

## Physiotherapy or home-based exercises in conservative treatment of rotator cuff tears - A prospective randomized controlled pilot study

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This pilot study evaluates the outcome after physiotherapy performed by physiotherapists, compared to home-based exercises in the conservative treatment of patients with full thickness rotator cuff tears. 43 adult subjects (range 18-75 years) who had a full thickness rupture of the rotator cuff which was verified by magnetic imaging tomography, with clinical signs of a chronic rotator cuff impingement, and who were available for follow-up, were randomized to physiotherapy, or to independent home-based exercises twice a day using a booklet. After drop out, 38 patients were available for full examination at follow-up. Before therapy and after two months of conservative treatment, pain intensity, the Constant-Murley score, isokinetic strength testing in abduction and external rotation, functional limitation, clinical shoulder tests and health-related quality of life (EQ-5D) were evaluated. Two-thirds of the patients improved in clinical shoulder tests, regardless of the therapy group. There were no significant differences between the groups with reference to pain, range of motion, maximum peak force (abduction, external rotation), the Constant-Murley score, and the EQ-5D index. The only significant difference observed was the improvement in the self-assessed health-related quality of life (EQ-5D VAS) favoring home-based exercises. It is concluded that home-based exercises, on the basis of an illustrated booklet with exercises, supplies comparable results to formal physiotherapy applied by physiotherapists in the conservative treatment of rotator cuff tears. The results of the pilot study suggest some potential advantages related to psychological benefits using home-based treatment.

### Biography

Gert Krischak has completed his MD at Ulm University School of Medicine and his MBA at Neu-Ulm University of Applied Sciences. He is Associate Professor and head of the department for orthopaedic surgery in Bad Buchau, and Director of the Institute of Research in Rehabilitation Medicine at Ulm University. He has published more than 60 original papers in reputed journals and serving as an editorial member of *repute*.

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