

examination revealed that joints were more affected than tendons and ligaments of different compartments of ankle and foot. Metatarsophalangeal (MTPs) joints were the most common affected joints (83%) followed by talonavicular (TNJ) joint (63%), subtalar joint (46%) and tibiotalar joint (TTJ) (35%). Achilles tendon was the most commonly affected tendon followed by tibialis posterior tendon. Anterior-inferior talio-fibular ligament (ATIFL) ligament was the most commonly affected ligament (28%). Among different cases, the most common involved joint by US in RA patients were MTPs, while in SpA patients; Achilles tendon was the most commonly involved tendon. There were significant association between clinical and US findings in tibiotalar ( $p<0.001$ ), MTPs ( $p<0.001$ ) joints and achilles tendon ( $p<0.001$ ) whereas no significant association between clinical and US findings in the remaining joints, tendons and ligaments. Regarding functional assessment, We found a significant correlation between synovitis in US of most of MTPs joints and pain and disability in FFI ( $p<0.001$ ). There were significant correlation between the presence of synovitis and erosions in naviculo-cuniform joint and pain and disability in FFI ( $p=0.004$ ), also between the presence of synovitis in talonavicular joint and pain and disability in FFI ( $P=0.005$ ).

**Conclusion:** Ultrasound is an essential tool in identifying different pathologies of the ankle and foot as well as clinical examination due to their complicated anatomy. It clearly distinguishes between synovitis, tenosynovitis, enthesitis and ligament injury. Ankle and foot pathologies have a significant impact on patients' function and disability, and they should be evaluated accurately using US.

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#### AB0146 PAIN ASSESSMENT IN HOSPITALIZED OLDER ADULTS: COMPARISON OF TWO PAIN SCALES: THE VERBAL RATING SCALE (VRS) AND THE VISUAL ANALOG SCALE (VAS)

**Keywords:** Quality of care, Observational studies/ registry, Pain

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**Background:** Positive diagnosis and assessment of pain are crucial in the elderly, a population where pain is often underestimated. The literature suggests various tools commonly used in clinical practice, including the Visual Analog Scale (VAS) and the Verbal Rating Scale (VRS).

**Objectives:** This study aimed to investigate the correlation and degree of agreement between VRS and VAS in pain assessment among hospitalized elderly subjects and establish potential recommendations for interchangeable use of the two scales.

**Methods:** This was a monocentric, cross-sectional, diagnostic, and comparative study conducted in December 2019 at various departments of Fattouma Bourguiba Hospital in Monastir over a period of seven consecutive days.

**Results:** Forty-three patients were included, of whom 62.8% were male. All these patients sought consultation for a painful condition. A surgical cause was found in 83.7% of cases, followed by medical causes in 16.3% of cases. Upon admission, the mean VAS score was  $58.6 \pm 17.8$ . Forty-two percent of patients had severe pain according to VAS. In contrast, 67.4% of patients rated their pain as severe according to VRS (mean  $2.63 \pm 0.69$ ). The correlation study between VRS and VAS measurements at admission revealed a strong positive linear correlation ( $n=43$ ,  $r=0.805$ ,  $p<0.001$ ). Additionally, the correlation remained strong after analgesic treatment ( $n=43$ ,  $r=0.822$ ,  $p<0.001$ ). The degree of agreement assessed by the Kappa test found good (measure of agreement of 0.876 with  $p<0.001$ ) to moderate (measure of agreement between 0.4 and 0.6) concordance between VAS and VRS. Regarding preference, VRS was preferred by more than half of the patients (72% of cases), mainly due to its ease of understanding.

**Conclusion:** Based on these tests and results, it can be concluded that the Visual Analog Scale (VAS) and Verbal Rating Scale (VRS) are strongly correlated and concordant, allowing for interchangeable use. Indeed, these two measurement scales have proven to be reliable and effective, demonstrating practical equivalence in the elderly and offering similar performance in terms of effectiveness.

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AB0147

#### CAN WATER HOLD THE KEY TO MANAGING FIBROMYALGIA? A SYSTEMATIC ANALYSIS OF AQUA THERAPY'S IMPACT ON PAIN, FATIGUE, AND OTHER SYMPTOMS

**Keywords:** Systematic review, Non-pharmacological interventions, Clinical Trial, Physical therapy/Physiotherapy

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**Background:** Fibromyalgia (FM), also known as soft tissue rheumatism, is a debilitating pain syndrome characterized by chronic, widespread musculoskeletal pain. The origin is unknown, but it is a disease accompanied by both physical and impaired quality of life (QoL), fatigue, sleep disorders, and psychological factors. The solution of these symptoms is very important both financially and spiritually. Interest in the development of non-pharmacological treatments is increasing. The creation of programs and applications that will facilitate physical activity and reduce sedentary living can reduce the burden and cost of chronic diseases on health systems, as well as providing significant improvements in health and other benefits. Physical activity has been used in the treatment of fibromyalgia in recent years and is considered the first option for treatment. It has been shown that FM syndrome has a central rather than a peripheral or muscular basis. Therefore, it is important to add functional treatment options, not only physical ones. Hydrotherapy is one of the most common treatments for relieving musculoskeletal pathologies. The water environment is widely used for recreational, sporting, and therapeutic activities.

**Objectives:** The aim of our study is to investigate the overall effectiveness of hydrotherapy on FMS in current approaches, and to be a summary and guide for treatments. A compilation of research on the effects of exercise interventions on disease effects, sensitivity, body composition, functional capacity, quality of life, and cognitive function will be conducted.

**Methods:** The EMBASE, PubMed, ProQuest, Medline, and PEDro databases were searched using the mesh terms "fibromyalgia", "fibromyalgia syndrome", "FM", "FMS", "aqua therapy", "aquatic therapy", "water therapy", and "pain". A total of 778 articles were found. The inclusion criterion for the search was randomized controlled trials published in peer-reviewed journals in English from 2010 onwards, with results only for FMS. The exclusion criterion was non-randomized controlled trials and articles written before 2010. The PRISMA criteria were followed in the writing stage. A systematic review was conducted on the studies that have been done on the general effects and results of hydrotherapy on patients with fibromyalgia.

**Results:** Nine of the 778 articles found met the eligibility criteria. The studies were generally conducted by comparing land and water over sessions of at least 6 weeks and 60 minutes. The water level in the pool was adjusted to the chest level of the people and the same type of exercises were used in both. When the general results were examined, it was found that water exercise programs had positive effects on variables related to body composition, functional conditioning, especially upper and lower extremity strength, and hand grip strength. It also shows that water exercise programs are beneficial for cognitive functions. The importance of continuity has been emphasized and it has been stated that it contributes to the increase in VO<sub>2</sub> at peak KPET in women with FMS. In addition, water bio dance has contributed to improvements in anxiety, pain, and other fibromyalgia symptoms, especially sleep quality. In addition to these, a study concluded that limiting the use of indoor gyms increased situational anxiety and decreased body acceptance.

**Conclusion:** In view of these results, it is seen that physical exercise programs performed in water are a non-pharmacological treatment type that should be considered in the treatment of fibromyalgia patients, improving symptoms and quality of life. Finally, it has also started to be used as a treatment method aimed at improving proprioception for the newly observed balance disorder in FM, but high-quality scientific studies are needed to emphasize that water physiotherapy is one of the most recommended treatment options for this syndrome.

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AB0148

#### DIAGNOSTIC DELAY ON FIBROMYALGIA DIAGNOSIS AND ITS IMPACT ON THE SEVERITY AND OUTCOME

**Keywords:** Diagnostic test, Outcome measures, Patient Reported Outcome Measures

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