observed between the groups in post-treatment, but they were found at the follow-up, in favor of aquatic therapy for pain intensity (p=0.023) and sleep quality (p=0.030).

**Conclusion:** Both physiotherapy interventions showed to be effective in reducing pain in patients with fibromyalgia. However, aquatic therapy was more effective in improving quality of sleep and decreasing pain intensity at six weeks of follow-up than land-based therapy. It seems that the therapeutic effects achieved in post-treatment were maintained for a longer time in the aquatic therapy group. Even so, in order to maintain the benefits obtained with the interventions, continuous physiotherapy treatment seems to be necessary.

**References:**


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**Figure 1. WIP**

![Figure 1](https://example.com/figure1.png)

**Figure 2.**

![Figure 2](https://example.com/figure2.png)

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**AB0959**

**FREQUENCY OF SEXUAL DYSFUNCTION IN WOMEN WITH FIBROMYALGIA**

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**Background:** The impact of rheumatic diseases on patients’sexual life has been gathering the attention of the scientific community over the last decade. The existing studies, especially related to fibromyalgia, are scarce.

**Objectives:** To assess the prevalence of sexual dysfunction in women with fibromyalgia followed up at the Outpatient Clinic of the Medical Hospital in Russia.

**Methods:** The main group consisted of 54 women aged from 18 to 55 sequentially applied for rheumatologist consultation. All subjects fulfilled ACR 2010 fibromyalgia criteria. The comparison group included 100 healthy women adjusted by age who came for a scheduled health check up and signed the informed consent form. The Female Sexual Function Index (FSFI), obtained by applying a 19-item questionnaire that assesses six domains (sexual desire, arousal, vaginal lubrication, orgasm, sexual satisfaction and pain) and Hospital Anxiety and Depression questionnaire (HADS) were used. The data are presented as means and standard deviations.

**Results:** 26 (48,1%) of the patients interviewed reported no sexual activity over the past 4 weeks. fibromyalgia patients reported no sexual activity during the previous 4 weeks. Fibromyalgia group had significantly lower values of all FSFI scores compared to the placebo group (p<0.0001).

**References:**


**Disclosure of Interests:** None declared, Patrizia Monteforte: None declared, Marica Doveri: None declared, Geoliamo Bianchi Grant/research support from; Cellgene, Consultant of; Amgen, Janssen, Merck Sharp & Dohme, Novartis, UCB, Speakers bureau: Abbvie, Abiogen, Alfa-Sigma, Amgen, BMS, Cellgene, Chiesi, Eli Lilly, GSK, Janssen, Medac, Merck Sharp & Dohme, Novartis, Pfizer, Roche, Sanofi Genzyme, Servier, UCB, Luigi Carlo Bottaro: None declared, Carlo Selmi Grant/research support from: Abbvie, Janssen, MSD, Novartis, Pfizer, Cellgene, and Leo Pharma, Consultant of: Bristol-Myers Squibb, Cellgene, Eli Lilly, Janssen, Novartis, Pfizer, Roche, and Sanofi-Regeneron. Speakers bureau: Abbvie, Aesku, Alfa-Wassermann, Bristot-Myers Squibb, Biogen, Cellgene, Eli-Lilly, Girofils, Janssen, MSD, Novartis, Pfizer, Roche, Sanofi-Genzyme, UCB Pharma

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domains than those of the comparison group: desire 1.98±1.28 and 3.19±1.45; arousal 1.98±1.48 and 3.74±1.45; lubrification 2.35±2.25 and 4.37±1.32; orgasm 1.75±1.68 and 4.06±1.66; satisfaction 2.29±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 measured 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.

Disclosure of Interests: None declared

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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 Bournemouche 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 mass index.

Conclusion: Ninety-five percent of the caregivers were mother and the others were 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 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 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 the babysitter.

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**AB0961** MYOFASCIAL TRIGGER POINTS ARE THE UNDEVALUATED HYPOXIC NISCHES ALTERING POSTURE AND PHENOTYPE

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

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

Objectives: The aim was to evaluate structure of MTFP 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 MTFP under US guidance.

Results: We successfully detected MTFP as hypoechic, stiff and hypovascular small areas with different patterns of decreasing motility, contractility (muscle contracted/relaxed 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 11.56 kPa in MTFP (27 kPa in active, 5-8 kPa in latent MTFP) 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 0.1-5.5 mm, correlated with muscle function. Preliminary we found MTFP 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: MTFP 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 individualized profiles of patients and diagnosed ischemic pattern is recommended.

References:

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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 medical studies.