

LETTER TO THE EDITOR

Comment on: A Prospective Study Assessing Functional Outcomes of Arthroscopic Subacromial Decompression with Platelet-Rich Plasma Augmentation in Shoulder Impingement Syndrome



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Dear editor,

We read with interest the study by Kumar *et al*, which evaluated functional outcomes following arthroscopic subacromial decompression (ASD) augmented with platelet-rich plasma (PRP) in patients with shoulder impingement syndrome (SIS)¹. The authors are to be commended for their prospective data collection and for exploring the potential role of biological augmentation in shoulder surgery.

However, interpretation of these findings requires consideration within the context of current evidence. While some smaller series demonstrate short-term improvement following ASD in terms of the constant score and American Shoulder and Elbow Surgeons score (ASES), larger randomised controlled trials (RCT) did not support the use of ASD in patients with SIS^{2,3}. High quality RCT such as Finnish Subacromial Impingement Arthroscopy Controlled Trial (FIMPACT) and Can Shoulder Arthroscopy Work? (CSAW) studies shows that ASD alone does not provide clinically meaningful improvement over sham surgery or structured exercise therapy, both in the short- and long-term^{4,5}. These landmark studies have led to a re-evaluation of the routine use of ASD in uncomplicated SIS^{4,5}.

In this study, post-operative improvements in pain and functional scores were reported following ASD with PRP augmentation¹. While encouraging, the lack of a comparison group, be it ASD alone, PRP injection alone, or structured physiotherapy, limits the ability to attribute these improvements specifically to PRP augmentation or to the decompression procedure itself. Gains may reflect post-operative rehabilitation, placebo effects, or the natural course of SIS rather than the intervention. The sample size of 72 patients in this prospective study, although not large, would

have been sufficient to allow randomisation into two groups with a control arm. For example, comparing ASD alone versus ASD with PRP augmentation, or PRP injection alone versus ASD with PRP injection, would help differentiate the relative contribution of the surgical and biological interventions to clinical improvement, and clarify whether PRP provides any additional benefit beyond standard decompression or non-operative therapy.

Current literature suggests that PRP injections do not confer superior short-term pain relief compared with corticosteroids, with any potential benefits more likely to manifest at mid-term follow-up⁶. High-level evidence demonstrating additive benefit of PRP when combined with ASD remains limited. Consequently, ASD with PRP augmentation should be regarded as investigational rather than standard practice.

In clinical practice, structured exercise therapy remains the cornerstone of SIS management, with injection therapies serving as adjuncts for short-term symptom control^{4,6}. Surgical intervention should be reserved for carefully selected patients with recalcitrant disease where the symptoms persist despite optimised conservative care. Future studies directly comparing ASD with PRP augmentation versus ASD alone, PRP injection alone, and exercise therapy are required to clarify the role of biological augmentation in SIS management.

In conclusion, while Kumar *et al* provide valuable prospective data, the reported improvements should be interpreted with caution¹. The study highlights the ongoing interest in optimising outcomes for SIS, but routine use of ASD with PRP remains unsupported by high-level comparative evidence.

Kow RY¹, MS Ortho

Low CL², FRCR (London)

¹Joint Replacement Unit, ALTY Orthopaedic Hospital, Kuala Lumpur, Malaysia

²Department of Radiology, International Islamic University Malaysia, Kuantan, Malaysia

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