

An Approach to Low Back & Hip Pain

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Assumptions for today

1. You know how to do the tests
2. You are able to guide workup
3. There is a focus on injections for this forum, but treatment options are multifactorial

Lumbar Spine- Range Of Motion

<u>Finding</u>	<u>Diagnostic Consideration</u>	<u>Options</u>
Not Fixed	Pain/Centralization/Malingering	Continue exam
Fixed Chest expansion Schober Wall Occiput Distance Side Bending	Ankylosing Spondylitis (DISH)	Workup (bloodwork) and rheumatology referral if other consistent findings and history



Lumbar Spine- Centralizing

<u>Finding</u>	<u>Diagnostic Consideration</u>	<u>Options</u>
Waddell Score >2	Centralization/Malingering	Continue exam Consider non surgical treatment



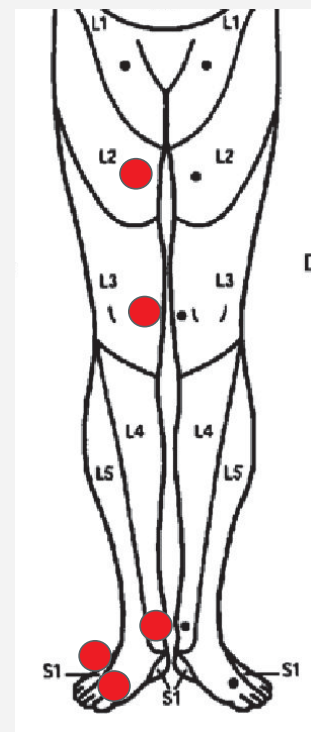
Lumbar Spine - Upper Motor Neuron Findings/Vascular

<u>Finding</u>	<u>Diagnostic Consideration</u>	<u>Options</u>
Hyperreflexia Spasticity Hoffman's Babinski Clonus	Cervical or Thoracic Myelopathy	MRI Cervical/thoracic Spine
Loss of Pedal Pulses Decreased Cap Refill	Vascular Claudication	Workup as indicated



Myotomes/Dermatomes

L3 & L4	Quadriceps (femoral n.) Hip Adductors (obturator n.)	Knee Extension Hip Adduction
L5	Gluteus Medius/Min (Super Gluteal n.) Extensor Hallucis Longus (Deep Peroneal n.)	Hip Abduction Great Toe Extension
S1	Flexor Digitorum Longus (Tibial n.) Gastrocsoleus (Tibial n.) Gluteus Maximus (inferior gluteal n.)	Great Toe Flexion Plantar Flexions Hip Extension



Lumbar Spine - Peripheral Nervous System

<u>Finding</u>	<u>Diagnostic Consideration</u>	<u>Options</u>
Concordant Weakness, Reflex, & Sensory Loss Straight Leg Raise	Radiculopathy Plexopathy	Manage symptoms (physio, meds, injections) - workup (MRI and/or EMG/NCS) and refer if no resolution
Weakness/sensory abnormalities in a single peripheral nerve distribution	Mononeuropathy	EMG/NCS



Lumbar Spine - Other Regional Pain Issues

<u>Finding</u>	<u>Diagnostic Consideration</u>	<u>Options</u>
Supine IR HIP	OA Labral Tear	Imaging (xray/MRA) Physio Injection Surgical referral
SI Joint Loading Faber Test PSIS Palpatory Pain	SI joint	Physio SI Belt SI joint Injections
Pubis Adductor Psoas	Athletic Pubalgia	Imaging MRI Abdominal Wall Physio ESWT Injection Surgical Referral



Lumbar Spine - Palpatory Exam

<u>Finding</u>	<u>Diagnostic Consideration</u>	<u>Options</u>
Paraspinal	Facet joint Pain	Physio Facet joint procedures
PSIS	SI joint	Physio SI Belt SI joint Injections
Posterior Gluteal Region	Piriformis myofascial pain/tendinopathy	Physio/ESWT injection
Ischial Region	Hamstring Tendinopathy	Physio/ESWT Injections
Greater Trochanter	Greater Trochanter Syndrome	Physio/ESWT Injections



Injection Considerations

<u>Finding</u>	<u>Diagnostic Consideration</u>	<u>Injection Options</u>
Mechanical Low Back Pain	Myofascial Pain Facet Joint Pain SI Joint	Trigger Points Facet Procedures SI joint Epidural*
Radiculopathy	Nerve Root compression	Epidural Nerve Block
Hip	Intra Articular Tendinopathy (ie GTS, Ischium) Myofascial Athletic Pubalgia	Joint injection Fenestration Muscle (Piriformis) Pubis/Nerve Block