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BIOCHEMICAL AUTONOMIC AND OXIDATIVE STRESS INDICATORS IN CHILDREN WITH AND WITHOUT AUTISM SPECTRUM DISORDERS

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The prevalence of Autism spectrum disorders (ASD) has increased dramatically over the past 50 years. It is rising at an alarming rate in the Indian scenario. Since autism is a heterogeneous neurodevelopmental disorder of unknown origin, no biochemical markers and current diagnosis are based on behavioral criteria. The purpose of this study is to evaluate urinary Vanillylmandelic acid (VMA) levels and serum antioxidant levels in children with and without ASD and correlate the association of severity of disease with these biochemical indicators. Methodology and theatrical orientation: In this case-control study, 100 subjects were enrolled, including 50 children with ASD and 50 Typically Developing (TD) children aged between 3–14 years. ASD diagnosis is made according to the Diagnostic and Statistical Manual for Mental disorders 5. The severity of ASD was assessed by administering Childhood Autism Rating Scale I. All the participants underwent the Estimation of urinary levels of VMA as biochemical autonomic index and serum total antioxidants and malonaldehyde levels as oxidative stress markers.

Biography

Dr. Shailaja S Moodithaya currently working as an Additional Professor in the Department of Physiology at K.S Hegde Medical Academy, Nitte (Deemed to be University) Mangalore, India. Dr. Shailaja obtained her PhD in Medical Physiology from St. John's Medical College, Rajiv Gandhi University of Health Sciences, Bangalore. She has published 23 papers in refereed journals and completed Research projects funded by Indian Council for Medical Research and Board of Research for Nuclear Sciences. She is guiding doctoral students and Medical and Paramedical undergraduate students on their teaching and research. Her Area of research is 'Autonomic Neuroscience and Physiology of Aging'.