

Revisiting Childhood Gratification Disorder: Clinical Diagnosis and the Role of Sodium Valproate in Management

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ABSTRACT

The childhood gratification disorders are a group of nonpathological, repetitive, pleasure-seeking, self-stimulatory behaviors in early childhood. Due to its varied clinical presentation, it often creates diagnostic dilemma and leads to unnecessary investigations. These behaviors may impact social, cognitive, and emotional growth in children. In developing countries like India, behavioral therapy is difficult to deliver to every patient due to less manpower, less resources, and lack of psychological mindedness in parents. Hence, we need to explore pharmacological interventions. In this regard, it is the first case series comprising three cases of childhood gratification disorder, showing dramatic responses with sodium valproate within a month, and no side effects noted in a long-term follow-up of 3 months duration.

Keywords: Case report, Childhood gratification disorder, Compulsive masturbation, Seizures, Sodium valproate.

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INTRODUCTION

Childhood gratification disorder comprises a group of nonpathological, repetitive, pleasure-seeking, self-stimulatory, and habit-forming behaviors often leading to orgasm.¹ It is often difficult to diagnose in children as there is less manipulation of genitals, and rather presents with pelvic thrust, autonomic arousal, twitching of lower limbs, and other atypical behaviors. These behaviors are episodic and transient in nature with no interepisodic focal neurological deficit. Thus, they are commonly mistaken as focal seizures, movement disorders, or other neurological or physical symptoms, leading to unnecessary investigations and wasting of crucial time.² The mainstay of treatment is behavioral modification, parent management training, and age-appropriate sex education. But the pharmacological management is less explored in this context.

In this case series, we are going to depict presentation of childhood gratification disorder in Indian context and focus on the role of sodium valproate where behavioral therapy is not feasible due to logistic issues. Thus, it may generate erroneous interpretation as pharmacotherapy is not a standalone option. We have taken written informed consent from the parents and verbal assent from the children included in our case series.

CASE SERIES

Case 1

A 4-year-old boy was brought in outpatient department with chief complaint of episodic rocking movements in supine position associated with intermittent dystonic posturing of crossed legs for around 10–15 minutes. These episodes were associated with sweating over forehead region, facial flushing, and sometimes vocalization of quiet grunting sounds (as depicted in video 1). On some occasions, there were documentation of erection of penis. During these episodes, the child responded on calling his name and could easily be distracted with external cues. There was no diurnal variation. These episodes happened when he became alone or bored but never during sleep. There was no documentation of

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postictal phenomenon. The child gazed with silly smile on asking him to recall about the events. These abnormal movements started at the age of 3.5 years, with gradual increase in frequency to 8–10 episodes per day. Besides, his parents also noted that he wrote each letter of the words he pronounced in air before uttering, and on giving him paper, he used to write all the letters of words he knew repeatedly till the last point of the paper. The child was born out of nonconsanguineous marriage with nil-contributory antenatal, natal, and postnatal history. The speech and language, socioemotional milestones, and the gross motor and fine motor milestones all are achieved appropriate to his age as reported by his guardians. Guardians denied any prior sexual abuse history and family history was also nil contributory.

On detailed clinical examination, no focal neurological deficit was noted. The eye contact and joint attention both were maintained. No other stereotypical behaviors, sensory issues, or emotional disturbances were noted. The psychometric assessments like Vineland social maturity scale (VSMS) for measuring developmental quotient, Seguin form board test (SFBT) for assessing formal

intellectual functioning, and International Clinical Epidemiology Network (INCLIN) diagnostic tool for autism spectrum disorders revealed no abnormality. Both ictal and interictal video-recorded electroencephalography (EEG) showed no abnormality. We came to the diagnosis of childhood gratification syndrome. Due to logistic issues, the parents denied for behavioral therapy and opted for pharmacological therapy. He was given a trial of sodium valproate at a dose of 20 mg/kg/day. The frequency of gratification behavior reduced to minimal, with also improvement in hypergraphia within a period of 1 month, and at around 3 months follow-up, gratification behavior and hypergraphia both were resolved completely.

Case 2

A 3.5-year-old boy presented to us with complaints of episodic arching of the whole body with rubbing the genitals with hands or sometimes also with any objects nearby for a period of 5–10 minutes. These episodes were associated with redness of face with whispering of irrelevant words. The child became easily distractible with external cues and stood up with downcast gaze. These episodes happened mostly when the child was left alone and never happened during sleep. It was not associated with postictal phenomenon, and he was able to recall the events (as depicted in video 2). These episodes started from the age of 2.8 years, with gradual increase in frequency to 20–30 times per day. The child was born out of normal vaginal delivery with nil contributory antenatal, natal, and postnatal history. The developmental milestones were appropriate to his age. On clinical examination, no neurological deficit was noted. The psychometric assessments, including VSMS and INCLIN diagnostic tool for autism spectrum disorders, revealed no abnormality, and SFBT could not be administered due to uncooperativeness. Both the ictal and interictal video-recorded EEG were normal. The child was diagnosed as a case of childhood gratification syndrome and was started on valproate tablet 20 mg/kg/day as the parents were not able to come for regular therapy sessions. The child became asymptomatic on medications within one month, and on 3 months follow-up, child was maintaining well with no evident side effects.

Case 3

A 5-year-old boy presented with chief complaints of episodic rubbing of his genitals and uttering sounds with flushing of face for 15–20 minutes. There were episodes of touching private parts of mother and uttering sounds. On forbidding him to touch private parts or calling him in-between the episodes, he shouted in a loud tone for 10 minutes and then said sorry for his misdeeds. During the episodes, he was able to interact and was able to control the act voluntarily. Those episodes happened only when the child was alone or with mother. No documentation of episodes in sleep. No postictal phenomenon was noted. The age of onset of symptoms was around 4.5 years, with gradual increase in frequency to seven to eight episodes per day. The child had nil contributory antenatal, natal, and postnatal history, with appropriate developmental milestones. On clinical examinations and psychometric assessments, no abnormality was detected. Both the ictal and interictal video-recorded EEG were normal. The child was given a trial of sodium valproate tablet 20 mg/kg/day as the parents refused for therapy. The child showed improvement within a month and was maintaining well even on 3 months follow-up.

DISCUSSION

Childhood gratification disorders are thought to be a part of spectrum that includes thumb sucking, body rocking, and other

activities performed in early childhood.³ These behaviors may be discovered unnoticeably while playing, but reinforced and later habit formation occurs because of its pleasurable effects. The onset of these activities coincides with the age of habit formation in infants of around 4 months. Because of its repetitive nature, it may impact social, emotional, and cognitive development.⁴ They may lack the self-regulation and delayed gratification, leading to impulse control disorders, and may have deficits in executive functions. Studies have found 20% of cases diagnosed with childhood gratification disorder develop attention-deficit hyperactivity disorder in later life.⁵ They may face school bully and peer rejections, as these behaviors are disruptive in nature. Phenomenologically, the stereotyped behavior of penile erection, genital manipulation focusing around perineum with autonomic features, grunting and silly sounds of variable frequency, and duration pointed toward gratification syndrome. The gratification disorder has no specific diagnostic criteria according to Diagnostic and Statistical Manual of Mental Disorders, 5th edition (DSM-5) or International classification of diseases (ICD-10/ ICD-11) and focuses on ruling out other mimics like epilepsy, childhood-onset dystonia, paroxysmal movement disorders, abdominal pain, colic, or other medical issues.⁶ Clinically, the absence of pain or discomfort in child during the episodes ruled out gastrointestinal problems. Able to interrupt with distraction, occurrence when being alone or bored, without any altered consciousness and without postictal phenomenon pointed against epilepsy.⁷ The stereotyped behaviors like flushing, grunting, and posturing of lower limbs focusing around perineum region of varied duration without pain pointed against childhood-onset dystonia. Childhood-onset dystonia accompanies with pain and progress from caudal to cranial region.⁸ Lack of itching, tenderness, and other features rules out local pathology. Absence of nightmare, history of trauma, crying spells, lack of interest, irritability, and other acute-onset behavioral changes rule out comorbid psychiatric illness. Furthermore, presence of autonomic features, absence of stressors, and secondary/tertiary gain differentiates it from factitious/malingering disorders. In all the cases, videotaping is utmost important to rule out mimics. The normal ictal and interictal video-recorded EEG rule out any epileptiform activities in brain in all of our cases. The role of magnetic resonance imaging and EEG is limited in diagnosing gratification disorder. Thus, clinicians should be vigilant to diagnose the cases at correct time, as the main problem is diagnostic delay due to numerous unwanted investigations, lack of proper diagnostic assessment tools, criteria, or investigations, and lack of awareness.

Treatment usually revolves around psychoeducation, behavioral modification, distraction technique, parent management training, and age-appropriate sex education.⁴ The behavioral therapy is time consuming, and parents are needed to be psychologically minded to come for regular follow-up. Hence, it is difficult to provide behavioral management training in developing countries like India due to poor economic resources and less manpower. Researches are lacking in developing a pharmacological management protocol for childhood gratification syndrome. A single randomized controlled study revealed low-dose risperidone (0.25–1 mg/day) and behavioral therapy reduced symptoms better than behavioral therapy alone.⁹ Another systematic review showed effectiveness of escitalopram and aripiprazole in childhood gratification disorder.¹⁰ Mirtazapine has also been reported beneficial in a case of compulsive masturbation in the background of severe autism spectrum disorder.¹¹ Sodium valproate has been established as a safe option in children with movement disorders, but its role



Table 1: Summary of demographical and clinical picture and laboratory investigations of three cases included in our study diagnosed with childhood gratification syndrome

Features	Case 1	Case 2	Case 3
Age/sex	4 years/male	3.5 years/male	5 years/male
Phenomenology of movements	Episodic rocking movements in supine position associated with intermittent dystonic posturing of crossed legs	Episodic arching of the whole body with rubbing the genitals with hands or sometimes also with any objects nearby	Episodic rubbing and manipulating his genitals and uttering sounds with flushing of face
Association with autonomic features	Yes	Yes	Yes
Awareness of surroundings	Intact	Intact	Intact
Postictal phenomenon	Absent	Absent	Absent
Recall of the event	Present	Present	Present
Age of onset of symptoms	3.5 years	2.8 years	4.5 years
Frequency of the event	8–10 times/day	20–30 times/day	7–8 times/day
Duration of each episode	10–15 min	5–10 min	15–20 min
Episodes during sleep	Absent	Absent	Absent
Psychological assessments including VSMS and INCLIN	Within normal range	Within normal range. Seguin form board test could not be applied due to uncooperativeness	Within normal range
Ictal and interictal EEG	No abnormality detected	No abnormality detected	No abnormality detected
Treatment with response	Dramatic response to sodium valproate (20 mg/kg/day)	Dramatic response to sodium valproate (20 mg/kg/day)	Dramatic response to sodium valproate (20 mg/kg/day)

in gratification disorder remains unexplored.¹² In our three cases, the sodium valproate at a dose of 20 mg/kg/day showed dramatic response and remained symptom-free even after 3 months of follow-up. Furthermore, studies are needed to substantiate our findings and long-term follow-up is also needed (Table 1).

CONCLUSION

Our aim is to raise the awareness about childhood gratification syndrome among parents and practitioners and it should be kept as a differential in mind. Pharmacological management should be sought of where behavioral therapy is not possible in the developing countries like India. This is the first case series showing dramatic improvement with sodium valproate in childhood gratification syndrome.

SUPPLEMENTARY MATERIALS

The supplementary videos 1 and 2 are available online on the website of <https://www.ijjapp.com/>

Video 1: Episodic rocking movements in supine position, associated with intermittent dystonic posturing of crossed legs for around 10–15 minutes in case 1.

Video 2: Episodic abnormal body movements focusing on perineum region for around 5–10 minutes, associated with whispering of sounds and intact awareness of surroundings without postictal phenomena in case 2.

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REFERENCES

- Phillips DF, Seshia SS. Gratification, masturbation or paroxysmal hyperkinetic motor syndrome of infancy? *Can J Neurol Sci* 2013;40:278–279. DOI: 10.1017/s0317167100014189.
- Nechay A, Ross LM, Stephenson JBP, et al. Gratification disorder (“infantile masturbation”): A review. *Arch Dis Child* 2004;89:225–226. DOI: 10.1136/adc.2003.032102.
- Yang ML, Fullwood E, Goldstein J, et al. Masturbation in infancy and early childhood presenting as a movement disorder: 12 cases and a review of the literature. *Pediatrics* 2005;116:1427–1432. DOI: 10.1542/peds.2005-0532.
- Longkumer I, Patil R, Ahmed A. Understanding gratification disorder in childhood: A comprehensive review of diagnosis, differential diagnosis, and management approaches. *Cureus* 2024;16:e70415. DOI: 10.7759/cureus.70415.
- Jan MM, Al Banji MH, Fallatah BA. Long-term outcome of infantile gratification phenomena. *Can J Neurol Sci* 2013;40:416–419. DOI: 10.1017/s0317167100014396.
- Biswas T, Nath S, Mishra BR. Childhood gratification syndrome: Demystifying the clinical conundrum with a narrative literature review of the past 5 decades. *Indian J Psychiatry* 2024;66:516–527. DOI: 10.4103/indianjpsychiatry.indianjpsychiatry_46_24.
- Ibrahim A, Raymond B. Gratification disorder mimicking childhood epilepsy in an 18-month-old Nigerian girl: A case report and review of the literature. *Indian J Psychol Med* 2013;35:417–419. DOI: 10.4103/0253-7176.122247.
- Fernández-Alvarez E, Nardocci N. Update on pediatric dystonias: Etiology, epidemiology, and management. *Degener Neurol Neuromuscul Dis* 2012;2:29–41. DOI: 10.2147/DNND.S16082.
- Omrani V, Najafi M, Sharbafchi MR, et al. Risperidone as a treatment for childhood habitual behavior. *J Res Pharm Pract* 2013;2:29–33. DOI: 10.4103/2279-042X.114086.
- Nemati H, Ahmadabadi F, Shahisavandi M, et al. Treatment of child gratification disorder. *Iran J Child Neurol* 2022;16:9–16. DOI: 10.22037/ijcn.v16i2.35480.
- Albertini G, Polito E, Sarà M, et al. Compulsive masturbation in infantile autism treated by mirtazapine. *Pediatr Neurol* 2006;34:417–418. DOI: 10.1016/j.pediatrneurol.2005.10.023.
- Yang C-S, Zhang L-L, Lin Y-Z, et al. Sodium valproate for the treatment of Tourette’s syndrome in children: A systematic review and meta-analysis. *Psychiatry Res* 2015;226:411–417. DOI: 10.1016/j.psychres.2014.08.058.