Coenzyme-Q10 deficiency and stress oxidative in children with autism spectrum diseases

Elham Mousavinejad
University of Medical Sciences, Iran

I assume that serum concentration of total CoQ^{10} and stress oxidative factors could be used as important biomarkers of therapy. One hundred and eighty children (aged 3-12 years), one group consisted of children with autism (n=90) and other consisted of health children (n=90). Children with autism according to the DSM-IV criteria and using CARS were included in the study. All the subjects were Iranian, born and living in the state Khuzestan. This was an original study. The present study aimed to analyze the serum levels of concentration of CoQ^{10}–TOTAL, in the children. In total, patient group and health group, including boys and girls, were matched for age, gender, and body mass index (BMI). Serum levels of CoQ^{10}–TOTAL in children with ASDs were significantly lower than that in the healthy children. We propose that serum concentration of CoQ^{10}–TOTAL could be used as relevant biomarkers of CoQ^{10} supportive therapy. Overall supplementation with Co-Q^{10} provides promising alternatives to current therapies for neurodevelopmental disorders. CoQ^{10} is a naturally occurring flavonoid with potent antioxidant, properties that are found in green plants. This study with a larger number of patients is confirmed these previous research.

Speaker Biography

Elham Mousavinejad has completed her MSc in the Department of Biochemistry, School of Medical Sciences, Ahvaz Jundishapur University of Medical Sciences, in 2016, and BSc Degree in Community Nutrition, School of Nutritional Sciences and Dietetics, Jundishapur University of Medical Sciences, Ahvaz, Iran in 2006. Her research area involved Nutritional Neuroscience and various nutritional deficiencies described in children with ASDs.

e: mousavinejad.e@ajums.ac.ir

Notes: