Does arthroscopic acromioplasty provide any additional value in the treatment of shoulder impingement syndrome?

A two-year randomised controlled trial.

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This is a randomised controlled trial to examine the effectiveness and cost-effectiveness of arthroscopic acromioplasty in the treatment of stage II shoulder impingement syndrome.

140 patients were divided into two groups: supervised exercise programme (n = 70, exercise group) and arthroscopic acromioplasty, followed by a similar exercise programme (n = 70, combined treatment group).

The main outcome measure was self-reported pain on a 0-10 Visual Analogue Scale at 60 months. Other outcome measures on VAS 0 to 10 were Disability, Working ability, and Pain at night. Shoulder Disability Questionnaire (0-100) and the proportion of pain-free patients were recorded. A total of 109 patients have attended the 5-year follow-up.

An intention-to-treat analysis disclosed an improvement in both groups. Differences in outcomes between the groups were insignificant. The combined treatment was considerably more costly.

Arthroscopic acromioplasty does not provide any clinically important effects over structured and supervised exercise programme alone in terms of subjective outcome or cost-effectiveness. Structured exercise treatment should be the basis for treatment of shoulder impingement syndrome. Operative treatment should be offered judiciously.