patients were divided into two groups according to whether there was a %50 reduction in VAS.

Results: The study was completed with 68 patients and 114 hands. While in group 1, in which VAS reduction was less than %50, there were 38 hands; in group 2, in which VAS reduction was more than %50, there were 76 hands. There were no differences improvement of symptom severity, nerve conduction studies parameters, M-CSA at the level of radio-ulnar joint between groups. Improvement of functional capacity and decrease of M-CSA at the level of pisiform bone and hook of hamate were significantly better in group 2 ($p < 0.05$).

Conclusions: After conservative treatment, while M-CSA was consistent with clinical findings, this consistency has not been observed with nerve conduction studies. M-CSA may be used to follow-up after receiving conservative treatment in patient with CTS.

Disclosure of Interest: None declared

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AB1073 THE EFFECTS OF LYMPHEDEMA SEVERITY ON DYNAMIC SCAPULAR CONTROL

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Background: Women with mastectomy are reported to have altered dynamic scapular control compared to the asymptomatic healthy individuals. However, the effects of breast cancer related lymphedema (LE) on scapular control has not been fully understood yet.^{1,2}

Objectives: The aim of this study was to determine the impact of LE severity on scapular kinematics in breast cancer patients with moderate LE, severe LE and without LE.

Methods: 67 women who have undergone radical or modified radical mastectomy as part of the breast cancer treatment were included in the study. The study was approved by the local ethics committee of the university and all participants provided written informed consent. Individual's demographic and medical characteristics were recorded. By volumetric measurement, women were divided into 3 groups. Between the affected and non-affected extremities; the non-LE group (group 1, $n=22$) had 0 and 200cc difference, the moderate LE group (group 2, $n=18$) had 250–500cc difference, and the severe LE group (group 3, $n=27$) had a difference of 500cc or more. 3-D analysis of the scapula was performed during the bilateral upper extremity elevation in the scapular plane with the 3D Motion Monitor-Electromagnetic System. Scapular kinematics in the scapular plane were recorded at 30°, 60° and 90° (during elevation and lowering phases) of the arm elevation in the affected side. Each measurement was repeated 3 times and the mean of 3 repetitions were recorded. Patient characteristics and scapular kinematics were analysed by Kruskal Wallis test and two-way repeated measures of ANOVA test, respectively.

Results: There was no significant difference between groups in terms of age (mean ages; group 1: 45.54 ± 5.88 , group 2: 52.05 ± 6.63 , group 3: 56.37 ± 8.24 years) ($p=0.08$). Regarding the Body Mass Index (BMI) (group 1: 25.57 ± 2.92 , group 2: 25.95 ± 2.35 , group 3: 28.93 ± 1.02 kg/m²), it was found that group 3 had higher BMI scores than group 1 and 2 ($p < 0.001$). The duration of LE (group 2: 22.38 ± 23.1 , group 3: 42.29 ± 31.85 months) was higher in group 3 than the group 2 ($p=0.004$). There were significant interactions for scapular upward rotation between groups ($F_{4,11, 131.51} = 3.09$, $p=0.015$). It was observed that group 1 had higher scapular upward rotation at 60° and 30° of the lowering phase of the arm elevation trials than group 3 ($p=0.013$, $p=0.004$). There was no significant interaction in terms of the scapular internal rotation ($F_{4,37, 139.9} = 0.59$, $p > 0.05$) and posterior tilt ($F_{5,05, 161.8} = 1.02$, $p=0.4$) among groups during the arm elevation in scapular plane.

Conclusions: The results of this study revealed that scapular upward rotation could be reduced by LE severity. LE severity might also be associated with BMI and LE duration. Further studies comparing LE patients with healthy individuals are needed to better understand the effects of LE severity on scapular kinematics.

REFERENCES:

- [1] Shamley D, Srinaganathan R, Oskrochi R, Lascurain-Aguirrebena I, Sugden E. Three-dimensional scapulothoracic motion following treatment for breast cancer. *Breast cancer research and treatment*. 2009;118(2):315–22.
- [2] Crosbie J, Kilbreath SL, Dylke E, Refshauge KM, Nicholson LL, Beith JM, et al. Effects of mastectomy on shoulder and spinal kinematics during bilateral upper-limb movement. *Physical therapy*. 2010;90(5):679–92.

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AB1074

IN DEGENERATIVE SPINE DISEASE REGULAR SHORT COURSES OF NSAIDS USE ARE ASSOCIATED WITH GREATER KIDNEY INJURY, COMPARED WITH CONTINUOUS NSAIDS INTAKE AND WITH ABSENCE OF NSAIDS TREATMENT

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Background: Nephrotoxicity in short-term or continuous NSAIDs administration is well-known problem of anti-inflammatory treatment. However, data about kidney injury in case of repeated short-term courses of NSAIDs treatment are limited. **Objectives:** of the present study was to evaluate the kidney functions in patients with degenerative spine disease (DSD), taking NSAIDs in repeated short courses, compared with kidney function of patients with constant NSAIDs intake and to the healthy individuals.

Methods: The study included 137 patients, taking NSAIDs for DSD. 97 patients used NSAIDs in repeated short-term courses (3–5 courses per year, 7–14 days each course). 40 patients had continuous NSAIDs intake (5 and more days per week during the 1 year before the study). In the control group were involved healthy persons, did not treated with NSAIDs during the last year ($n=40$). Controls were sex- and age-matched with the DSD patients. Glomerular filtration rate (GFR) was calculated using CKD-EPI calculator. Albumin, α 1-microglobulin and creatinine levels of urea were measured; albumin/creatinine and α 1-microglobulin/creatinine ratios were calculated.

Results: Kidney function in DSD patients with NSAIDs intake and in healthy controls are presented in table 1.

Abstract AB1074 – Table 1. Kidney function in patients with short-term and continuous NSAIDs use and in healthy controls

Kidney function parameter	NSAIDs short courses, $n=97$	NSAIDs continuous intake, $n=40$	Controls, $n=40$
GFR, ml/min/1.73 m ²	77.5 [68.0; 89.0]	86 [68.0; 92.2]	82.5 [70.8; 90]
Albumin/creatinine, mg/g	57.1 [33.8; 82.4]*#	32 [21.0; 44.4]*	25.0 [17.5; 32.9]
α 1-microglobulin/creatinine, mg/g	134.7 [77.5; 197.7]*#	66.0 [41.0; 112.3]*	12.9 [0.5; 18.1]

* $p < 0.000$ for the difference with controls; # – $p < 0.000$ for the difference with NSAIDs' continuous intake.

In patients with DSD and short NSAIDs' use a decrease in GFR of less than 90 ml/min/1.73 m² was evaluated in 61 (62.9%) of cases, GFR less than 60 ml/min/1.73 m² was detected in 11 (11.3%) patients. In patients with DSD and continuous NSAIDs use a decrease in GFR of less than 90 ml/min/1.73 m² was evaluated in 34 (85%) of cases, GFR less than 60 ml/min/1.73 m² was detected in 2 (12.5%) patients, $p < 0.01$, compared with controls and $p \geq 0.05$ compared with short-term use. GFR less than 60 ml/min/1.73 m² was found in 11 (11.3%) patients with DSD and short NSAIDs intake and in 0 (0%) of healthy volunteers ($p=0.026$). Albumin/creatinine ratio ≥ 30 mg/g was found in 74 (76.3%) patients with DSD with short-term NSAIDs use, in 22 (55%) patients with constant NSAIDs intake, and 9 (22.5%) healthy individuals ($p < 0.01$ for all intergroup differences). An increased level of microglobulin/creatinine ratio was found in 66% patients with DSD (in 82.4% cases of short-term and in 25% of continuous NSAIDs use, $p < 0.01$) and in 3 (7.5%) healthy individuals, $p < 0.0001$.

Conclusions: Decrease of the GFR less than 60 ml/min/1.73 m² and subclinical kidney injury in patients, treated with NSAIDs, was found frequently, than in healthy persons never treated with NSAIDs. The subclinical glomerular and tubular damage in patients with short-term courses of NSAIDs use exceeded glomerular and tubular changes in patients with constant NSAIDs use.

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AB1075

RELATIONSHIP OF SERUM CHOLECALCIFEROL (VITAMIN D3) LEVEL WITH MUSCULOSKELETAL SYMPTOMS

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Background: Patients suffering from generalised aches and pains, not adequately responding to treatment are usually considered as fibromyalgia, depression, chronic fatigue syndrome etc. But those patients need further