

**Catatonia: A Rare Manifestation of Autism**

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Research Article

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**Abstract**

**Background:** Autism disorders which are also known pervasive developmental disorders as are very complex and heterogeneous group of chronic disorders that marked by early impairment in socialization, communication, and behavior. Catatonia has rarely been reported in association with autism disorder.

**Patients and methods:** The father of a ten year old boy with autism was particularly concerned about an abnormal behavior the boy was showing during the previous weeks. The boy was taking an abnormal position for variable time, sometimes more that 20 minutes, and associated with some repetitive movements, and was not responding to external stimuli.

**Results:** A ten year old boy who was first observed on the fifth of November, 2021 because his father complained his son had poor communication with his parents, and was poorly responding to his name. The boy’s language was not good, and he had some repetitive movements. The abnormal communication prevented the child from learning like normal children. At the age of ten his adaptive skills was considered acceptable. The diagnosis of typical autism without significant mental retardation was made. The occurrence of a mild form of catatonia was documented.

**Conclusion:** In this paper, the rare occurrence of a mild form of catatonia in association with typical autism disorder is reported, and a therapeutic approach is suggested.

**Keywords:** Catatonia; Autism; Cerebrolysin.

**Introduction**

Autism disorders which are also known pervasive developmental disorders as are very complex and heterogeneous group of chronic disorders that marked by early impairment in socialization, communication, and behavior. Autism disorders were first recognized by Grunya Efimovna Sukhareva (Figure–1A), a Soviet pediatric psychiatrist in 1925, and she called these disorders autistic psychopathy.

The characteristic and diagnostic manifestations of autism disorders result from impairments in social interaction and communication. The impaired social interaction causes the two major diagnostic features of autism, which are the lack of eye contact, and the lack of appropriate responsiveness to own name. Difficulties in using and understanding language are an important feature of autism disorders. Repetitive body movements or behavior patterns including hand flapping, foot tapping, and spinning are commonly associated with autism disorders.

The Autistic disorder which is called classical autism was first described by Leo Kanner (Figure–1B) in 1943. The diagnostic feature of this type is normal or high intelligence.

Children with Autism disorder who have subnormal intelligence,



**Figure–1A:** Grunya Efimovna Sukhareva, a Soviet pediatric psychiatrist.

but without significant mental retardation are considered to have typical autism. The absence of significant mental retardation in such children is suggested by having acceptable adaptive behaviors including eating with spoon, bowel control and going

to bathroom. In children with typical autism disorder, the serious lack of communication skills per se is expected to prevent or delay the acquisition of developmental mile stones.



Figure-1B: Leo Kanner.

Asperger syndrome was first described by Grunya Efimovna Sukhareva, and later by Hans Asperger (Figure-1C) in 1944 [1–7].



Figure-1C: Hans Asperger.

Catonia has rarely been reported in association with autism disorder [8].

#### Patients and methods

The father of a ten year old boy with autism was particularly concerned about an abnormal behavior the boy was showing during the previous weeks. The boy was taking an abnormal position for variable time, sometimes more than 20 minutes, and associated with some repetitive movements, and was not responding to external stimuli.

#### Results

A ten year old boy who was first observed on November 5, 2021 because his father, complained that although his son had poor communication with his parents, and was poorly responding to his name. The boy's language was not good, and he had some

repetitive movement. The abnormal communication prevented the child from learning like normal children. However, at the age of ten, he had a relatively good vocabulary, and knows the numbers from 1 to 100, but he was unable to do simple mathematics like adding and subtracting. His mother taught him to write some words like “Father”. At the age of ten his adaptive skills was acceptable as he could go to toilet alone and wash his hands. He was eating with spoon when his mother asked him to eat with spoon, but in many times he was eating foods like rice with his hands. The diagnosis of typical autism without significant mental retardation was made.

The boy was taking an abnormal position for variable time, sometimes more than 20 minutes, and associated with some repetitive movements, and was not responding to external stimuli (Figure-2).



Figure-2: The boy was developing catatonic behavior.

The boy was initially treated based on our extensive published experiences with treatment of autism disorders. We recommended an initial therapeutic course which included cerebrolysin 5ml ampoule given intramuscularly every other day during the morning hours (Not necessarily on the same time) [15 doses per month] [9–15].

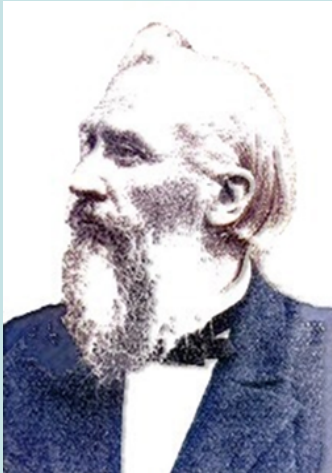
#### Discussion

Catonia is a complex behavioral condition associated with a variety of neuropsychiatric disorders including schizophrenia and mood disorders.

Karl Ludwig Kahlbaum (Figure-3) was the first to use the term catatonia to describe the condition.

It was recognized as early as 1874, and it is dominated by motor dysfunction associated with immobility in an abnormal position occurring in association with abnormal movements and behaviors, and withdrawal. Catatonia can be an acute or subtle and symptoms can change during attacks [8,16,17].

Zaw et al (1999) reported the successful treatment of a 14-year-old autistic boy with a severe form of catatonia associated with stupor, with a course of electroconvulsive therapy after failure of treatment with intravenous injection of sodium amytal [18].



**Figure–3:** Karl Ludwig Kahlbaum (December 28, 1828–April 15, 1899), a German pioneer of modern practices in mental health.

Fink and colleagues (2006) suggested the use of high dose lorazepam for the treatment of catatonia in autism disorders before considering electroconvulsive therapy [19].

Bozkurt and Mukaddes (2010) reported the successful treatment of catatonia with lorazepam in an 11-year-old child who had autism disorder with no significant language impairment (Asperger syndrome) [20].

Ellul and colleagues (2015) reported the successful treatment of catatonia with amantadine in a patient with autism disorder [21].

This patient was initially treated with courses of intramuscular cerebrolysin based on our extensive published experiences with treatment of autism disorders [9–15]. The use of lorazepam and amantadine was considered but not recommended initially.

Cerebrolysin, a safe parenteral mixture of aminoacids which has been used with a benefit in a variety of childhood neuropsychiatric disorders, is the only medical therapy that is known to be associated with significant improvement and even cure of the major autistic features (Poor response to name and poor eye contact which indicate impaired communication) [9–15].

### Conclusion

In this paper, the rare occurrence of a mild form of catatonia in association with typical autism disorder is reported, and a therapeutic approach is suggested.

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Some of the figures in this paper were included in previous author's publications, but the author has their copyrights.

### Conflict of interest

None.

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