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LETTER

Re: Study of the Distribution of Lumbar Modic Changes in Patients with Low Back Pain and Correlation with Lumbar Degeneration Diseases [Letter]

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Dear editor

A recent paper states that "In conjunction with this study, more aggressive anti-inflammatory therapy should be given to patients with simple Modic changes" and concludes that "Modic changes … are a very important factor in low back pain" (LBP).[1]

We believe that neither the methods nor the results of this study support these statements. In fact:

1. Bibliographical references appear to be biased. For instance, one of our studies is cited to support secondary results from this study,[2] while another, which contradicts its main conclusion, is overlooked.[3]
2. The study only describes Modic and other radiological findings in "500 randomly selected patients who visited the outpatient clinic for lumbar spine MRI for low back pain" (LBP), and assumes that the presence of a radiological finding (eg, Modic changes) implies that it is the cause of LBP. This is against the available evidence, which shows that most of the reported findings are incidental (not causal) and are equally present among healthy subjects and among patients with LBP.[3–5]
3. The paper does not describe how MRI findings were assessed,[1] while the interobserver agreement of most reported MRI findings has been shown to be moderate at best.[6,7]
4. Limitations derived from the absence of a control group and the rudimentary statistical methods used disqualify this study from being able to suggest any statistical association, let alone causal relationship, between LBP and any of the reported radiological findings. These limitations also imply that this study can neither support the notion that Modic changes are pathological or suggest any treatment for this hypothetical disease.

Disclosure

All authors declare no conflict of interest in this communication.

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