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Letter to the Editor

Risk Factors and Preventive Approaches in Early Onset Osteoarthritis

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To the Editor,

I read with interest the review entitled 'Disorders Leading to Early-Onset Osteoarthritis: Orthopedic Considerations and Insights', and I would like to thank the authors for their valuable contribution to this topic, which is of great importance for physicians interested in the musculoskeletal system. The review comprehensively discusses the genetic and orthopaedic factors that play a role in the development of early-onset osteoarthritis (EOA).[1] Osteoarthritis is a disease that decreases the quality of life of individuals by negatively affecting joint health, and it often requires surgical intervention.[2] A multidisciplinary approach is required to prevent EOA and slow down its progression, especially in patient groups at risk. In this context, attention should be drawn to the importance of preventive and early interventions from the perspective of a physiatrist.

Obesity and weight control: Overweight and obesity are among the most important modifiable risk factors for osteoarthritis. Obesity may accelerate cartilage degeneration by increasing mechanical loading on the joint. In addition, it may accelerate the progression of the disease by triggering systemic inflammation. Therefore, promoting healthy nutrition and regular physical activity from childhood onwards may reduce the development of osteoarthritis in adulthood. Individuals who achieve weight control through diet and exercise are likely to have milder osteoarthritis symptoms.[3]

Prevention of joint injuries: Traumatic joint injuries, especially anterior cruciate ligament and meniscal tears, are strong risk factors for the development of osteoarthritis. Programmes including neuromuscular control and strengthening exercises should be implemented to prevent such injuries in athletes and physically active individuals. Exercises, especially those that increase knee stability, have been shown to be effective in the prevention of sports injuries.[4]

Muscle strength and biomechanical corrections: Muscle weakness can impair joint stability and accelerate the development of osteoarthritis. Muscle strengthening programmes and appropriate biomechanical alignments (postural corrections for the knee and hip joint) can maintain joint health. Maintaining proper posture and gait mechanics can reduce the risk of developing osteoarthritis in the long term by reducing abnormal loads on the joints.[3]

Physical activity and exercise: Regular physical activity is critical for maintaining joint health and slowing disease progression. While low-impact exercises (such as swimming, cycling, yoga) support joint health, activities that may cause heavy loading should be avoided. Individualised exercise programmes should be implemented to maintain range of motion and strengthen muscle function.[5]

Controlling inflammation: Chronic inflammation can accelerate joint degeneration. Healthy nutrition, anti-inflammatory diets and physical therapy applications, (cold-hot applications, electrotherapy) aimed at reducing inflammation in the early period may be effective. In addition, pharmacological and non-pharmacological approaches to reduce inflammation should be evaluated individually.[3]

Early diagnosis and intervention: Identifying clinical symptoms and risk factors in the early stages of osteoarthritis can slow the progression of the disease. For early diagnosis in individuals at risk, it may be useful to monitor joint health with non-invasive methods such as regular controls, ultrasound, and magnetic resonance imaging.

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Adopting a multidisciplinary approach for patient groups who can be diagnosed with early osteoarthritis will protect joint health in the long term and reduce the need for surgery.

Yours sincerely,

Footnotes

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