


Isotretinoin use should be examined in young individuals with inflammatory spinal pain, sacroiliitis or hyperostosis

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I read with interest the presented case by Min et al.¹ The reported case involved a young male with neck and back pain for 12 months, odontoid syndesmophyte, and structural damage on sacroiliac computed tomography suggestive of ankylosing spondylitis. I would like to remind an overlooked entity, retinoid hyperostosis, in such cases of young individuals presenting with spinal pain, enthesophytes, or osteophytes and sometimes sacroiliitis suggestive of spondyloarthritis (SpA).

After its first description by Pittsley and Yoder,² increasing number of reports, case series, and observational and prospective studies revealed that isotretinoin treatment might lead inflammatory back pain and sacroiliitis.³⁻⁵ Isotretinoin is a retinoid commonly used as a systemic treatment for severe acne vulgaris.⁶ Acne vulgaris is an inflammatory disease of the pilosebaceous unit of the skin targeting young individuals aged 12 to 29 years, which are also common ages for SpA onset.^{6,7} Clinicians should question retinoid use in patients who developed inflammatory spinal pain or have hyperostosis characterized by the ossification of the spinal ligaments.^{7,9}

Isotretinoin-induced sacroiliitis is not rare. Karadağ et al.¹⁰ recently reported four cases of their own clinic and identified 15 articles describing 33 patients with isotretinoin-induced sacroiliitis during their systematic review. The prominent mutual features of the reviewed cases, including their own cases, were male sex, response to steroids or nonsteroidal anti-inflammatory drugs, bilateral or unilateral sacroiliitis on magnetic resonance imaging, and initiation of sacroiliitis symptoms within days to months after the isotretinoin start up. It should be noted that five cases were positive for human leukocyte antigen-B27, and some of the reviewed cases required adalimumab for the treatment.¹⁰

The presented case had prominent and robust features of axial SpA; however, unusual ossification of the odontoid process should prompt further inquiry into any history for retinoid use. At this point, data is insufficient to support the idea that retinoids may trigger the onset of SpA findings such as enthesitis, tendonitis, or osteitis; however, investigators advise to monitor patients for the emerge of inflammatory findings.^{3,4} Dermatologists should closely monitor musculoskeletal symptoms alongside other side effects and may be advised to ask patients for SpA features or family history for SpA prior to treatment with retinoids. Collaboration with rheumatologists should be considered if required.

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