Cholecystitis

A 79-year-old male presented with lower back pain and urinary incontinence after receiving a non-image-guided lumbar infiltration treatment four weeks prior to admission. The MRI highlighted multi-segmental hyperintensities in the intervertebral disc spaces of the lumbar spine indicative for spondylodiscitis. Antibiotic treatment over a week did not lead to significant clinical improvement. Blood cultures, cardiologic, otorhinolaryngologic and dental examinations turned out negative for a focus of infection. A CT-guided biopsy was indicated after discontinuation of antibiotic treatment for less than 24 hours. Rapid clinical deterioration with concomitant onset of abdominal pain resulted in the diagnosis of cholecystitis, which required cholecystectomy. Mirbagheri et al. performed a systematic literature review using the Pubmed database for the key words “spondylodiscitis”, “spine”, “abdominal” and “cholecystitis”, to identify abdominal diseases that mimic spine pathologies and spinal diseases that mimic abdominal pathologies.

No other report in English literature of cholecystitis associated with initial onset of lower back pain was identified. Eighteen reports referred to abdominal conditions that mimic spinal diseases among them a patient with cyclic lumbar back pain who received a lumbar spinal fusion who, after persisting symptoms led to further diagnostic procedures, was ultimately diagnosed with endometriosis. Spinal symptoms included paraplegia and urinary incontinence as results of acute aortic pathologies. Eleven reports presented spinal pain mimicking abdominal conditions including abdominal pain and diarrhea as well as have had surgical procedures such as an appendectomy before the spinal condition was discovered.

Clinical symptoms of the spine such as lower back pain can be unspecific and lead to false conclusions in the presence of concomitant pathologies in MRI. Only clinical deterioration in our case patient prompted correction of the diagnosis on day seven. Initial workup for alternative common infectious foci such as lung and urinary tract was performed, but further abdominal workup despite the absence of abdominal symptoms may have led to an earlier diagnosis. Our literature review found several cases of misdiagnosed spinal and abdominal conditions, respectively. Some had undergone unnecessary invasive surgical procedures before the right diagnosis was concluded. Because of the high incidence of symptoms such as lumbar back pain as well as abdominal pain, considering optimal patient care as well as economic aspects it would be essential to conduct an interdisciplinary clinical management to avoid errors in the early stage of diagnostics. The purpose of this case report and literature review was to discuss atypical abdominal entities mimicking spinal diseases typically presenting with lower back pain. [1)].

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Mirbagheri A, Etminan N, Schölch S, Maier C, Perrin J, Enders F. Lumbar spondylodiscitis-mimicking cholecystitis - a case report and review of literature. J Neurol Surg A Cent Eur Neurosurg. 2022 Mar 30. doi: 10.1055/a-1811-7393. Epub ahead of print. PMID: 35354214.