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Effectiveness of Tailormade Physiotherapy Protocol in 42-years Old Female Patient Suffering from Ankylosing Spondylitis: A Case Study

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ABSTRACT

Ankylosing Spondylitis (AS) is a chronic inflammatory arthritis that primarily affects the axial skeleton and is often underdiagnosed in females due to atypical presentations, such as peripheral joint involvement.

Early intervention, especially through physiotherapy, is crucial for symptom management and preventing disease progression. This case study evaluates the effectiveness of a tailored physiotherapy protocol in improving pain, stiffness, functional ability, and mobility in a 42-year-old female patient with AS. A 42-year-old overweight female (body mass index: 26.5) with a 10-year history of hip pain, stiffness, and reduced spinal mobility, along with a family history of HLA-B27 positivity and arthritis, underwent an 8-week physiotherapy programme. The 60-minute sessions included hot packs, Transcuataneous Electrical Nerve Stimulation (TENS), Ultrasound Therapy (UST), resistance and spinal mobility exercises, ergonomic training, and a home exercise plan. Outcomes were assessed using Numeric Pain Rating Scale (NPRS), Bath Ankylosing Spondylitis Disease Activity Index (BASDAI), Bath Ankylosing Spondylitis Functional Index (BASFI), Modified Schober Test, and lateral spinal flexion test. The physiotherapy intervention significantly improved the patient's condition, reducing pain (NPRS: 8 to 2), functional impairment (BASFI: 5.4 to 2.1), and disease activity (BASDAI: 6.3 to 2.3). Spinal mobility also improved, with the Modified Schober Test increasing from 3 cm to 4.5 cm and Lateral Spinal Flexion improving bilaterally (right: 10 cm to 12 cm, left: 9 cm to 11 cm). These results highlight the program's effectiveness in reducing pain, enhancing mobility, and improving function.

The tailored physiotherapy programme effectively reduced pain and stiffness, enhanced mobility, and improved functional ability in a female AS patient. This case highlights the need for individualised physiotherapy regimens to address gender-specific challenges in managing AS.

Keywords: Functional ability, Gender-specific treatment, Pain management, Tailored physiotherapy.

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