Verapamil use in autism treatment - case series report questionnaire

Basic information:

Initials: Shiva

Age: 14 years (now)

Sex: Male Country: India

ASD Diagnosis (ICD-10/DSM-V): Mild to moderate

Comorbidities and allergies:

GI disease/symptoms: Constipation

Epilepsy:

Allergy: MCAS causing aggression with allergic food, smells, dust particles

Mitochondrial disease: Could be there

Immune dysfunction:

Other: High Ammonia in blood

Intellectual disability:

Genetic diagnosis:

Treatment details:

Verapamil introduced (date):

Dose:

Brand name:

Treatment duration:

Adverse effects:

Other treatments co-administered with verapamil:

General symptoms description with focus on ASD, comorbidities and verapamil effects:

Please describe what you consider important about your or your child's health and development as well as both beneficial and adverse effects of verapamil treatment.

Blood test results:

The table includes basic labs as well as tests associated with mitochondrial dysfunction proposed by Rossignol and Frye [PMID:21263444] as potential biomarkers of verapamil response suggested by the blog reader Natasa, immune/inflammatory parameters as suggested by Peter and some mast cell activation labs. Please add other if you consider important.

If your test values are presented with different units, please correct this in the table.

Test	Units	Before start of verapamil treatment	After verapamil treatment (if different or not done before)
Sodium	mmol/L		
Potassium	mmol/L		
Calcium	mg/dL		
CRP	mg/L		
Lactate (lactic acid)	mg/dL		
Pyruvate	μmol/L		
AST (GPT)	U/L		
ALT (GOT)	U/L		
AST/ALT ratio	-		
Carnitine (free)	μmol/L		
Carnitine (total)	μmol/L		
Coenzyme Q10 (ubiquinone)	μg/mL		
Ammonia	μg/dL		
Creatine kinase	U/L		
CO ₂ (acid base balance)	mmHg		
Glucose	mg/dL		
Interleukin-6	pg/mL		
Interleukin-10	pg/ml		
Histamine	nmol/L		
Trypatse	ng/mL		

IgE (total)	IU/mL	

Other abnormal laboratory or imaging results:

Please include any tests results off normal range. As we don't know what is the biological profile of verapamil responders or non-responders (if any) it would be good to check many parameters. Even if our "sample" is little more than "n=1" we cannot rule finding something in common.

EEG (Electroencephalogram):

ECG (Electrocardiogram):

QT:

QTc:

QT/QTc is a parameter calculated by doctor based on ECG pattern. Please let me know if you have ever done ECG and have QT or QTc calculated (regardless of verapamil use). I would appreciate such data as I was once told that many children with ASD have abnormal ECG with long QT. This was personal communication by an experienced doctor, but there is not data in medical literature to prove this. It would be great to know if this is true as long QT can be dangerous especially when using some medications as well as it could serve as a biomarker of calcium channelopathy diagnosed with non-invasive procedure (ECG). This request is unrelated to verapamil paper.

Thank you very much for reporting the data!

Please feel free to send me comments or questions regarding this questionnaire, proposed case series report or any other autism treatment related issue.

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