

domains than those of the comparison group: desire 1.98 ± 1.28 and 3.19 ± 1.45 ; arousal 1.98 ± 1.46 and 3.74 ± 1.45 ; lubrication 2.35 ± 2.25 and 4.37 ± 1.32 ; orgasm 1.75 ± 1.68 and 4.06 ± 1.66 ; satisfaction 2.28 ± 1.19 and 3.95 ± 1.61 ; no pain 2.49 ± 1.77 and 4.30 ± 1.42 . In General, total FSFI score was 12.86 ± 10.97 on fibromyalgia group versus 23.55 ± 8.24 in the healthy group (maximum possible being 36 points, $p < 0.0001$).

We tried to see if sexual function was affected by psychological status or stile of life. We found that only arousal, lubrication, orgasm and satisfaction had minimal values for clinically expressed anxiety while all parameters of sexual dysfunction were reduced in women on fibromyalgia group with borderline and clinically significant depression. There was the best index of sexual function married patients compared to divorced women. Unexpectedly, the minimal scores for all FSFI domains were in the fibromyalgia subgroup of 8 women with body mass deficiency and 20 women with Overweight, while normal body mass index and obesity were protective factors in sexual function.

Conclusion: Thus, a significant sexual function decrease was detected in female with fibromyalgia. The most severe dysfunction being associated with the abnormal anxiety, borderline and abnormal depression, divorced status, body mass deficiency and overweight.

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Back pain, mechanical musculoskeletal problems, local soft tissue disorders

AB0960

RELATIONSHIP BETWEEN THE CAREGIVER BURDEN AND UPPER LIMB-NECK DISABILITY AND PAIN IN BABY CAREGIVERS

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Background: Although caregiving is a normal part of being a parent of a young child, it is still unclear whether caregiving causes upper limb or neck disability in the caregiver.

Objectives: The aim of this study was to investigate the relationship between caregiver burden and upper limb-neck disabilities and pain in baby caregivers.

Methods: Sixty caregivers who are responsible for the caregiving of a 0-2 year old healthy baby, were included in this study. Physical characteristics and the gender of the caregivers were recorded. Caregiver burden was assessed by the Zarit Burden Interview; upper limb problems by DASH and neck problems by the Neck Disability Index and Neck Bournemouth Questionnaire. In addition, pain severity related to neck and upper limb was evaluated by using Visual Analog Scale over a 10 level scale.

Results: The mean age of the caregivers was 30.96 ± 6.43 year. The mean body mass index of the caregivers was 23.34 ± 3.29 indicating normal body composition. Height and weight were 163.75 ± 6.01 and 62.55 ± 8.98 , respectively. Ninety-five percent of the caregivers were mother and the others were the babysitter. A weak relationship was determined between the Zarit Burden Interview and DASH ($p=0.02$, $r=0.2$), while no relationship was found between caregiver burden and other assessments. Caregivers were found to have very low pain severity in the upper limb and neck.

Conclusion: It has been previously reported that caregiving for a disabled child or adult causes care burden and various musculoskeletal disorders¹⁻⁴. Current study demonstrated that giving care for a healthy child did not create care burden, and caused lower levels of pain in the upper limb and neck.

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AB0961

MYOFASCIAL TRIGGER POINTS ARE THE UNDEREVALUATED HYPOXIC NISCHES ALTERING POSTURE AND PHENOTYPE

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Objectives: Myofascial trigger point (MTrP) is a pillar pathophysiological unit in development of myofascial pain [1] and postural imbalance [2]. Dry needling (DN) of MTrP under ultrasound (US) guidance is prioritized method for treatment myofascial pain. Hypoxia-related signaling pathways play important role in development of rheumatic diseases and cancer [3,4].

Hypothesis: MTrP are spastic hypovascularized hypoxic low energy areas that can produce organismic signaling, associated with niches in Flammer syndrome [3,4].

Objectives: The aim was to evaluate structure of MTrP in regard to stiffness and "ischemic pattern" before and after DN.

Methods: We included 40 patients (26 females, aged 18–68 y.o.) with low back pain. Healthy 20 individuals (aged 18–52 y.o.) were controls. All patients underwent general exam, MRI, precise physical tests, extensive functional multiparameter neuromuscular US including M-mode, elastography (SWE), B-Flow (LOGIC E9 GE) of multifidus muscles. Then patients received DN of detected MTrP under US guidance.

Results: We successfully detected MTrP as hypoechoic, stiff and hypovascular small areas with different patterns of decreasing motility, contractility (muscle contracted/rested thickness) in all patient and did precise DN. After DN muscle structure improved, motility, contractility restored, VAS scores changed from 7.4 to 2.3 ($p < 0.05$). SWE was 11 ± 6 kPa in MTrP (27 kPa in active, 5-8 kPa in latent MTrP) vs 3.8 ± 0.3 kPa in controls and decreased to 4 ± 0.4 kPa after treatment. Hypovascularity ("ischemic pattern") size decreased from 3-4 mm to 0-1.5 mm, correlated with muscle function. Preliminary we found MTrP with more expressed hypovascular pattern, higher sensitivity and retaining levels of in individuals lower BMI and patient with Flammer phenotype [3,4] (13-15/15 positive responses to questionnaire).

Conclusion: MTrP are stiff and most likely hypoxic areas, parameters improved after precise DN. US hunting for "ischemic pattern" markers can be important for patient stratification and targeted treatment and prevention. Metabolic profiling including HIF signaling, proteomic data collecting needed for further investigation for effective patients stratification. For the follow-up studies a correlation of the Flammer syndrome phenotype with individualised profiles of patients and diagnosed ischaemic patterns is recommended.

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AB0962

LOW BACK PAIN AMONG MEDICAL STUDENTS: PREVALENCE AND RISK FACTORS

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Background: Low back pain (LBP) is a common health problem among all age groups. Medical students do not seem to be spared. In fact LBP is one of the most common musculoskeletal disorder and its prevalence is variable ranging from 41% to 72%.

Objectives: The aim of our study was to determine the prevalence of LBP among Tunisian medical students and to assess its associated factors.

Methods: We conducted a cross-sectional study over 2 months carried out on medical students in a Tunisian medical college. A digital questionnaire entered by Google forms was sent by e-mail and was completed by the students. Our study included students from the first year of the first cycle of medical studies up to the third year of