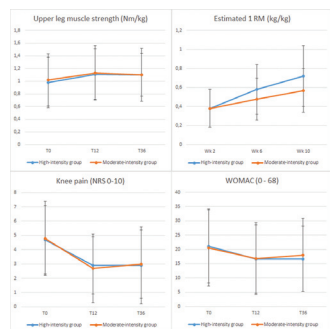


intensity resistance training led to greater improvements in muscle strength compared to moderate-intensity resistance training in patients with knee OA. This did not result in greater improvements in pain and physical functioning in the high-intensity resistance group; both groups showed similar clinically important improvements. The added value of vitamin D supplementation on muscle strength in knee OA patients with vitamin D deficiency need further study.



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OP0160-HPR DOES OCCUPATIONAL THERAPY DELAY OR REDUCE THE PROPORTION OF PATIENTS WHO RECEIVES THUMB CARPOMETACARPAL SURGERY? A RANDOMIZED CONTROLLED TRIAL

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Background: The 2018 update of the EULAR recommendations for the management of hand osteoarthritis (OA) states that every patient with hand OA should be offered patient education, hand exercises and provision of assistive devices. Orthoses should be considered for symptom relief in patients with thumb carpometacarpal (CMC1) OA. Surgery should only be considered when other treatment modalities have not been sufficiently effective in relieving pain (1).

Objectives: The main aim was to evaluate whether occupational therapy in the waiting period prior to surgical consultation can reduce or delay the need for surgery in CMC1 OA. A secondary aim was to explore potential predictors for CMC1 surgery.

Methods: This is a multicentre parallel-group randomized controlled trial including patients referred by their general practitioner for surgical consultation due to CMC1 OA at three Norwegian departments of rheumatology. After baseline assessments, participants were randomized into an occupational therapy group or a control group and reassessed after 4, 18 and 24 months. Both groups received written and oral information on hand OA. In addition, the occupational therapy group received a hand exercise program, day and night orthoses, assistive devices and a treatment diary.

Intention-to-treat analyses were conducted fitting multivariate logistic regression analyses to compare the proportion of participants in the two groups who had received CMC1 surgery after two years. Time to surgery was examined in a Kaplan-Meier survival plot, whereas crude and adjusted logistic regression analyses were performed to investigate predictors for CMC1 surgery using a predefined set of covariates of demographic and clinical variables.

Results: Of 214 patients screened for eligibility, 180 (84%) were randomized. The mean age was 63 years (SD 7.6) and 79% were women. Eighty-four (93%) participants in the occupational therapy group and 82 (91%) in the control group completed 24 months follow-up assessments. Fifty-eight (64%) participants in the occupational therapy group were categorized as having high treatment adherence. Twenty-two (24%) participants in the occupational therapy group and 31 (34%) in

the control group received surgery before the two year follow-up. The odds for receiving surgery were 50 percent lower in the occupational therapy group ($p=0.10$). Median time to surgery was 349 days (IQR 210 to 540) in the occupational therapy group and 267 days (IQR 181 to 406) in the control group ($p=0.07$). Previous non-pharmacological treatment (OR 2.70, 95% CI 1.16 to 6.27) and higher motivation for surgery (OR 1.22, 95% CI 1.07 to 1.38) were significant predictors for CMC1 surgery

Conclusion: In participants receiving occupational therapy there was a clear, but not statistically significant trend towards reduction and delay in CMC1 surgery as compared to the control group. Previously received non-pharmacological treatment and higher motivation for surgery significantly predicted surgery. The results support that patients with CMC1 OA should be referred to occupational therapy before surgery is considered.

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OP0161-HPR SHORT-TERM EFFECT OF OCCUPATIONAL THERAPY INTERVENTION ON HAND FUNCTION AND PAIN IN PATIENTS WITH THUMB BASE OSTEOARTHRITIS – SECONDARY ANALYSES OF A RANDOMIZED CONTROLLED TRIAL

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Background: Carpometacarpal joint osteoarthritis (CMC1 OA) is a subset of hand osteoarthritis (HOA), presenting symptoms of pain and functional limitations. No cure for OA exists, and the EULAR recommendations highlight conservative treatment as first-line treatment for patients with HOA. Although several studies have assessed the effect of different treatments on pain and function in patients with HOA, there is a lack of high quality studies assessing these effects in patients with CMC1 OA. A recent systematic review showed that multimodal treatments (i. e. patient education, exercises, orthoses) improved pain but not function; however, the two studies included had short intervention periods and small samples. Thus, additional studies are warranted.

Objectives: To assess the short-term effect of a 3-month multimodal occupational therapy intervention on pain and function in patients referred to surgical consultation for CMC1 OA.

Methods: This study presents secondary analyses of a multicenter randomized controlled trial. Patients referred to surgical consultation due to CMC1 OA at three departments of rheumatology in Norway between 2013 and 2015 were considered eligible if they could speak Norwegian and did not have cognitive dysfunction. During the waiting period between referral and actual surgical consultation, the 180 included patients were randomized to either usual care (information about hand OA) or multimodal occupational therapy consisting of patient education, hand exercises, orthoses and assistive devices. Patients were instructed in conducting hand exercises three times per week for 12 weeks. They were given both day and night orthoses and were instructed to use them as much as possible. They were also given five commonly used assistive devices for use at home. The patients answered questionnaires and were assessed at baseline and in conjunction with the surgical consultation (follow-up). Pain at rest and during pinch- and grip strength was self-reported on a 10-point numeric rating scale. Function was self-reported in MAP-Hand (1-4, 1= no problems) and QuickDASH (0-100, 0=no disability) and measured as grip- and pinch strength (% of reference values) and range of motion (flexion deficit 2-5.finger, palmar abduction and abduction in the CMC1). Within-group difference from baseline to follow-up was analyzed with paired sample t-test, while between-group difference at follow-up was estimated with multiple linear regression, adjusting for baseline value and time to follow-up. Due to multiple analyses of secondary outcomes, the p-value was set to $p<0.01$.

Results: The 180 included patients' mean (SD) age was 63 (8) years and most were women (81%). At baseline, there were no significant differences between