Critical Appraised Paper

Manual therapy is more efficient than exercise therapy for osteoarthritis of the hip

Synopsis


Question What is the effect of manual therapy or exercise therapy in patients with osteoarthritis of the hip? Design Randomised controlled trial with concealed allocation, assessor blinding and intention to treat analysis. Setting Outpatient clinic in The Netherlands. Patients 109 patients were included in this study. Criteria were limited flexion, internal rotation with pain, and morning stiffness lasting more than 60 minutes. Fifty-six patients were assigned to the manual therapy group and 53 to the exercise group. Interventions Both groups participated in 25-minute sessions twice a week for nine weeks. For the manual therapy group, techniques were: stretching six peri-articular muscles (10–15 minutes), and traction on the hip joint in different positions. For the exercise group, techniques were: improvement of muscle function (strength exercises for deficient muscles, endurance treadmill exercises, co-ordination exercises to stimulate balance function), and active or passive motion of the hip in different sectors. Lifestyle education was provided for both groups. Outcomes Outcomes were assessed at baseline and 5, 17, and 29 weeks. The primary outcome was patient-assessed recovery measured on a 6 point scale, in analysis dichotomised to (i) improved or (ii) stable or worse. Other outcomes included quality of life measured by the SF-36, function measured with the Harris hip score, and a walking test. Main results Six patients were lost to follow-up at five weeks, and 21 at 29 weeks. Nine patients in each group underwent hip surgery. At five weeks, 81% of subjects in the manual therapy group considered themselves improved versus 50% in the exercise group. Odds ratio for improvement was 1.92 (95%CI 1.30 to 2.60). Manual therapy was more effective in improving function as measured by the Harris score (week 5, 17, and 29), walking speed (weeks 5 and 17), and SF-36 physical function (week 5); all p < 0.05. Conclusion Manual therapy (stretching and traction) has a greater effect than exercise therapy (muscle rehabilitation, passive or active motion) on osteoarthritis of the hip.

Commentary

Level of evidence has been a stumbling block for manual techniques. The efficacy of manipulative therapy has been questioned by the scientific community. While systematic reviews have concluded that manipulative therapy is effective for spinal pain, clinical trials evaluating manipulative therapy for other conditions are uncommon.

The current study is a welcome addition to the medical literature. The study tested the view that manual therapy treatment of soft tissues benefits patients with degenerative hip disease. This study by Hoeksma and colleagues is exceptional in its rigorous methodology, not often seen in the rehabilitation literature. Accordingly the study provides strong evidence that manual therapy is more effective than exercise for patients with osteoarthritis of the hip.

The use of manual therapies directed to the peri-articular soft tissues should be a part of the treatment of patients with hip osteoarthritis. It is regrettable that not all patients are given the opportunity to benefit from its effects. This is all the more true since these results can be obtained with a limited number of sessions (n = 9), with sustained effects as has been demonstrated by Hoeksma et al. In France application of manual joint distraction techniques using femoral traction is part of the basic arsenal of manual physical therapy for the hip (Hignet 1993). However in the Netherlands not all physical therapists have fundamental training in hip therapy using the manual techniques described in this article.

Yves Chatrenet
Sancellemoz Rehabilitation Center, France

Reference