

Rehabilitative Approach to Rheumatological Diseases

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The number of cases of rheumatological diseases, including musculoskeletal disorders, is only surpassed by cardiovascular diseases. Their prevalence in adults in Europe is about 25%, but this rate varies according to countries. In the United States, musculoskeletal disorders affect 50 million adults, and this number is predicted to rise to more than 60 million by 2030.^[1,2]

Rheumatological illnesses can be seen in all ages but occur at an increased ratio in the elderly. In addition, they can be found in both genders, but females comprise more than 60% of the patients. Rheumatological diseases affect joint structures such as the synovium, bones, and cartilage as well as the surrounding muscles, tendons, and ligaments.^[3] As a basic classification, these diseases can be categorized into two subgroups: inflammatory and non-inflammatory, with non-inflammatory rheumatological disorders such as neck, back, and lower back pain and soft tissue diseases like fibromyalgia and osteoarthritis making up 95% of all cases. A wide range of heterogeneous disorders and clinical expressions also fall into this category, including arthritis and osteoporosis, and all involve different fundamental etiopathogeneses. Therefore, they should be treated appropriately via multidisciplinary approaches.^[4]

Rheumatological diseases can be defined as chronic painful musculoskeletal disorders which result in limitations involving joint mobility, muscle weakness, inactivity, and a decline in functional capacity. The vicious cycle of pain and immobility ultimately leads to functional impairment in daily living activities. Furthermore, the combination of joint stiffness and deformities enhances the probability

of having a disability along with a poor quality of life. In order to lessen the chances of this happening, complex and multidisciplinary treatments for rheumatological diseases should be employed that include both pharmacological drug therapies and non-pharmacological interventions in the early phases.^[5] The main pharmacological therapies include non-steroidal anti-inflammatory drugs (NSAIDs), corticosteroids, synthetic and biological disease-modifying anti-rheumatic drugs (DMARDs) for rheumatoid arthritis (RA), and intra-articular injections. Several guidelines were previously developed for the proper management of rheumatological conditions. Last year, the Turkish League Against Rheumatism (TLAR) provided recommendations for the management of osteoarthritis (OA), RA, and ankylosing spondylitis (AS) by taking into consideration the health care system of our country.^[6-8] These recommendations emphasized the importance of non-pharmacological interventions. The rehabilitative treatment approach included educational programs (lifestyle alterations, weight control, joint protection, and energy consumption), physical therapy modalities [thermotherapy, cryotherapy, electrotherapy, transcutaneous electrical nerve stimulation (TENS), and laser therapy], exercise (range of motion, strengthening, stretching, flexibility, muscle conditioning, aerobics, and cardiopulmonary fitness), ergonomic arrangements, assistive and adaptive devices, protective and corrective orthoses, appropriate footwear, and hydrotherapy (balneotherapy, spa, and aquatherapy).

Overall, the treatment goal for rheumatological disorders should not be limited by only

pharmacological therapies. We have to start non-pharmacological interventions as early as possible to prevent disability. Therefore, physical medicine and rehabilitation (PMR) has arisen as a core part of the necessary therapy. A realistic, eligible, and practical rehabilitation program involves the cooperation between the patient and rehabilitation team members. The PMR specialist, as the leader of the team, collaborates with the occupational therapist, physiotherapist, physiotherapy assistants, and orthotist in order to achieve the maximum functional capacity for their patients, and the arrangement of individual treatment programs is essential for active diseases. Rheumatologists can also consult and join the team, and particular consideration should be given to the fact that improvement of quality of life is as important as the inhibition of the inflammation. Otherwise, patients will incur an increased financial burden due to the failure of both the medical and non-medical therapies.

As a result, a good, collaborative rehabilitation team is required for the treatment of rheumatological disorders, beginning in the early phases of the diseases. Additional scientific studies are necessary in order to obtain objective data regarding the efficacy of rheumatological rehabilitation programs.

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