DIAGNOSTIC CHALLENGES IN INFLAMMATORY BACK PAIN /AXIAL SPONDYLOARTHRITIS

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Low-back pain (LBP) is the single leading cause of disability worldwide and the condition for which the greatest number of people may benefit from rehabilitation. LBP may be classified as specific, where pain can be explained by tissue damage, an underlying disease, or may be referred from other organs, or non-specific, where pathology or tissue damage cannot confidently account for the experience of pain, but is usually of „mechanical" origin. The latter is the most common type of LBP (about 90% of cases). Inflammatory back pain (IBP) is associated with inflammatory conditions, like chronic inflammatory rheumatic diseases, in the first place, spondyloarthritides (SpA). Several key features help differentiate IBP from other causes of back pain. It is a chronic pain, with insidious onset in a younger age, localized on the axial, particularly the lumbar spine, with additional alternating buttock pain from one side to another. Also, it improves with exercise, with no improvement with rest, nocturnal pain may awaken the patient, and is associated with prolonged morning stiffness. IBP can be defined according to various criteria, combining features of IBP, whose sensitivity ranges from 70.0 to 89.9% and specificity from 52.2 to 81.4%. The latest and most frequently used in clinical trials is one developed by Assessment for Spondyloarthritis Group (ASAS). SpA defines a group of closely related conditions, with several common etiopathogenetic, serological, clinical, and imaging features.

According to their predominant presentation, SpA can be axial (axSpA) or peripheral (pSpA). Furthermore, axSpA may be either radiographic (interchangeable term with ankylosing spondylitis, AS), with definitive radiographic damage on sacroiliac joints or non-radiographic axSpA (nr-axSpA), with changes visible only on MRI. Patients with axSpA also have some extra-musculoskeletal manifestations that can help in establishing diagnosis, but they also represent an additional burden for the patients, regarding higher disease activity and functional impairment. Diagnosis of axSpA can be complex and is often missed or delayed. Systematic review and meta-analysis of diagnostic delay in axSpA showed that the mean delay to diagnosis was 6.7 years overall (95% CI 6.2 to 7.2, I2 99%). ASAS produced classification criteria for axSpA, with entry criteria of having chronic back pain and age at onset less than 45 years, and thereafter two arms: imaging arm (sacroiliitis on standard radiograms or MRI plus at least one of the SpA features) or clinical arm (positive HLA B27 plus 2 or more of SpA features). ASAS classification criteria may be used as a guide to identify features associated with axSpA in clinical practice. Still, they should not be used for diagnostic purposes, as they have specific limitations that affect their utility when used incorrectly as diagnostic criteria. There are several referral strategies that include IBP for early diagnosis of axSpA. In the European study, the distinctive impact of IBP is most pronounced in the referral of patients by GP to a rheumatologist, while the diagnostic value of the criteria for IBP

in rheumatologist practice has very low specificity and positive likelihood ratio. ASAS accepted a modified Berlin algorithm for diagnosing axSpA, with IBP being one of the SpA features. Recently, it was confirmed to be the preferred strategy with the best sensitivity and specificity in diagnosing axSpA in patients with undiagnosed chronic low back pain. In conclusion, differentiating the etiopathogenesis of low back pain is crucial for diagnostic and therapeutic procedures. IBP is one of the main features of axSpA. Recognition of IBP is particularly important for referring patients to a rheumatologist. Early recognition of characteristic symptoms and signs, and thus the diagnosis of axSpA, results in timely and appropriate treatment and ultimately better outcomes.

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