

Golden Tips to Diagnose Low Back Pain Better, Faster and Easier A Useful Guide for Practitioners

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Editorial

Spinal pains are among the most prevalent conditions leading to referral to medical centers.

Neck pain, back ache and low back pain (LBP) are common complaints in patients seen in daily practice. In spite of modern and frequent teachings in related field, according to our observations, graduates of medical school frequently suffer from mis-diagnosis and incorrect attribution of LBP to muscle spasm, calcium deficiency, degenerative disc disease or psychogenic neck or LBP.

Apart from traumatic injuries, two major categories of these pains are mechanical and inflammatory ones. Non-organic and infiltrative spinal disorders are also important even they are rather rare. Early and correct clinical diagnosis of LBP is crucial for better outcome and chronicity [1].

Gender, age, job, history of trauma and nature of the pain are critical points to correct diagnosis. There are some "golden clues" that discriminate near all spinal pains based only on history and physical examination and irrespective of sophisticated laboratory and imaging investigations.

- 1. Longstanding non-disabling back and low back pain in a young boy or girl with poor sitting, standing and walking position usually is due to poor anatomical posture and un-balanced muscle strain [2].
- 2. Persistent awakening focal LBP in a child almost indicates to an important pathology.
- 3. Chronic axial pain in a young man with marked limitation of range of motion and rather normal MRI almost always indicates seronegative spondylarthropathy (SpA).
- 4. Chronic LBP with limited chest expansion in a middle age man is suggestive of seronegative spondylarthropathy
- 5. Neck or LBP in a young (male or female) patient that is aggravated at night with pronounced morning discomfort is typical of inflammatory spinal disorders or SpA.
- 6. LBP with testicular enlargement and retroperitoneal lymphadenopathy is a clue to underlying malignancy.
- 7. LBP in a woman with vaginal discharge/ infection is suggestive of gynecologic problem.
- 8. Mechanical LBP in a girl with low sun exposure and diet poor in vitamin D is indicative of hypovitaminose D.
- 9. Neck or low back pain that is aggravated by movement and/ or exertion in an elderly or middle age person is typical of spondylosis.
- 10. History of trauma directly pushes to the diagnosis of spinal fractures. Low impact trauma in an elderly, denotes an osteoporotic or pathologic fracture
- 11. Local and unilateral low back pain that is accentuated by extension and ipsi-lateral bending is typical of "facet syndrome"
- 12. Sudden onset LBP limited to low back area with or without radiation to lower limbs and normal MRI is the only convincing evidence for

muscle spasm as a culprit mechanism for LBP.

- 13. Newly onset shooting pain after heavy object lifting in a middle age person almost always denotes disc herniation.
- 14. Disc extrusion (not bulging or herniations) may cause inflammatory LBP with pronounced morning stiffness like SpA.
- 15. Universal spinal pain with generalized tenderness over bony prominences and sacroiliac joints could be a golden clue to inflammatory spinal pain representative of polyenthesopathy
- 16. Neck pain accompanied with LBP in a young man/ or woman must urged to search for other signs of inflammation and examination of sacroiliac joints.
- 17. History of uveitis, psoriatic skin lesion, nail pitting or onycholysis and any kinds of colitis (IBS or IBD) and spinal pain are indicative and even typical of seronegative spondylarthropathy [3].
- 18. Constitutional symptoms like fever, sweeting and weight loss are key features of more important causes of LBP like spinal infection and neoplasm. However, inflammatory spinal pain also may induce fever and weight loss.
- 19. Back or LBP that is awakening during night sleep always hints to infiltrative bone lesion, metastasis or any other focal pathology and needs full work up [4,5].
- 20. There is no growth pain in territory of spine in children.
- 21. Close contact to animal products like raw milk and unprocessed chees in endemic area is indicative of brucellosis
- 22. Poor socioeconomic state and close contact to a person with active tuberculosis is a telltale sign for spinal tuberculosis.
- 23. LBP in the context of known malignancy is suggestive of bone metastasis
- 24. Unilateral LBP with burning sensation in susceptible patients and elderly may herald herpes zoster.
- 25. Axial pain of any type with exaggerated deep tendon reflex or pathologic reflex is indicative of upper motor neuron lesion [6].
- 26. High signal lesions in vertebral endplates suggestive of edematous or inflammatory Schmorls' nodes are equivalent to mini-sacroiliitis and is suggestive of SpA [7].

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Received October 20, 2015; Accepted October 21, 2015; Published October 23, 2015

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- 27. Non-remitting LBP in an old or pregnant woman may indicate sacral insufficiency (stress) fracture [8].
- 28. Severe excruciating pain in an old man should always address to a catastrophic vascular emergency [9].
- 29. Abdominal pain may be the sole presentation of spinal pathology in elderly and young patients [10,11].
- 30. No LBP is a "simple low back pain" except after a careful history, relevant physical examination and judicious use of imaging techniques.

Most of mechanical spinal disorders are composed of disc herniation and degeneration (spondylosis) and degenerative facet joint diseases (osteoarthritis).

Very long and unacceptable lapsing time from initial symptoms and final diagnosis of ankylosing spondylitis is a good evidence for underestimating inflammatory spinal disorders in common practice.

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