Conclusions: Short term adherence to WATs was high in published studies of LPB, OA or CIRDs but the efficacy to increase physical activity levels was small to moderate. There were no modifications of symptoms. The incorporation of WAT in patient care remains challenging. Further studies are needed, especially for CIRDs.

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THU0746-HPR EFFICACY OF SURGICAL TREATMENTS FOR PAIN ASSOCIATED WITH TRAPEZIOMETACARPAL (THUMB BASE) OSTEOARTHRITIS: A SYSTEMATIC REVIEW

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Background: Trapeziometacarpal osteoarthritis (TMO) is a highly prevalent, painful, and debilitating disorder. Unfortunately, TMO management remains sub-optimal and this is in part due to the lack of knowledge on evidence-based care management. The aim of this systematic review (SR) is to document the efficacy of existing surgical interventions for reducing TMO pain.

Methods: We performed this SR according to the Cochrane intervention review methodology. Trials and SRs assessing surgical intervention efficacy on TMO were identified via 16 databases and hand search via the included references. Studies selection, data extraction and methodological quality assessment were conducted by two independent reviewers. Effect estimates of interventions were extracted from SRs when available, otherwise estimated from randomised controlled trials (RCTs). If RCTs were not available, non-RCTs (NRCTs) were referred to. Characteristics and efficacy of interventions were quantitatively analysed. In addition, we rated the level of evidence quality by using the GRADE tool.

Results: A total of 8 SRs, 16 RCTs and 41 NRCTs were identified. Most of these studies had unclear to high risk of biases which may have compromised their results. More than 40 comparisons of different surgical interventions were identified, including arthroscopic debridement (AD) (n=2 studies); 1 st metacarpal osteotomy (n=3); resection of 1 st metacarpal/trapezium (R) (n=3); arthrodesis (A) (n=14); trapeziectomy (T) (n=16); hematoma distraction arthroplasty (n=5); ligament reconstruction (LR) (n=5); tendon interposition (TI) (n=13); LRTI (n=17); and manufactured implants - Arex (n=1), Artelon (n=7), chondrocostal autograft (n=4), De la Caffinière (n=5), Elektra (n=5), Graftjacket (n=1), Gore-Tex (n=6), Guepar (n=3), Ledoux (n=2), Maia (n=1), Marlex (n=5), porcine dermal collagen xenograft (n=2), pyrocarbon Pi₂ (n=5), PyroDisk (n=1), Pyrocardan (n=1), and Swanson (n=11). The effect sizes of most of the interventions were small (standardised mean differences 0.04–4.81, risk ratios 1.05–11.1) and/or their 95% confidence intervals included null value. Nonetheless, the superiority of the following interventions was supported by the evidence of very low to moderate quality: AD

over conservative interventions; R+GraftJacket over R; A over R, T+TI and T+LRTI; partial T+chondrocostal autograft over T; T over T+porcine xenograft; T+TI over Artelon; T+LRTI+ bone tunnel over T+LRTI without tunnel for a short-term period; T+LRTI over T+LRTI+ Mitek anchor suture; T+Elektra over T+TI; PyroDisk over Pyrocardan.

Conclusions: This SR allowed collating comprehensive evidence on the efficacy of surgical interventions for TMO pain. Based on the available scientific evidence, arthrodesis appears superior to other interventions (R, T+TI and T+LRTI) to alleviate pain, however, adverse effects (e.g., nonunion) have been reported. Thus, it goes without saying that when choosing a proper surgical intervention for TMO, not only its analgesic effects but also the risk and gravity of adverse effects must be taken into consideration.

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THU0747-HPR THE EFFECT OF CLINICAL PILATES EXERCISES ON DISEASE SPECIFIC INDICES, CORE STABILISATION AND BALANCE IN PATIENTS WITH ANKYLOSING SPONDYLITIS

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Background: The Pilates method has been widely used to improve physical fitness and rehabilitation in general. Although Pilates method gives precedence to the spine and focuses on controlled movement, posture, and breathing, which are obviously the basic goals of Ankylosing Spondylitis(AS) treatment there is limited literature on the effectiveness of the Pilates method as treatment for patients with AS.

Objectives: The aim of this study was to investigate the efficacy of clinical pilates exercises on on disease-specific indices, core stabilisation and balance in patients with AS.

Methods: The study included 21 AS patients(11 male, 10 female). Demographic and physical characteristics(age, height, weight, body mass index) were recorded. Evaluations were performed before clinical pilates treatment and after 8 weeks clinical pilates treatment. Bath Ankylosing Spondylitis Disease Activity Index(BASDAI) for disease activity, Bath Ankylosing Spondylitis Functional Index (BASFI) for functional capacity, Bath Ankylosing Spondylitis Mobility Index (BASMI) for spinal mobility were used. Balance was evaluated with Biodex Balance System SD. Overall postural stability indices obtained with bilateral stance (stable and unstable platform), single leg stance(stable platform) and overall limits of stability scores were recorded. Static and dynamic endurance tests were used to evaluate core stabilisation. Modified sit-ups test for dynamic core endurance and static core endurance tests recommended by McGill were used to evaluate core stabilisation. Patients attended group clinical pilates exercise sessions three times a week, during 8 weeks with physiotherapist.

Results: The mean age of patients was 43.9±8.93 years and the mean body mass index(BMI) was 27.37±3.68 kg/m². Pre and post treatment measurements were shown in table 1. Statistically significant improvement were observed in all parameters except stable platform bilateral stance and single leg stance postural stability results(p<0,05).

Abstract THU0747HPR – Table 1. Comparison of pre and post treatment measurements

	Pre-Treatment Median(IQR)	Post Treatment Median(IQR)	p value
BASDAI	1,70 ^(1,01–3,27)	0,8 (0,56–1,75)	0,000*
BASFI	1,8 (0,35–3,13)	1 (0–1,83)	0,001*
BASMI	2,4 (1–3,7)	2 (0,7–3,1)	0,002*
Flexor endurance(s)	30,0 (20,5–60,35)	54,50 ^(42,85–86,00)	0,000*
Extensor endurance(s)	44,6 (20,75–63,00)	76,5 (54,25–91,77)	0,000*
Lateral side bridge(right)(s)	39 ^(21,86–60,00)	59,00 ^(43,61–80,00)	0,000*
Lateral Side Bridge(Left)(s)	42,40 ^(27,35–55,90)	65 ^(34,65–89,00)	0,001*
Sit-up test(reps)	16 ^(3,50–25,50)	20 ^(13–26,50)	0,001*
Bilateral stance (stabil)	0,30 (0,2–0,45)	0,3 (0,2–0,40)	0,907
Bilateral stance (unstabil)	1,5 (1,25–2,10)	1,40 ^(1,10–1,75)	0,007*
Single leg stance(Right)	0,7 (0,6–0,95)	0,7 (0,6–0,85)	0,298
Single leg stance(left)	0,7 (0,6–1,05)	0,7 (0,6–0,80)	0,463
LOS (overall)	51 ^(46–62)	64 ^(52,5–70,5)	0,007*

Mann Whitney U test. IQR: Interquartile Range

Conclusions: Clinical pilates exercises is beneficial and safety method in patients with AS to improve functional capacity, disease activity, spinal mobility, core stabilisation and balance. Clinical pilates is an enjoyable and effective way to exercise for Ankylosing Spondylitis patients.

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