

## Letter to the Editor: An Updated Overview of Low **Back Pain Management**

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We read with interest the article by Hong et al. [1] entitled "An updated overview of low back pain management." The authors reported that there was a high degree of evidence and so provided a strong recommendation for use of paracetamol for both acute and chronic low back pain. The authors cite the PACE trial [2] and a systematic review [3] as evidence to support their recommendation. Unfortunately we feel they misunderstood these papers, on which we are authors, and have subsequently misrepresented the evidence for paracetamol. We would like to take the opportunity to alert readers to the known lack of effectiveness of paracetamol for acute low back pain and uncertain effectiveness for chronic low back pain.

The PACE trial (n=1,652) compared paracetamol to placebo in people with acute low back pain and found that paracetamol had no effect on pain, disability, function, global symptom change, sleep quality, or quality of life [2]. The 2015 systematic review (three trials, 1,825 patients) concluded that there was no effect of paracetamol (over placebo) on pain or disability [3].

There is additional evidence that attests to the lack of efficacy of paracetamol for acute low back pain. The Cochrane review published in 2016 (two trials, 1,785 patients) reported that here is high-quality evidence that paracetamol (compared to placebo) has no effect on quality of life, function, global impression of recovery, and sleep quality [4]. Subsequent to the Cochrane review the 2020 Friedman trial (n=120) found no benefit of adding paracetamol to ibuprofen for low back pain in the emergency department setting [5]. A 2021 overview of paracetamol for all health conditions concluded that for most conditions, evidence regarding the effectiveness of paracetamol is insufficient for drawing firm conclusions. The one exception was low back pain where there is strong evidence that paracetamol is not effective for reducing acute low back pain [6].

The evidence for paracetamol for chronic low back pain was originally confined to a single trial [7] which has subsequently been retracted [8]. Accordingly the efficacy of paracetamol for chronic low back pain is uncertain.

While in the past paracetamol was almost uniformly recommended in guidelines for low back pain, the evidence that has emerged over the last decade has forced guideline committees to rethink their earlier endorsement [9]. Paracetamol is not an evidence-based treatment for low back pain and should not be recommended.

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## **Conflict of Interest**

No potential conflict of interest relevant to this article was reported.

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