When outpatient care falls short: A case report of complex pediatric obsessive-compulsive disorder treated in a day clinic

Müjdat Erarkadaş[1], Kübra Özmeral Erarkadaş[2], Burcu Kardaş[3], Nursu Çakın Memik[4]

[1]M.D.,Gölcük Necati Çelik State Hospital, Clinic of Child and Adolescent Psychiatry, Kocaeli, Turkey https://orcid.org/0000-0001-8263-9219
[2]M.D., [3]Assoc. Prof., [4]Prof. Kocaeli University, Medical Faculty, Department of Child and Adolescent Psychiatry, Kocaeli, Turkey
https://orcid.org/0000-0002-4513-8164-https://orcid.org/0000-0002-2912-8097-https://orcid.org/0000-0001-9029-3457

SUMMARY

Pediatric obsessive compulsive disorder (OCD) frequently presents with comorbid psychiatric disorders and may show limited response to first-line interventions such as selective serotonin reuptake inhibitors (SSRI) and cognitive behavioral therapy (CBT). The day treatment model, which provides structured, intensive, and multidisciplinary care, is particularly effective for such complex, treatment-resistant cases. This case report presents a 16-year-old female with severe OCD and comorbid skin picking disorder, trichotillomania, hoarding disorder, and major depressive disorder. She had early-onset symptoms, a history of suicide attempts and severe functional impairment. Due to insufficient clinical improvement in outpatient follow-up, she was subsequently admitted to a day clinic. She received comprehensive treatment, including pharmacotherapy (SSRI, antipsychotics, and N-acetylcysteine), CBT, milieu therapy, group therapy, and family psychoeducation/counseling. Following eight weeks of treatment in the day clinic, significant clinical improvement was observed. This case highlights the effectiveness of day treatment in managing severe pediatric OCD with comorbidities. The intensive, multimodal approach led to symptom reduction, improved functioning, and increased self-esteem. Additionally, N-acetylcysteine, which is not commonly used in pediatric psychiatry, appeared to contribute to improvements in skin picking and hair pulling behaviors in this case. This suggests that N-acetylcysteine is a promising option that warrants further investigation. This case report highlights the important role of day clinics in the management of complex psychiatric disorders in children and adolescents, and underscores the need to expand this model, which is currently available in only one center in Türkiye, nationwide.

Key words: Day clinic, obsessive compulsive disorder, skin picking disorder, trichotillomania, hoarding disorder, n-acetylcysteine.

INTRODUCTION

Obsessive compulsive disorder (OCD) is characterized by persistent, intrusive, and distressing thoughts, images, or urges (obsessions), accompanied by repetitive behaviors or mental acts (compulsions) that are time-consuming and cause significant functional impairment (1). The prevalence of pediatric OCD is estimated to be between 1% and 2%. OCD often follows a chronic course and has a substantial negative impact on children's quality of life (2).

First-line treatment for moderate to severe pediatric OCD typically includes a combination of selective serotonin reuptake inhibitors (SSRI) and cognitive behavioral therapy (CBT). While many children benefit from these treatments, approximately half fail to achieve full clinical remission (3). According to Diagnostic and Statistical Manual of Mental Disorders (DSM-5), skin picking disorder, body dysmorphic disorder, hoarding disorder, and trichotillomania are classified under obsessive compulsive and related disorders (OCRD) (1). These disorders frequently co-occur with one another and with other psychiatric disorders, which can complicate treatment and negatively affect clinical outcomes (2). This case report aims to present the diagnostic and treatment process of an adolescent followed in day clinic, diagnosed with severe OCD and comorbid skin picking disorder, hoarding disorder, trichotillomania and major depressive disorder.

DOI: 10.5505/kpd.2025.89083

Cite this article as: Erarkadas M, Ozmeral Erarkadas K, Kardas B, Cakin Memik N. When outpatient care falls short: A case report of complex pediatric obsessive-compulsive disorder treated in a day clinic. Turkish J Clin Psych 2025; 28:368-373

The arrival date of article: 09.07.2025, **Acceptance date publication:** 03.09.2025

Turkish J Clinical Psychiatry 2025;28:368-373

CASE

The patient is a 16-year-old female in the 10th grade, residing with her nuclear family. The prenatal, perinatal, and postnatal periods were unremarkable. Neuromotor development was reported to be age-appropriate, and the primary caregiver was her mother.

Her initial symptoms emerged during primary school, starting with repetitive skin picking on her hands and feet. At times, the resulting lesions were so extensive that she was unable to walk. She had experienced persistent unhappiness and loss of interest for the past five years. She reported a history of persistent peer bullying throughout her school years. In 8th grade, she attempted suicide by drinking bleach in the presence of her classmates, as reported by the patient as an act intended to punish them. Following this attempt, during the onset of the COVID-19 pandemic, she developed additional symptoms, including fear of contamination, compulsive counting, keeping her eyes closed to avoid perceived contamination, hair pulling, blasphemous intrusive thoughts, and hoarding of food packaging waste under the belief that it would prevent distressing thoughts.

After presenting to the clinic with these complaints, she was diagnosed with OCD, skin picking disorder, hoarding disorder, trichotillomania, and major depressive disorder. Following standard pediatric OCD assessment and treatment guidelines (2,4), fluoxetine, a SSRI, was initiated at 20 mg/day and titrated to 40 mg/day, in accordance with first-line therapy recommendations for moderate to severe OCD. As her obsessions increased in severity, aripiprazole 5 mg/day, an atypical antipsychotic, was added for augmentation, according to guidelines supporting the use of antipsychotics in SSRI-refractory pediatric OCD (2,4). It was later discontinued due to blurred vision adverse effect. Subsequently, risperidone 1 mg/day was initiated for treatment augmentation. After two months without clinical improvement, fluoxetine was discontinued, and sertraline, another SSRI, was initiated at 50 mg/day and titrated to 150 mg/day, in line with guideline recommendations for switching to another SSRI after inadequate response to optimized SSRI therapy (2,4). At that time, she was experiencing severe religious obsessions, including the belief that failing to pray would cause to harm herself or her family. She reported praying aloud for an average of 10 hours per day. Despite ongoing follow-up, she attempted suicide again by trying to jump from a school window after further bullying. Following this, it was decided to admit her to the day clinic for more intensive treatment.

During the initial psychiatric evaluation, the patient appeared her chronological age and was dressed appropriately for her socioeconomic status. She was conscious and fully oriented. Her mood was depressed and anxious, with affect congruent with thought content. Her thoughts were goal-directed, and perception was intact. Her speech content focused predominantly on peer bullying, religious obsessions, and harm-related fears. No current suicidal or homicidal thoughts were reported. Cognitive functions were generally assessed to be within normal limits.

Clinical observations noted low self-esteem, poor insight, limited psychological flexibility, and marked social withdrawal. She demonstrated improved peer interactions. The summary of interventions and clinical observations is presented in Table 1.

At the initiation of the day clinic, sertraline was increased to 200 mg/day and risperidone to 2 mg/day, following pediatric OCD guidelines for insufficient response. N-acetylcysteine (NAC) 600 mg/day was added and gradually increased to 1800 mg/day based on emerging evidence for its efficacy in trichotillomania and skin picking disorder (5-7). By the fourth week of treatment, significant reductions were observed in her hair pulling and skin picking behaviors.

During CBT, she was introduced to the cognitive model of OCD and encouraged to identify and list her specific obsessions and compulsions. She was assigned daily exposure tasks, which were gradually extended over time. She documented her distress levels after each task and gradual decreases were observed. She also engaged in cognitive restructuring exercises, where she challenged maladaptive

Table 1. Summary of interventions, applied strategies, and clinical observations in the 8-week day clinic treatment

Intervention Area	Interventions Applied	Clinical Observations
Pharmacotherapy	- Sertraline (> 200 mg) - Risperidone (> 2 mg) - N-acetylcysteine (> 1800 mg)	- Significant reduction in obsessions and compulsions - Decrease in hair pulling and skin picking behaviors
Cognitive Behavioral Therapy (CBT)	- Psychoeducation on the cognitive model - Listing obsessions and compulsions - Cognitive restructuring or reframing - Activity scheduling and behavioral activation - Behavioral experiments - Relaxation and stress reduction techniques - ERP practices	- Improved emotional regulation - Reduction in anxiety and distress related to obsessions - Resolution of suicidal ideation - Enhanced insight into OCD patterns - Improved cognitive flexibility and reduced rumination - Enhanced coping skills and stress management
Family Education & Counseling	- OCD psychoeducation - Supportive family communication training	- Strengthened family support and communication patterns - Increased parental understanding of OCD - Improvement in family problem-solving and conflict resolution skills - Enhanced emotional support within the household - Greater adherence to treatment recommendations encouraged by family involvement - Reduction in episodes of anger at home
Group & Milieu Therapy	- Group therapy with peers - Social skills development - Group ERP sessions	- Increased empathy and improved social skills - Increased social interaction and participation - Positive response to group ERP sessions - Increased motivation and morale through peer support
Overall Clinical Course	- 8-week day clinic follow-up - Structured daily monitoring	- Noticeable clinical and functional improvement. - Enhanced daily functioning and academic motivation - Improved quality of life - Notable reduction in standardized scale scores*: -CGI: 6 >> 3 -CGAS: 35 >> 70 -Y-BOCS: 38 >> 22 -BDI: 46 >> 10 -STAI: 75/60 >> 47/47 -RSES: 10 >> 24

*Note: Clinically significant improvement is defined as Y-BOCS ≥35% reduction (observed: 42%), CGI ≤ 3 (6>> 3, moving from severely ill to mildly ill), and CGAS >60 (35>>70, improvement from serious to mild functional impairment). Reductions in BDI (0-9: minimal, 10-16: mild, 17-29: moderate, 30-63: severe), STAI (40-59: moderate, ≥ 60: high) and increase in RSES (≤ 15: low self-esteem, 16-25: normal self-esteem, 26-30:high self-esteem) indicate meaningful symptom and functional improvement based on standard thresholds for children and adolescents (20).
BDI: Beck Depression Inventory, CGAS: Children's Global Assessment Scale, CGI: Clinical Global Impression, ERP: Exposure and response prevention, OCD: Obsessive compulsive disorder, RSES: Rosenberg Self-Esteem Scale, STAI: State-Trait Anxiety Inventory, Y-BOCS: Yale-Brown Obsessive Compulsive Scale.

core beliefs. Initially, she expressed severe anxiety at the idea of reducing rituals. Through gradual exposure and response prevention, she began tolerating longer periods without compulsions, reflecting improvements in clinical functioning. Cognitive restructuring was crucial in addressing her catastrophic beliefs. She began challenging her core assumptions about harm and responsibility, gradually recognizing the irrational nature of these thoughts. Over time, improvements were noted in her psychological flexibility and emotional regulation.

Family psychoeducation focused on the mechanisms of OCD, avoiding reassurance, and fostering supportive communication. The patient's mother initially struggled with feelings of guilt and the urge to accommodate rituals, fearing that resistance would exacerbate her daughter's distress. Over time, the family gradually learned to maintain firm but supportive boundaries, which contributed significantly to the patient's progress. Group therapy sessions helped her improve social skills and reduced feelings of isolation. She engaged in group exposure and response prevention tasks, which fostered empathy and peer support, enhancing her motivation and morale.

Throughout the day clinic program, the patient demonstrated a high levels of engagement and adherence to both pharmacological and psychotherapeutic interventions. Despite occasional moments of discouragement, her motivation was sustained by the support of the staff and interactions with peer group. Overall, her cooperation and positive attitude were crucial factors in the treatment's success. At discharge, she showed marked improvements across all standardized measures and global clinical ratings (Table 1). She and her family consented to continue weekly outpatient

CBT sessions focused on relapse prevention and strengthening her functional skills, with a planned gradual return to school under close support. In addition, a comprehensive crisis intervention plan was also developed to mitigate future risks. Written and verbal informed consent was obtained from the patient and parent to publish this report.

DISCUSSION

This case illustrates a complex presentation of OCD accompanied by depression and multiple comorbid OCRDs, including skin picking disorder, trichotillomania, and hoarding disorder. Psychiatric comorbidity is considered the rule rather than the exception in pediatric OCD and is associated with significantly lower treatment response and remission rates (8,9). Consistent with these findings, our patient exhibited poor initial response to treatment and required a multimodal, intensive approach to achieve a significant reduction in symptoms. These observations highlight the critical importance of assessing and addressing comorbidities in the management of pediatric OCD, particularly in severe and treatment-resistant cases.

The patient exhibited a broad range of OCD symptom dimensions, including fear of contaminations, religious and harm-related obsessions, compulsive praying, and hoarding. Religious and aggressive obsessions, in particular, have been associated with poorer insight, greater functional impairment, and a less favorable prognosis compared to washing and checking compulsions (2). These factors likely contributed to the severity and persistence of symptoms in this case.

Early-onset OCD is often associated with a more severe clinical presentation, higher rates of psychiatric comorbidity, and increased functional impairment (2). In the presented case, the patient began exhibiting compulsive behaviors during primary school, which aligns with the literature suggesting an average onset of pediatric OCD between 7.5 and 12.5 years, with diagnosis typically delayed until adolescence (10). This diagnostic delay, also present in our case, is clinically significant, as early intervention is crucial in preventing symptom entrenchment and psychosocial deterioration. The role of family accommodation and environmental stressors, such as peer bullying in this case, should not be overlooked. Negative social interactions and lack of peer support may exacerbate symptoms or reduce treatment efficacy (11,12).

Insight in OCD is a critical determinant of treatment outcome. Poor insight, defined as limited recognition of the irrational nature of obsessions and compulsions has been associated with increased severity, reduced treatment adherence, and poorer outcomes (13). In the present case, the patient demonstrated impaired insight, particularly in relation to her religious obsessions, which likely contributed to her fluctuating response to treatment. Unfortunately, the literature on insight in children and adolescents with OCD remains scarce. More research is needed to explore the developmental aspects of insight and its role in tailoring interventions.

Pharmacological treatment was initiated with fluoxetine, a SSRI prescribed for pediatric OCD. However, due to lack of clinical response, fluoxetine was switched to sertraline. This strategy aligns with current treatment guidelines, which recommend SSRI as the first-line pharmacologic treatment, and combined CBT with SSRI for moderate to severe cases (2). Approximately 40% of patients do not respond adequately to SSRI monotherapy (14). Adjunctive agents, including the use of atypical antipsychotics or glutamate modulators, are increasingly being explored. Although NAC is not yet widely used in pediatric psychiatry clinics, emerging evidence suggests its potential benefit as an adjunctive treatment in managing symptoms such as skin picking and trichotillomania (5-7). In this case, the addition of NAC, a glutamate modulator, appeared to contribute to symptom improvement. However, further controlled studies are needed to establish its efficacy and safety in pediatric populations. The use of NAC in this context highlights the importance of exploring novel therapeutic options for complex, treatment-resistant pediatric OCD.

The complexity and severity of the patient's condition, including multiple suicide attempts, signifi-

cant academic/social impairment and comorbidities contributed to treatment resistance and necessitated an intensive, multimodal intervention in a day treatment clinic. The day treatment model is designed to provide care in the least restrictive environment and tailored to the child's individual needs. This approach allows children and adolescents to receive structured and intensive therapeutic interventions without being removed from their family environment (15). Day clinic programs typically integrate group therapy, milieu therapy, CBT, and pharmacological treatments. Recent studies in psychiatric populations have demonstrated the effectiveness of day treatment in improving clinical outcomes, social functioning, and overall quality of life (16-18). Day treatment offers a structured environment where intensive behavioral interventions, particularly exposure and response prevention, can be effectively applied. Psychoeducation and family involvement were key components of the therapeutic process, emphasizing the need to avoid reinforcing compulsive behaviors and to foster supportive, nonjudgmental communication at home. In this case, following initial treatment resistance, the patient exhibited substantial clinical improvement through a comprehensive, multimodal intervention in day treatment, incorporating CBT, pharmacological optimization, and family psychoeducation. Comprehensive treatment opportunities offered by day clinics represent a valuable alternative to inpatient care for children and adolescents with severe psychiatric disorders. However, in Turkey, day clinics and inpatient units for this population are markedly limited, resulting in predominantly outpatient-based care even for complex cases (19). At present, only one center currently offers a day treatment program for youth. Expanding such services is essential to improve access to intensive, multidisciplinary care and enhance clinical outcomes for children and adolescents with severe mental health needs.

In conclusion, this case highlights the importance of individualized, multimodal treatment approaches—including day treatment—in the management of pediatric OCD, particularly in patients with poor insight and multiple comorbidities. It also underscores the need for novel therapeutic strategies, such as NAC, and for further research on insight and treatment resistance in youth with OCD.

Correspondence address: M.D, Kubra Ozmeral Erarkadas, Kocaeli University, Medical Faculty, Department of Child and Adolescent Psychiatry, Kocaeli, Turkey
kubraozmeral1995@gmail.com

REFERENCES

1. American Psychiatric Association. Diagnostic and Statistical Manual of Mental Disorders (5th ed.). Arlington, VA. American Psychiatric Publishing. 2013.

2. Geller DA, March J. Practice parameter for the assessment and treatment of children and adolescents with obsessive-compulsive disorder. J Am Acad Child Adolesc Psychiatry 2012; 51(1):98-113. doi: 10.1016/j.jaac.2011.09.019

3. Pediatric OCD Treatment Study (POTS) Team. Cognitive-behavior therapy, sertraline, and their combination for children and adolescents with obsessive-compulsive disorder: the Pediatric OCD Treatment Study (POTS) randomized controlled trial. JAMA 2004; 292(16):1969-1976. doi: 10.1001/jama.292.16.1969

4. Florida Department of Children and Families. Florida Best Practice Psychotherapeutic Medication Guidelines for Children and Adolescents. 2022; 57–59. https://floridabhcenter.org/. Erişim tarihi: Ağustos 20, 2025.

5. Goldin D, Salani DA, Valdes B. N-Acetylcysteine (NAC) for Trichotillomania and Excoriation Disorder: An Overview. J Psychosoc Nurs Ment Health Serv. 2025; 14:1-9. doi: 10.3928/02793695-20250506-04

6. Hwang AS, Campbell EH, Sartori-Valinotti JC. Evidence of N-acetylcysteine efficacy for skin picking disorder: A retrospective cohort study. J Am Acad Dermatol. 2022; 87(1):148-150. doi: 10.1016/j.jaad.2021.06.874

7. Sonia, SBA, Siddiki, MNA, Sultana S, Chowdhury IH, Sinha S. Ahmad R, Mehta M, Haque MN. N-acetylcysteine: An innovative approach to obsessive-compulsive disorder treatment: A narrative review. Adv Hum Biol 2025; 15.2:167-176. doi: 10.4103/aihb.aihb_10_25

8. Geller D, Biederman J, Faraone SV, Frazier J, Coffey BJ, Kim G, Bellordre CA. Clinical correlates of obsessive compulsive disorder in children and adolescents referred to specialized and non-specialized clinical settings. Depress Anxiety 2000; 11(4):163-168. doi: 10.1002/1520-6394(2000)11:4<163::AID-DA3>3.0.CO;2-3

9. Storch EA, Merlo LJ, Larson MJ, Geffken GR, Lehmkuhl HD, Jacob ML, Goodman WK. Impact of comorbidity on cognitive-behavioral therapy response in pediatric obsessive-compulsive disorder. J Am Acad Child Adolesc Psychiatry 2008; 47(5):583-592. doi:10.1097/CHI.0b013e31816774b1

10. Geller D, Biederman J, Jones J, Park K, Schwartz S, Shapiro S, Coffey B. Is juvenile obsessive-compulsive disorder a developmental subtype of the disorder? A review of the pediatric literature. J Am Acad Child Adolesc Psychiatry 1998; 37(4):420-427. doi:10.1097/00004583-199804000-00020

11. Storch EA, Ledley DR, Lewin AB, Murphy TK, Johns NB, Goodman WK, Geffken GR. Peer victimization in children with obsessive–compulsive disorder: relations with symptoms of psychopathology. J Clin Child Adolesc Psychol 2006; 35(3):446-455. doi:10.1207/s15374424jccp3503_10

12. Garcia AM, Sapyta JJ, Moore PS, Freeman JB, Franklin ME, March JS, Foa EB. Predictors and moderators of treatment outcome in the Pediatric Obsessive Compulsive Treatment Study (POTS I). J Am Acad Child Adolesc Psychiatry 2010; 49(10):1024-1033. doi:10.1016/j.jaac.2010.06.013

13. Çimen İD, Memik NÇ, Gündoğdu ÖY. Poor insight in obsessive compulsive disorder: a case report. Anatolian Journal of Psychiatry 2016; 17(3):17-19. doi: 10.5455/apd.199173

14. Bandelow B, Zohar J, Hollander E, Kasper S, Moller HJ. World Federation of Societies of Biological Psychiatry (WFSBP) guidelines for the pharmacological treatment of anxiety, obsessive-compulsive and post-traumatic stress disorders – first revision. World J Biol Psychiatry 2008; 9(4):248–312. doi:10.1080/15622970802465807

15. Kallert TW, Matthes C, Glöckner M, Eichler T, Koch R, Schützwohl M. Acute psychiatric day-clinic treatment: A care offer that is guaranteed to be effective? Acute psychiatric day hospital treatment: is the effectiveness of this treatment approach still questionable?. Psychiatr Prax 2004; 31(8):409-419. doi:10.1055/s-2003-815031

16. Clisu DA, Layther I, Dover D, Viner RM, Read T, Cheesman D, Hodges S, Hudson LD. Alternatives to mental health admissions for children and adolescents experiencing mental health crises: A systematic review of the literature. Clin Child Psychol Psychiatry. 2022; 27(1):35-60. doi:10.1177/13591045211044743

17. Balvardi S, Rahbari N, Jolicoeur-Martineau A, et al. Effectiveness and Predictors of Outcomes in a Psychiatric Day Treatment Program for Elementary-Age. Can J Psychiatry. 2021;67(4):269-280. doi:10.1177/07067437211000627

18. Kardaş B, Kardaş Ö, Memik NÇ. The effectiveness of day clinic treatment in adolescents with obsessive compulsive disorder: Outcomes in Turkey. Indian J Psychiatry 2024; 66(10):938-945. doi:10.4103/indianjpsychiatry.indianjpsychiatry_823_22

19. Memik NÇ, Öç ÖY, Karakaya I, Şişmanlar ŞG, Ağaoğlu B. An Experience of A Child and Adolescent Psychiatry Day Clinic Treatment Program. Turkiye Klinikleri J Pediatr 2010; 19(2):103-112.

20. Görmez V, Yıldırım Budak B, Usta Gündüz EB. Çocuk ve Ergen Ruh Sağlığı Alanında Kullanılan Değerlendirme Araçları. Ankara: APAMER Psikoloji Yayınları, 2022.