99 TYPE III AND V AC JOINT DISLOCATION SHOW NO DIFFERENCE IN FUNCTIONAL OUTCOME AND RISK OF SURGERY AT 1-YEAR FOLLOW-UP

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Introduction Acromioclavicular(AC) joint dislocations are common injuries, but the need for surgery is debated. The objective of the study was to evaluate the result after acute Rockwood type III and V AC joint dislocations managed non-surgically with the option of delayed surgical intervention.

Materials and Methods This was a prospective cohort study with clinical, radiological and patient-reported outcome assessment at baseline and 6w, 3m, 6m and 1y after acute AC joint dislocation. Inclusion criteria were patients aged 18–60 with acute AC joint dislocation and >50% superior displacement of the clavicle. All patients were treated non-surgically with 3 months of home-based training and with the option of delayed surgical intervention. At baseline, patients were graded as Rockwood type III or V based on the coracoclavicular difference. The primary outcome was the Western Ontario Shoulder Instability Index (WOSI). Secondary outcome was surgery yes/no.

Results Ninety-five patients, male:female ratio 9.6:1, mean age 39.5 (range 18–59), were included. 57 patients were Rockwood type III and 38 patients were type V. There were no statistically significant differences in WOSI between patients with type III and V injuries at any time-point. Nine patients (9.5%) were referred for surgery at an average of 189 days (range 75–358) after the injury; 7 type III and 2 type V (p=0.31). Patients eventually referred for surgery had significantly worse WOSI at 6w, 3m and 6m.

Conclusion Non-surgical management of Rockwood type III and V injuries shows similar and overall satisfactory results with 91% recovering well without the need of surgery.

101 ASSOCIATION BETWEEN HIP MUSCLE FUNCTION AND HIP-SPECIFIC PATIENT-REPORTED OUTCOMES IN PATIENTS WITH LONGSTANDING HIP AND GROIN PAIN

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Introduction Decreased hip muscle strength and poor patient-reported outcomes are common in patient with longstanding hip and groin pain. However, the association between hip muscle strength and patient-reported outcomes is less known. The aim the study was to investigate the association between hip muscle strength and hip-specific patient-reported outcomes in patients with longstanding hip and groin pain.

Materials and Methods Seventy-two patients were recruited from an orthopaedic department. Isometric hip muscle strength was measured with a handheld dynamometer in adduction and extension. Patient reported outcomes was measured with Hip and Groin Outcome Score (HAGOS). Linear regression examined the association between hip muscle strength and each HAGOS subscale. The regression models were adjusted for sex, age, BMI, and activity level.

Results Greater isometric hip muscle strength in adduction was associated with better HAGOS score in the subscales; pain, and activity in daily life (B=12.4–12.5, p≤0.037) but not for the subscales; symptoms, physical function in sports, participation, and quality of life (QOL) (B=-0.5–9.7, p≥0.154). Greater isometric hip muscle strength in extension was associated with better HAGOS score for the subscales; symptoms, pain, and activity in daily life (B=7.2–12.3, p ≤0.034), but not for the subscales; physical function in sports, participation, or QOL (B=5.2–6.6, p ≥0.084).

Conclusions Greater isometric hip muscle strength seems to be associated with better patients-reported symptoms, pain, and physical activity in daily life. The result of this study highlights the importance of considering hip strength in the rehabilitation of patients with longstanding hip and groin pain.

105 LOOP TAPING FOR HEEL FAT PAD SYNDROME: A RANDOMIZED CONTROLLED CROSSOVER CLINICAL TRIAL

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Introduction Heel fat pad syndrome (HFPS) is the second leading cause of plantar heel pain. Clinical practice guidelines recommend conservative treatments for HFPS (activity modification, arch taping, and viscoelastic heel-cups). Alarmingly, the evidence for managing HFPS is scant and no well-executed randomised trials exist to support specific treatments. We aim to examine the effect of a novel heel fat pad loop taping on pain and function for HFPS.

Materials and Methods In this two-arm crossover, participant-blinded RCT, participants with HFPS are block-randomized into either AB or BA interventions (A=loop taping that encircles/bunches the fat pad to centralize it and enhance its fullness and resilience to compression, B=control taping that mimic the loop taping without any force/pressure or attempt to bunch/centralize the fat pad) with a 4-to-7-day between-intervention washout period. The primary outcome is pain during the most pain-aggravating activity selected by participants (30-sec single-leg standing or 20-meter barefoot walking). Secondary outcomes are worst pain in the past 24 hours, foot health/function using the Foot Health Status Questionnaire, and global rating of change. We also assessed mechanistic outcomes of ultrasound-measured heel fat pad thickness and pressure-algometer-measured pressure pain thresholds.

Results This pre-registered RCT will be completed in December 2022. 19 participates are needed to detect a 2-point greater pain reduction for loop vs. control taping. We have eligibility-screened 17 participants, enrolled and completed data collection in 2.

Conclusion Findings of this first RCT examining clinical and mechanistic effects of loop taping will provide much-needed