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The association of autism with self-injurious behaviors: An educational article

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Abstract

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. Although the occurrence of self-injurious behaviors has been reported as early as the 1970s, this association has not been adequately emphasized. The case of a 3.5-year Iraqi boy who has autism disorder and self-injurious behaviors is described. A 3.5-year Iraqi boy was seen because of poor communication with others and poor speech development. At the clinic, the boy was not responding to name and had no eye contact, and it was like the doctor was not visible to him at all. He was also hyperactive and was trying to leave the room. The parents were also concerned about biting his hand especially when wanted to go outside home and the family prevented him. The diagnosis of typical autism without significant mental retardation was made and the patient was initially treated with courses of intramuscular cerebrolysin based on our extensive published experiences with treatment of autism disorders. In this paper, the association of self-injurious behavior with autism disorder is emphasized, and the uncommon occurrence in association with autism sis order without significant mental retardation is described.

Keywords: *Self injury, autism, cerebrolysin, educational article*

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.

Fig 1A: Grunya Efimovna Sukhareva, a Soviet pediatric psychiatrist

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.

Fig 1B: Leo Kanner

Children with Autism disorder who have subnormal intelligence, 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.

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

Fig 1C: Hans Asperger

Although the occurrence of self-injurious behaviors has been reported as early as the 1970s, this association has not been adequately emphasized [8].

Patients and methods

The case of a 3.5-year Iraqi boy who has autism disorder and self-injurious behaviors is described.

Results

A 3.5-year Iraqi boy was seen because of poor communication with others and poor speech development. At home he was not responding to name and had very poor eye contact (Figure-2A). He was also having repetitive movements and was sometimes hitting the floor until experiencing pain (Figure-2B).

He was repeating many words taught by his mother but was not using them satisfactorily to express his needs or to communicate with others.

Fig 2A: The boy was not turning toward his father despite he was saying his name repeatedly

Fig 2B: The boy had repetitive movements and was sometimes hitting the floor until experiencing pain

He was still unable to go the toilet by his own, and the parents were satisfied by his self-feeding ability (Figure-2C) despite he was eating sometimes things like rice by his hands and not using a spoon. He could use the pen to draw scribble and lines and some circular figures that are not that good (Figure-2D).

Fig 2C: The parents were satisfied by his self-feeding ability

Fig 2D: The boy could use the pen to draw scribble and lines and some circular figures that are not that good

At the clinic, the boy was not responding to name and had no eye contact (Figure-3), and it was like the doctor was not visible to him at all. He was also hyperactive and was trying to leave the room.

Fig 3: At the clinic, the boy was not responding to name and had no eye contact

The parents were also concerned about biting his hand especially when wanted to go outside home and the family prevented him.

The diagnosis of typical autism without significant mental retardation was made and the patient was initially treated with courses of intramuscular cerebrolysin based on our extensive published experiences with treatment of autism disorders [9-15].

Discussion

Self-injury is a serious behavioral abnormality that is commonly reported in association with severe mental retardation, and its occurrence in association with autism without significant mental retardation is uncommon [5, 8, 16, 17, 18, 19, 20].

Recently, Malhi and Sankhyan (2021) studied the records of 1252 children with autism disorders and reported that about 22 % had self-injurious behavior including head banging (47%), and self-hitting (27.8%) [21].

Neufeld and Fantuzzo (1984) suggested the use of a protective plastic mouth shielding apparatus in the treatment of children with autism and severe self-biting behavior [18].

Walters (1990) reported a beneficial effect of naltrexone in the treatment of self-injury in a 14-yeal boy with autism and mental retardation [19]. Taylor et al (1991) reported that naltrexone markedly reduced self-injurious behavior in a 20-year-old male patient with autism and mildly mental retardation [20]. However, Knabe and colleagues (1990) reported an initial increase of self-injurious behavior in patients with autism disorders treated with naltrexone [23].

Gedye (1990) reported that trazodone reduced self-injurious and aggressive behaviors in a male patient with autism and mental retardation [21].

McCracken et al (2002) reported a placebo controlled, double-blind study of the use of risperidone in the treatment of 101 children (82 boys and 19 girls) aged 5 to 17 years, having autism disorder associated with severe tantrums, aggression, or self-injurious behavior. The study found that risperidone was beneficial for the treatment of tantrums, aggression, or self-injurious behavior in children, and was well tolerated [24].

This patient was initially treated with courses of intramuscular cerebrolysin based on our extensive published experiences with treatment of autism disorders [9-15].

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 association of self-injurious behavior with autism disorder is emphasized, and the uncommon occurrence in association with autism disorder without significant mental retardation is described.

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Conflict of interest

None.

References

1. Al-Mosawi AJ. (2018).Asperger syndrome and regressive autism.1st ed., Saarbrücken; LAP Lambert Academic Publishing: (ISBN: 978-613-9-82643-8).
2. Al-Mosawi AJ. (2018).A new therapeutic approach for pervasive developmental disorders. 1st ed., Saarbrücken; LAP Lambert Academic Publishing: (ISBN: 978-3-659-86602-9).
3. Al-Mosawi AJ. (2018) Pediatric psychiatry: An accredited training course. 1st ed., Saarbrücken; LAP Lambert Academic Publishing: (ISBN: 978-613-9-86510-9
4. Al-Mosawi AJ. (2019).The pattern of pervasive developmental disorders in Iraqi children.1st ed., Saarbrücken; LAP Lambert Academic Publishing: (ISBN: 978-3-330-05029-7).
5. Al-Mosawi AJ. Autism disorders in Iraq. Scholars' Press: 2021 (ISBN-13: 978-613-8-94973-2, ISBN-10: 6138949730).
6. Al-Mosawi AJ. (2020). Autism disorders: Cure is possible. 1st ed., Saarbrücken; LAP Lambert Academic Publishing, Saarbrücken; Germany, (ISBN-13:978-620-2-66617-6, ISBN-10: 620266617X).
7. Al-Mosawi AJ. (2021). An introduction to child psychiatry: A training course. Scholars' Press: (ISBN-13: 978-613-8-94954-1, ISBN-10: 6138949544).
8. Jones, F. H., Simmons, J. Q., & Frankel, F. (1974). An extinction procedure for eliminating self-destructive behavior in a 9-year-old autistic girl. *Journal of Autism and Childhood Schizophrenia*, *4*, 241-250.
9. Al-Mosawi AJ.(2019). The use of cerebrolysin and citicoline in autism and Asperger syndrome. Journal of Bio Innovation (e-ISSN 2277-8330) January; 8(1): 99-108.
10. Al-Mosawi AJ.(2019). Pervasive developmental disorders in Iraqi children. Journal of Psychiatry Research Reviews & Reports Sep 11; 1(1): 1-8.
11. Al-Mosawi AJ.(2020). Clinical uses of Cerebrolysin in Pediatric Neuropsychiatry. Science World Journal of Pharmaceutical Sciences February 5; 1(1): 1-4.
12. Al-Mosawi, A. J. (2020). Our experience with childhood pervasive developmental disorders (Autism and Asperger Syndrome): Cure is Possible. *EC Clinical and Medical Case Reports*, *3*(4), 01-08.
13. Al-Mosawi, A. J. (2020). Cure of autistic disorders: Mission impossible is possible in an illustrated pioneering experience. *Archives of Health Science*, *4*(1), 1-26.
14. Al-Mosawi AJ. (2021) Atypical Autism Associated with Elevated Gonadotrophin and Precious Puberty: A Very Rare Association or a New Clinical Syndrome? Biomedical Journal of Scientific & Technical Research (ISSN: 2574 - 1241) 2021 Jan, 21; 33(2): 256 86-25689.
15. Al-Mosawi AJ. (2021). A Novel Therapeutic Approach for Treating Rett Syndrome. EC Clinical and medical case reports March 01; 4(3): 1-9.
16. Al-Mosawi AJ. (2019). Pervasive developmental disorders in Iraqi children. Journal of Psychiatry Research Reviews & Reports Sep 11; 1(1): 1-8.
17. Al-Mosawi AJ. (2019). The etiology of mental retardation in Iraqi children. SunKrist Journal of Neonatology and Pediatrics. June 21; 1(1):1-9.
18. Neufeld, A., & Fantuzzo, J. W. (1984). Contingent application of a protective device to treat the severe self-biting behavior of a disturbed autistic child. *Journal of behavior therapy and experimental psychiatry*, *15*(1), 79-83.
19. Walters, A. S., Barrett, R. P., Feinstein, C., Mercurio, A., & Hole, W. T. (1990). A case report of naltrexone treatment of self-injury and social withdrawal in autism. *Journal of Autism and Developmental Disorders*, *20*, 169-176.
20. Taylor, D. V., Hetrick, W. P., Neri, C. L., Touchette, P., Barron, J. L., & Sandman, C. A. (1991). Effect of naltrexone upon self-injurious behavior, learning and activity: A case study. *Pharmacology Biochemistry and Behavior*, *40*(1), 79-82.
21. Gedye A. (1991). Trazodone reduced aggressive and self-injurious movements in a mentally handicapped male patient with autism. J Clin Psychopharmacol Aug; 11(4):275-6.
22. Malhi, P., & Sankhyan, N. (2021). Intentional self harm in children with autism. *The Indian Journal of Pediatrics*, *88*, 158-160.
23. Knabe, R., Schulz, P., & Richard, J. (1990). Initial aggravation of self-injurious behavior in autistic patients receiving naltrexone treatment. *Journal of autism and developmental disorders*, *20*(4), 591–593.
24. McCracken, J. T., McGough, J., Shah, B., Cronin, P., Hong, D., Aman, M. G., ... & McMahon, D. (2002). Risperidone in children with autism and

serious behavioral problems. *New England journal of medicine*, *347*(5), 314-321.