E-Poster

EP-614

The Physical Repercussions of Prolonged Immobilization Related to a Psychological Disorder in an Adolescent: The Role of Physical Medicine and Functional Rehabilitation (A Case Report)

Topic: Health Conditions (Nervous System, Musculoskeletal System, Cardiopulmonary System)

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BACKGROUND

Depression remains a relatively rare cause of prolonged immobilization in adolescents; however, it can lead to a significant reduction in physical activity, resulting in musculoskeletal complications such as joint deformities, stiffness, and joint deviations. Early intervention is essential to prevent these consequences and promote functional recovery.

CASE DESCRIPTION

This is a 19-year-old teenager who present in his pathological history a sarcomatous tumor on the posterior side of his right thigh which resulted in a limp and noticeable aesthetic changes. Social ridicule from peers further exacerbated his psychological distress, ultimately resulting in a six-month period of immobilization due to his depressive state, which in turn led to significant joint deformities.

The clinical examination revealed that standing and walking were impossible, a irreducible flessum of both knees numbered at -50°, dorso-lumbar scoliosis, limitation of the flexion of the hip, and limitation of the dorsal flexion of both feet.

The paraclinical workup included an x-ray of knees that objectified arthrosis of both knees, as well as a full-spine radiograph that demonstrated a thoracolumbar scoliosis with a Cobb angle of 35°.

The management in physical medicine and rehabilitation consisted of motor rehabilitation and orthotic support, including a cruro-pedious splint worn at night and the use of crutches. This approach resulted in a improvement in the patient's clinical condition.

DISCUSSION

Prolonged immobilization, often linked with depressive disorders in adolescents, is a significant risk factor for musculoskeletal complications, such as joint deformities and reduced mobility. Although depression is less frequently cited as a direct cause of immobilization, it plays a central role by reducing physical activity and promoting a sedentary posture, which in turn predisposes adolescents to musculoskeletal impairments.

A review of the musculoskeletal effects of psychological disorders in young populations suggests that depression may contribute to significant functional deficits and deformities, that can further diminish quality of life, impede functional rehabilitation, and increase the likelihood of chronic pain and other long-term complications.

Physical medicine plays a very important role by implementing targeted rehabilitation programs to improve functional outcomes and prevent severe deformities.

CONCLUSION

Depression is less frequently mentioned as a direct cause of immobilization, but it plays a significant role in decreasing physical activity which in turn increases the risk of adolescents developing musculoskeletal impairments. Regular follow-up and early intervention in physical medicine can improve mobility, reduce deformities, and give optimal functional recovery

Statement of Disclosures

None

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Doi: 10.5606/archisprm.2026.EP-614