	None
	ICSI	May be used considering the side effect suggested for acute pain		
	PARM	May be used considering the side effect suggested for acute pain		
	ACOE	Strongly recommended		
	M	Strongly recommended		
	IHM	Could be useful to reduce pain		
	NHG	Give as step 2 only if Paracetamol is effective		
NBPN	Do not use (evidence of no effect and risk of side-effects)			
Opioids	NICE	Consider Tramadol only for acute rescue therapy Do not start Tramadol for long term use in non-specialist setting,	Inconsistent	None
		Do not start Morphine in non-specialist setting		
	KCE	Do not routinely offer for managing chronic pain		

	PARM	Light opioid recommended in acute pain in combination with paracetamol as alternative when NSAIDs or paracetamol alone do not control pain		
	IHM	Strong recommendation. Could be useful to reduce pain		
	NHG	Consider strong opioids like Morphine/ Fentanyl in chronic pain		
	NBPN	Consider Tramadol for acute strong pain, but only for short periods		
Paracetamol + opioids	IHM	Can be an effective alternative when NSAIDs or PCM alone do not control pain	Inconsistent	None
	NHG	Not recommended		
Anti-epilepticum	NBPN	Start if no satisfactory effect with paracetamol alone		
	KCE	Do not offer	Inconsistent	None
	VA/Do d	No recommendation for or against		
	PARM	Recommended in acute pain		
	ACOE M	Not recommended for chronic radicular pain syndromes		
	NASS	insufficient evidence to make a recommendation for or against Gabapentin		
	NICE	Offer gabapentin or Pregabalin Do not start in non-specialist setting: levetiracetam, lamotrigine, topiramate, oxcarbazepine, lacosamide		
	NHG	Consider Gabapentine besides low dose of TCA, if TCA is not effective, or has side effect of is contra indicated		
Muscle relaxants	KCE	Do not offer	Inconsistent	None
	ICSI	May be used as a short-term option		
	PARM	Recommended in acute pain		
	ACOE M	Recommended for acute radicular pain		
	IHM	Could be useful to reduce pain		
	NHG	Benzodiazepines are not recommended		
Antidepressants	NBPN	Evaluate but only for a short period		
	NASS	Insufficient evidence for Amitriptyline	Inconsistent	None
	NICE	Offer amitriptyline or duloxetine Do not start venlafaxine in non-specialist setting		
	KCE	Do not offer SSRI, TCA or SNRI		
	ACOE M	SSRI is not recommended.		
	NHG	No recommendation for TCA/SNRI TCA/SNRI could be considered		
Corticosteroids	VA/Do d	Recommended against offering	Inconsistent	None

	PARM	Recommended short-term for patients with acute pain		
	ACOE M	Recommended for treatment of acute and subacute radicular pain Not recommended for treatment of chronic radicular pain		
	DLE-DWC	Not generally recommended		
	NHG	Not recommended		
	ACP-APS	Not recommended		
Antibiotics	KCE	Do not offer	Inconsistent	None
	ACOE M	No recommendation		
Cannabis	NICE	Do not start in non-specialist settings	Consistent	Do not do
	NHG	Not recommended in primary care		

Invasive Treatments

Surgery	NASS	Percutaneous/Automated discectomy may be suggested	Common	Could do
	APS	Consider offering discectomy		
	NHG	Consider after 12 weeks of conservative therapy		
	DLE-DWC	Discectomy/Laminectomy/Foramenotomy/Facetectomy/Chemonucleolysis are indicated		
	IHM	Discectomy effective when no improvement with conservative therapy laser/Percutaneous discectomy must be considered experimental		
	ACOE M	Lumbar discectomy is moderately recommended after 4 to 6 weeks to speed recovery Automated percutaneous discectomy and Laser discectomy not recommended		
	NBPN	Acute only for cauda equina syndrome Discectomy can be considered after 12 weeks (preferably before 8 months) when persistent severe symptoms		
Injection therapies <i>Epidural injections</i>	NICE	Consider acute and severe sciatica	Inconsistent	None
	NASS	Transforaminal epidural steroid injection are recommended Interlaminar epidural steroid injections may be considered		
	KCE	Consider in (sub)acute (at least 2-3 weeks) and severe pain		
	VA/Do d	Suggested for the very short-term effect		

	Recommended against offering for the long-term reduction of pain	
ICSI	May be used as an adjunct treatment to assist with short-term pain relief	
NBHD	Weak/conditional recommendation against extraforaminal glucocorticoid injection	
PRAM	Recommended	
ACOE	Recommended as an option	
M		
ACP	Weak recommendation	
NHG	Not recommended in first line	
NBPN	Can be tried in awaiting surgery	
APS	Consider offering when prolapsed lumbar disc	
Referral		Consistent should do
PRAM	Immediate referral for surgical evaluation when step-page To neurophysiological when etiological/ level diagnosis are uncertain, Prognostication information required or monitor objectively	
IHM	Surgical evaluation < 1 month when neurological symptoms worsening Or > 1 month when sciatica is important and disabling	
NHG	Neurologist evaluation when 1-3 months sciatica Neurologist evaluation when 1-3 months sciatica 1-2 day if sever pain despite maximal medication	

* Table 1 provides the extensive names of the included guidelines.