

Annual Congress &amp; Medicare Expo on

# Primary Healthcare

April 25-27, 2016 Dubai, UAE

## Mitochondrial dysfunction in Autism Spectrum Disorders (ASD) children from central India: Clinical, biochemical, neuroimaging and genetic screening

**Rashmi Chowdhary**

All India Institute of Medical Sciences, India

Autism Spectrum Disorder (ASD) encompasses neurodevelopmental disorders that are defined by behavioural observations, in particular dysfunctions in social interaction and communication skills, as well as repetitive behaviours. Several studies have revealed immune and neuronal dysregulation in autistic subjects. Many children with ASD have associated underlying medical comorbidities, like epilepsy, sleep disruptions, Mitochondrial Dysfunction (MD) and Gastrointestinal (GI) abnormalities. Few studies have hypothesized that individuals with ASD may have an abnormality in carbohydrate metabolism should be tested for disorder of impaired mitochondrial function. Many studies has provided evidence (19-43%) that individuals with ASD have concomitant MD and proposed a “mitochondrial autism sub-group”. Mitochondria exist in nearly every cell that generates adenosine triphosphate. In MD, the mitochondria cannot convert food and oxygen into life-sustaining energy. Earlier considered as uncommon disease, diagnosis of MD can be challenging. Its identification is based on several objectives, clinical, histological, biochemical, molecular, neuroimaging and enzymatic findings. Screening for underlying MD is important in ASD, because the children clinically look and act in both. Proposed study is an attempt screen ASD children and finding out the role of co-occurrences of MD for the better understanding and management of the disease.

### Biography

Rashmi Chowdhary has completed her PhD from SGPGIMS Lucknow and CSJM Kanpur University in 2009 and Postdoctoral studies from Center of Infection and Immunity (CII), Columbia University, New York, USA. She has also worked with WHO and is presently working as Assistant Professor, Biochemistry, AIIMS Bhopal. She has participated in many national and international conferences and a recipient of Mario Escobar Award at Clinical Virlogy Symposium (CVS), Florida, USA in 2009. She has published papers in reputed journals.

[rashmi.biochemistry@aiimsbhopal.edu.in](mailto:rashmi.biochemistry@aiimsbhopal.edu.in)

### Notes: