



Dietary Therapies in Autism Spectrum Disorder

Otizm Spektrum Bozukluğunda Diyet Tedavileri

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To the Editor,

Neurodevelopmental disorders are a cluster of diagnoses, including many highly interrelated disorders. Many researchers have carried out studies to obtain descriptive data on the disorders in this diagnostic cluster on a provincial basis. As the Child and Adolescent Psychiatry Unit of Harkani State Hospital, we decided to design a study to examine the medical board applications in our province and, thus, to obtain detailed descriptive data on neurodevelopmental disorders. While reviewing the electronic records of patients who sought medical board during the study period, it was observed that most cases involving neurodevelopmental disorders reported to the board were males, consistent with existing literature¹. The most common diagnosis was intellectual disability, followed by autism spectrum disorder (ASD). During the detailed examination of patient data, it was noted that a considerable number of ASD-diagnosed patients had not applied for an initial assessment, had previously received a medical report confirming ASD, and had been seeking treatment for an extended period. The prevalence of ASD is increasing in Türkiye as it is worldwide¹. The lack of definitive treatment for the core symptoms of restricted social interaction and stereotypical repetitive movements, the long duration of the disease, and the difficulties experienced during treatment push families to seek different or alternative treatment methods¹. These alternative therapies include auditory integration, sensory integration, music therapy, neurofeedback, ozone therapy, hyperbaric oxygen therapy, vitamin and mineral supplements, and dietary practices. We find it beneficial to provide a concise overview of dietary practices commonly reported by patients in our clinical practice and frequently encountered in patient files by reviewing the existing literature. According to the gluten-free/casein-free diet, one of the most commonly used diet types, individuals with ASD are hypersensitive to gluten and casein². Although it has been suggested that eliminating these substances from the diet will lead to significant steps towards recovery, many studies have shown that gluten-casein-restricted diet does not lead to significant improvement in individuals with ASD². Another common practice used in children with ASD is the ketogenic diet. While findings indicate that the ketogenic diet reduces the frequency of seizures in children diagnosed with both ASD and epilepsy, there is no significant improvement observed in core symptoms³. Polyunsaturated fatty acids have been proposed as an effective dietary method in ASD due to their anti-inflammatory and antioxidant effects³. However, clinical studies have shown that branched-chain fatty acids are beneficial but do not provide behavioral or significant improvement in core symptoms⁴. In addition to diet, several studies have been conducted on the effects of dietary supplements on ASD.

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Positive outcomes have been documented for vitamins A, B, and D; however, repeat studies have not yielded significant results⁵. In a particular study, including zinc in the diet showcased positive effects on ASD assessment scales, yet the necessity for further repeated studies was emphasized⁵. A common point in studies on dietary and complementary nutritional approaches for ASD is that this patient group corresponds to a population that is difficult to approach in clinical studies, considering the diversity of symptoms and the clinical magnitude presented, which creates significant methodological difficulties. Further repetitive studies with larger samples are needed in this regard. Based on our current knowledge, we believe it is still early before we can present dietary and complementary nutritional supplements to treatment-seeking families as a treatment method that significantly improves the core symptoms of ASD and that more comprehensive studies with sound methodology are needed.

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