

Increased Risk Of Psychiatric Comorbidities In Pediatric Patients With Undiagnosed Developmental Delay Symptoms

Domenick Sportelli DO^{1*}, Ryan Cordero¹, Ruchika Kapoor¹, Akhila Kethireddy¹, Sarah Loreck¹, Eric Parlin¹, Julia Rybalov²

¹Prime Health Saint Clare's Hospital Psychiatry Residency Program.

²Fordham College Rose Hill.

***Corresponding Author:** Domenick Sportelli DO, Prime Health Saint Clare's Hospital Psychiatry Residency Program.

Received date: 24 June 2025; **Accepted date:** 02 July 2025; **Published date:** 04 July 2025

Citation: DO DS, Cordero R, Kapoor R, Kethireddy A, Loreck S, et al. (2025) Increased risk of psychiatric comorbidities in pediatric patients with undiagnosed developmental delay symptoms. J Med Case Rep Case Series 6(04): <https://doi.org/10.38207/JMCRCS/2025/JUN06040241>

Copyright: © 2025 Domenick Sportelli DO. This is an open-access article distributed under the terms of the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited.

Abstract

This is the case of a 14 year old female, domiciled in private home living with her mother, current 9th grader in high school, developmental milestones reported as having all been met, past psychiatric history of depression with SI and attempt during the 4th grade unreported to family, no past psychiatric hospitalizations, no history of substance abuse, no history of physical/sexual abuse, no significant past medical history, presented to the emergency department brought in by her mom, after her mother received a call from the school counselor reporting that the patient had thoughts of hurting herself. The patient had told the school counselor that she took 16 Midol tablets 1 week prior to arrival, with the intent to kill herself, but got scared and vomited shortly, and the day before arrival, the patient took six additional Midol tablets at once.

Introduction

This case illustrates the psychiatric association of undiagnosed developmental disorders, that can manifest or exacerbate underlying primary psychiatric disorders such as Major Depressive Disorder. This case highlights the importance of assessing and evaluating pediatric patients for developmental disorders to identify such comorbidities early, as well as to avoid missing any developmental deficits indicative of a developmental disorder, to decrease the risk of developing or exacerbating a primary psychiatric condition.

Case Presentation

During this episode of psychiatric decompensation, the patient was initially evaluated in the emergency department and transferred to the pediatric medical floor due to hemoglobin noted to be 5.6 and signs and symptoms of anemia such as intermittent headaches and episodes of dizziness that occurred and were worse when standing. Vital signs BP 141/76, HR 90, RR 19, Pulse ox 100% on room air, Temp 98.0 F. CMP, UA were negative for any acute abnormalities, urine drug screen was negative for any illicit substances. Patient received a transfusion of 2 units of blood on the day prior to transfer to the inpatient psychiatric unit, after which the hemoglobin improved to 8.3 and the patient was subsequently transferred to the Child and Adolescent Inpatient Psychiatric unit for further evaluation and plan of care management.

Upon initial psychiatric screening, the patient was asked what led up to coming into the hospital and she reported that she spoke to her school guidance counselor and told them that she had overdosed on Midol. Patient reported that two weeks prior to arrival, she attempted

to overdose on 12-16 pills of Midol with the intent to end her life. She reported that she shortly after intentionally vomited most of the pills out and felt dizzy. Patient disclosed that the day before arrival, she attempted to overdose again on six tablets of Midol, this time with the intent to make herself sick so she would not have to attend school the next day. Patient stated that while she was at school she started to have chest pain and told her guidance counselor about the overdose because she was afraid of dying. Patient stated that she did not go to school nurse, as her nurse was dismissive of her and believed that she often pretends to be sick. Patient stated that sometimes this is true, but other times her concerns were dismissed. Patient reported having suicidal ideation since 3rd and 4th grade, approximately a few times a week. Patient reported one previous suicide attempt in 4th grade when she "drank cherry Medicine, drank the whole bottle, I liked the taste". The patient did not disclose to her mother that it was a suicide attempt, and her mother believed that it was only because she enjoyed the taste of the medicine. Patient stated the medication was for children, so it did not harm her. Patient reported non-suicidal self-injurious behavior via cutting with a knife, that started 1-2 years ago. The patient reported cutting every other day since then. When discussing her triggers for cutting, the patient stated, "when I am really happy or when I am really sad". Patient was unable to elaborate further only stated that it "makes her feel better". Patient denied ever needing sutures for the cuts. The patient began to become perseverative, repeatedly stating "I feel better now so I can go home right". Patient reported her mood is normally "good" but did report feeling "sad" for the past three weeks. The patient was unable to

spontaneously verbalize any triggers. After multiple attempts, the patient eventually stated that she feels that she is not being paid attention to when in school. Patient denied feeling ignored, only stated that she feels she wants to be recognized more. The patient was unable to state if she was referring to classmates or teachers. To most questions, it was notable that the patient would respond “I do not know” and at times it began to feel monotonous almost pathologically repetitive. Of note throughout the evaluation, the patient spoke in a very child-like voice, with inappropriate smiling throughout even when discussing the suicide attempts.

The patient reported that sleep, appetite, and concentration were intact. Patient denied feelings of hopelessness, worthlessness, or guilt. Patient reported most recent suicidal ideation was at night and morning before arrival, denied any specific plan, and did not tell staff. Patient reported that she felt safe, and that she will be able to inform staff if SI recurs, worsens, or if she develops a specific plan. Patient denied auditory or visual hallucinations.

The patient's mother noted that the patient used to have a history of skin picking on her face, and some OCD tendencies. Patient's mother consented to the initiation of Lexapro for mood, and naltrexone for self-harming behaviors. Patient initially agreed to take medication as well, however, later refused with nursing staff saying she feels better. Collateral information obtained from the patient's mother who provided a wealth of information. Developmentally, the patient's mother reported that the patient met all of her developmental milestones with no issues, and had always spoken and behaved in a childlike manner as was noted during initial psychiatric evaluation. Patients' hobbies include art, Japanese animation and manga, and music of a variety of different instruments. The patient's mother denied any history of physical/sexual/emotional abuse that she is aware of, mentioned that there may have been an incident with a cousin in the past but that it was years ago and never seemed to cause any issues, would not elaborate further on the incident in question. Patients mother reported that the patient had recently identified as homosexual to her friends, discovered when patients mother had found texts in the patient's phone indicating that she had been in a relationship with another female peer, and that relationship seemed to have ended last week, around the time the patient had attempted to overdose on the pills. The patient's mother additionally reported that the patient had been communicating with her friends via text message about preventing them from hurting themselves after they had voiced thoughts to her about suicidal ideation. Patient apparently has a significant phobia of bugs which she states “keeps her from going outside into grassy or wooded areas”, with the phobia being described as significant distress and panic. Additionally, the patient was described to have social anxiety issues that the patient seems to share with her mother, they both do not like to go out into crowded places where there are a lot of people, opting to go to the movie theatres when the theatre is empty, etc. Patient had been isolative in her room more frequently during the year but keeps a tidy room and attends to

all of her ADLs without issues.

Patient had never been the type of child who liked to hug her parents or siblings, or really anyone else, and had always kept her emotions within. Patient had throughout the years intermittently feigned sick in order to avoid going to school, which is something the patient has done frequently over the years and has seemingly increased during the year without any reason identified.

While on the inpatient psychiatric unit, the patient presented as calm, cooperative, intermittently smiling and laughing incongruent with reported mood or statements made. Throughout her initial stay on the inpatient psychiatric unit, the patient would report her mood as “good” while also reporting suicidal ideation in the same moment, would laugh and smile during these exchanges as well. Patient initially refused to cooperate with consent approved psychiatric medications ordered but with counseling and guidance, became amenable and adherent with regularly scheduled prescribed psychiatric medications administered on the unit. The patient was started on Lexapro 10mg oral once daily for mood stabilization which was titrated up to 20mg oral once daily, and naltrexone 50mg oral once daily for prevention of self-harming behaviors. With the above medication adjustments and continued management, patients' symptoms gradually improved.

Over the rest of the patient's admission, the patient attended all groups and activities, consistently began denying SI/HI and AH/VH. Sleep and appetite gradually improved and stabilized. Once the patient was stabilized, she was discharged home in stable condition.

On day of discharge, patient was calm and cooperative on evaluation. Remained child-like in behavior out of proportion for a 14-year-old adolescent. Patient reported looking forward to being discharged home, looking forward to sleeping in her own bed and eating the foods she enjoys.

Patient was able to verbalize multiple coping skills that she had developed on the unit, and that she feels she can access when she is starting to feel overwhelmed. Patient reported tolerating medications and denied adverse effects. Patient denied suicidal or homicidal ideation. Denied auditory or visual hallucinations. Denied self-harming urges.

Patient was discharged with follow up instructions to follow up with outpatient pediatric hematology for further evaluation of her chronic anemia, as well as follow up instructions to follow up with partial hospitalization program for further evaluation and plan of care management of the patient's developmental signs and symptoms and comorbid major depressive disorder.

Discussion

This case underscores the critical importance of early identification and intervention in neurodevelopmental disorders (NDDs) to prevent or mitigate the development and exacerbation of comorbid psychiatric disorders. As demonstrated in the literature, NDDs such as autism spectrum disorder (ASD), attention-deficit/hyperactivity

disorder (ADHD), and specific learning disorders (SLDs) rarely occur in isolation. Instead, they exhibit high rates of comorbidity, often sharing genetic, neurobiological, and phenotypic risk factors that create a complex clinical picture highlight how the arbitrary boundaries of diagnostic categories in the DSM-5 may obscure the reality of overlapping symptomatology, leading to delayed or missed diagnoses and, consequently, inappropriate interventions [1].

Failure to identify early signs of NDDs not only delays access to tailored interventions but also increases the risk of secondary emotional and behavioral difficulties, including anxiety, depression, conduct problems, and even delinquent behaviors [1, 2]. Studies show that children with undiagnosed ADHD or ASD are at greater risk for academic failure, social isolation, and negative life outcomes, including increased rates of substance abuse, offending behaviors, and lower educational attainment [3]. Moreover, children with complex medical conditions are particularly vulnerable to developing neurodevelopmental and mental health comorbidities with significantly higher rates of psychiatric diagnoses in children with medical complexity compared to their peers. [4]

Early detection of developmental delays enables a proactive, holistic approach to care that considers the evolving and dynamic nature of NDDs across the lifespan. As Bonti et al. (2024) emphasize, the fluctuating profiles of NDDs often lead to diagnostic overshadowing—where psychiatric symptoms such as trauma responses, mood instability, or anxiety are misattributed to core NDD features, or vice versa [1]. Without careful, early assessment, trauma-

related symptoms in ASD or emotional dysregulation in ADHD may go unrecognized and untreated, exacerbating long-term functional impairments [5].

Furthermore, early intervention programs have demonstrated efficacy in reducing the severity of core symptoms and improving adaptive functioning. Evidence from interventions such as cognitive-behavioral therapy (CBT) and eye movement desensitization and reprocessing (EMDR) in ASD populations [5] suggests that when trauma and psychiatric symptoms are appropriately addressed, even core features of NDDs can improve—highlighting the plasticity of the developing brain and the need for timely, tailored support.

Conclusion

In conclusion, this case reinforces the necessity of comprehensive, multidisciplinary screening for NDDs in early childhood. Early recognition of subtle developmental differences—whether in language, social interaction, motor skills, or attention—can serve as a protective factor against the later emergence of comorbid psychiatric conditions [1, 2, 3]. By reframing NDDs within a continuum model and recognizing the high prevalence of shared genetic, neurological, and environmental risk factors, clinicians can move beyond rigid categorical diagnoses toward a more integrated, needs-based approach that supports the whole child across developmental stages [3, 4, 5]. As the literature suggests, such an approach is essential for improving long-term outcomes, preventing psychiatric sequelae, and promoting resilience in this vulnerable population [1, 2, 3, 4, 5].

References

1. Bonti E, Zerva IK, Koundourou C, Sofologi M (2024) The High Rates of Comorbidity among Neurodevelopmental Disorders: Reconsidering the Clinical Utility of Distinct Diagnostic Categories. *J Pers Med*. 14(3): 1-24.
2. Munir KM (2016) The co-occurrence of mental disorders in children and adolescents with intellectual disability/intellectual developmental disorder. *Curr Opin Psychiatry*. 29(2): 95-102.
3. French B, Daley D, Groom M, Cassidy S (2023) Risks Associated With Undiagnosed ADHD and/or Autism: A Mixed-Method Systematic Review. *J Atten Disord*. 27(12): 1393-1410.
4. Leyenaar JK, Arakelyan M, Schaefer AP, Freyleue SD, Austin AM, et al. (2024) Neurodevelopmental and Mental Health Conditions in Children With Medical Complexity. *Pediatrics*. 154(3): e2024065650.
5. Lobregt-van Buuren E, Hoekert M, Sizoo B, Grabrucker AM (2021) Autism, Adverse Events, and Trauma. In: *Autism Spectrum Disorders*.