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Title: Diagnosis and treatment of early childhood masturbation in a case of autism spectrum disorder: a case report

Running Head: Early childhood masturbation in autism

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ABSTRACT

While there have been several reports concerning the treatment of inappropriate sexual behaviors in children with autism spectrum disorder (ASD), there have been no reports concerning treatment of childhood masturbation in subjects with ASD aged <3 years. We describe a 30-month-old girl referred to our department due to language delay, behavioral problems, and lower-limb contractions. She was diagnosed with ASD according to the Diagnostic and Statistical Manual of Mental Disorders (5th Edition) criteria and with early childhood masturbation according to the 10th revision of the International Statistical Classification of Diseases and Related Health Problems. Escitalopram was added to treatment when behavioral methods proved insufficient to resolve the masturbatory behavior and due to the patient's young age. The masturbatory behavior resolved entirely 3 weeks after the start of escitalopram treatment. We wish to report the first case of masturbation under the age of 3 successfully treated with escitalopram.

Key words: Autism, childhood masturbation, escitalopram, child, pharmacotherapy

INTRODUCTION

Autism spectrum disorder (ASD) is a severe neurodevelopmental disorder characterized by persistent deficits in social interaction and communication and restricted and repetitive patterns of behaviors and interests (1). Although an increasing number of studies have focused on a better understanding of causative factors with ASD, the number involving the management of early childhood masturbation in this group is very limited. Childhood masturbation is defined as self-stimulation of the genitalia frequently associated with flushing, sweating, and tachypnea in the prepubescent period (2). We describe a case of a child with autism and global developmental delay who started masturbating at 15 months of age and was treated with escitalopram at 30 months.

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CASE REPORT

A 30-month-old girl was referred to our clinic due to speech delay and lower-limb contraction. At 15 months of age, she had begun masturbating for half an hour before sleep, while in the previous 2 weeks, she had also begun masturbating in the daytime, alone or in the presence of family or others, by placing her hand between her legs and contracting them. The frequency of masturbation was approximately 7–8 times a day, with each event lasting approximately 30 min. This behavior might have a total duration of 5 h a day. This was accompanied by flushing, sweating, and tachypnea. At clinical examination, she was able to say only two meaningful words, failed to respond to her name, and exhibited limited eye contact and no joint attention. She also exhibited self-mutilative behavior including head banging and stereotypical behavior such as rocking the head and body. Blood biochemistry tests, urinalysis, audiometry, thyroid function tests, the hormones (such as dehydroepiandrosterone sulfate, 17-hydroxyprogesterone, free testosterone, estradiol, dehydroepiandrosterone, sex hormone-binding globulin, and androstenedione levels), brain magnetic resonance imagery, electroencephalography, and abdominal ultrasound were all normal. No infection that might cause this phenomenon was observed in the genital region at physical examination. At neurological examination, she was able to sit unsupported and walk independently in a limited manner on a flat surface. Deep tendon reflexes were normative, and her cranial circumference was 47 cm. Her developmental level was assessed using the Ankara developmental screening inventory (3). Her age equivalence was 8 months at the global development level, 8 months at the linguistic–cognitive level, 10 months in terms of fine motor skills, 12 months in terms of gross motor skills, and 6 months in terms of socialization/self-care (3). The Turkish versions of the autism behavior checklist (4) and the childhood autism rating scale (5) were used to evaluate the severity of her autistic symptoms. Her total scores were 86 on the autism behavior checklist and 44 on the childhood autism rating scale (indicating severe autism). The patient was diagnosed with ASD and global developmental delay according to the Diagnostic and Statistical Manual of Mental Disorders (5th Edition) criteria and with early childhood masturbation according to the 10th revision of the International Statistical Classification of Diseases and Related Health Problems (1, 6). There were no reports of sexual or physical maltreatment. The patient was referred for special education, and behavioral recommendations were made for the masturbatory behavior. At the 1-month follow-up, the masturbatory symptoms had decreased by half; because they did not completely resolve, escitalopram 1.5 mg/day was added to treatment. The masturbatory behavior resolved entirely 3 weeks after the start of medical treatment. Drug administration was maintained for 3 months. The medication was well-tolerated. No recurrence of masturbatory behavior occurred in the following 3-month period.

DISCUSSION

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While masturbation and hypersexual behaviors are reported in children and adolescents with ASD, there has been insufficient research into behavioral therapy in masturbatory behavior and its outcomes in children with ASD (7, 8, 9). Mirtazapine was reported to be effective in childhood masturbation in a 5-year-old male patient with autism (8). Mirtazapine was also shown to be effective in treatment of inappropriate sexual behaviors in children and adolescents with ASD aged 5–16 in another case series (9). In addition, several drugs including risperidone and paroxetine (10), leuprolide (a gonadotropin-releasing hormone analog) (7), and oral estrogen (11) are reported to be effective in the treatment of sexual behaviors in subjects with ASD. However, to the best of our knowledge, childhood masturbation and the treatment thereof with escitalopram in a child with ASD aged <3 years have not been reported; therefore, this is the first such case report. We reduced the family's anxieties by informing them on the subject and recommending that they should spend more effective time with their child in addition to periods of essential care, that she should be prevented from watching television, that lullabies should be used during transition to sleep, and that the child's attention should be diverted elsewhere when she began masturbating. We added psychopharmacological therapy in our case since masturbatory symptoms failed to entirely resolve using behavioral techniques only. However, since the patient was too young for the drugs listed above and due to the possibility of excessive side-effects in this age group, we added 1.5 mg/day escitalopram. Escitalopram is a selective serotonin receptor uptake inhibitor (SSRI). There are only a few case reports of SSRIs being used in the treatment of childhood masturbation (10, 12). The youngest reported case was a 6-year-old male with ASD (12).

The mesolimbic system was found to have important role in sexual interest. SSRI blockade was found to reduce dopamine activity in the mesolimbic system through the 5-HT₂ receptors, suggesting a possible mechanism of action for SSRI-induced sexual desire dysfunction (13). The symptoms entirely resolved in as little as 3 weeks with escitalopram therapy.

CONCLUSION

In conclusion, this case report is intended to raise awareness on the part of clinicians that masturbatory behavior may also be seen in very young children with autism. Another point that should be remembered is that cases of early childhood masturbation may be at risk of misdiagnosis and treatment, such as abdominal pain and colic, due to existing presentation symptoms. Presence of masturbatory behaviors in individuals with autism is a distressing factor for their family. Therefore, appropriate management seems to be important. Masturbation treatment options in very young children are limited, and escitalopram may assist clinicians in controlling symptoms in this age group. Further systematic, placebo-controlled studies are needed on this subject.

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All authors have read and approved the final manuscript.

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