

Level 1 autism spectrum disorder as a risk factor for suicide in a child: case report

Transtorno do espectro autista nível 1 como fator de risco para suicídio em uma criança: relato de caso

Trastorno del espectro autista de nivel 1 como factor de riesgo de suicidio en un niño: reporte de caso

- 1 Filipe Augusto Cursino de Freitas  [ORCID](#) - [Lattes](#)
- 2 Arthur Faria Turmin Caixeta - [ORCID](#) - [Lattes](#)
- 3 Mateus Arruda Aleixo - [ORCID](#) - [Lattes](#)
-

Affiliation of authors: **1** [Professor, Departamento de Saúde Mental, Faculdade de Ciências Médicas de Minas Gerais, FCMMG, Belo Horizonte, MG, Brasil]; **2** [Graduando, Medicina, Faculdade de Ciências Médicas de Minas Gerais, FCMMG, Belo Horizonte, MG, Brasil]; **3** [Médico, Psiquiatria, Universidade Federal de Minas Gerais, UFMG, Belo Horizonte, MG, Brasil]

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Authors contributions according to the [Taxonomia CRediT](#): Freitas FAC [1,2,3,5,6,7,8,10,11,12,13,14], Caixeta AFT [1,6,7,11,12,13,14], Aleixo MA [1,7,11,12,13]

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ABSTRACT:

Introduction: Suicidal behavior is one in which the individual has thoughts, plans, and actions with the intention of ending their own life. This is a global public health problem. Recently, autism spectrum disorders have begun to be considered risk factor for suicidal behavior in children and adolescents. **Method:** Case report. **Case presentation:** A 12-year-old boy who made a suicide attempt, was admitted to the emergency department at Centro Psíquico da Adolescência e Infância. After a period of irregular treatment, this child made a suicide attempt. As an inpatient, autism spectrum disorder with comorbid depressive disorder was diagnosed after longitudinal and systematic assessments of multidisciplinary team. Treatment was performed according to clinical issues. **Discussion:** This patient had a form of autism spectrum disorder on which core aspects were not so evident. In this child, there was an overlap between depressive symptoms and symptoms of autism spectrum disorder. Despite social isolation being present, this patient proved capable to disguising his condition using techniques of social and behavioral imitation and camouflage with the aim of adapting to social environment. **Conclusion:** This study emphasizes the importance of longitudinal evaluation and multidisciplinary assessment to differential diagnosis and appropriate treatment. It also opens a window for further investigations of a possible association between autism spectrum disorders and suicidal behavior in youth.

Keywords: autism spectrum disorder, child, risk factors, suicide

RESUMO:

Introdução: O comportamento suicida é aquele em que o indivíduo tem pensamentos, planos e ações com a intenção de acabar com a própria vida. Este é um problema de saúde pública global. Recentemente, os transtornos do espectro do autismo passaram a ser considerados fator de risco para comportamento suicida em crianças e adolescentes. **Método:** Relato de caso. **Apresentação do caso:** Um menino de 12 anos que realizou tentativa de suicídio foi atendido no setor de urgência do Centro Psíquico da Adolescência e Infância. Após um período de tratamento irregular, esta criança tentou suicídio. Com o paciente internado, o transtorno do espectro



do autismo com transtorno depressivo comórbido foram diagnosticados após avaliações longitudinais e sistemáticas da equipe multidisciplinar. O tratamento foi realizado de acordo com as características clínicas.

Discussão: Este paciente apresentava uma forma de transtorno do espectro do autismo cujos aspectos centrais não eram tão evidentes. Nesta criança, houve uma sobreposição entre sintomas depressivos e sintomas do transtorno do espectro do autismo. Apesar do isolamento social estar presente, este paciente mostrou-se capaz de disfarçar sua condição utilizando técnicas de imitação e camuflagem social e comportamental com o objetivo de se adaptar ao ambiente social. **Conclusão:** este estudo enfatiza a importância da avaliação longitudinal e da avaliação multidisciplinar para diagnóstico diferencial e tratamento adequado. Também abre uma janela para futuras investigações sobre uma possível associação entre transtornos do espectro do autismo e comportamento suicida em jovens.

Palavras-chave: transtorno do espectro autista, criança, fatores de risco, suicídio

RESUMEN:

Introducción: La conducta suicida es aquella en la que el individuo tiene pensamientos, planes y acciones con la intención de acabar con su propia vida. Este es un problema de salud pública mundial. Recientemente, los trastornos del espectro autista han comenzado a ser considerados factor de riesgo de conducta suicida en niños y adolescentes. **Método:** Reporte de caso. **Presentación del caso:** Niño de 12 años que intentó suicidarse, ingresó en el servicio de urgencias del Centro Psíquico da Adolescência e Infância. Después de un período de tratamiento irregular, este niño intentó suicidarse. Como paciente hospitalizado, se le diagnosticó un trastorno del espectro autista con trastorno depresivo comórbido después de evaluaciones longitudinales y sistemáticas de un equipo multidisciplinario. El tratamiento se realizó según las cuestiones clínicas. **Discusión:** Este paciente tenía una forma de trastorno del espectro autista en el que los aspectos centrales no eran tan evidentes. En este niño, hubo una superposición entre los síntomas depresivos y los síntomas del trastorno del espectro autista. Apesar de estar presente el aislamiento social, este paciente demostró ser capaz de disfrazar su condición utilizando técnicas de imitación y camuflaje social y conductual con el objetivo de adaptarse al entorno social. **Conclusión:** este estudio enfatiza la importancia de la evaluación longitudinal y multidisciplinaria para el diagnóstico diferencial y el tratamiento adecuado. También abre una ventana para futuras

investigaciones sobre una posible asociación entre los trastornos del espectro autista y el comportamiento suicida en los jóvenes.

Palabras clave: trastorno del espectro autista, niño, factores de riesgo, suicidio

Introduction

Autism spectrum disorder (ASD) level 1 is a form of autism spectrum disorder in which the individual generally maintains verbal language and cognition capabilities. As with other autism spectrum disorders, there is also difficulty socializing, restricted interests, and a tendency to social isolation. According to the revised text of the fifth edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5-TR), individuals with ASD level 1 may present difficulties in making friends and socializing, despite not necessarily having deficits in speech. These patients may have difficulty in initiating social interactions, problems with organization, relentless behavior [1]. The diagnosis is clinical and, under ideal conditions, must be ratified by a multidisciplinary team and longitudinally. Suicide is the second leading cause of death in youth. It is a major public health problem. Individuals with autism spectrum disorder are more likely to exhibit suicidal behavior compared to the general population [1 - 5]. Studies on risk factors for suicidal behavior in patients with autism spectrum disorder in the pediatric age group are recent, and the first of these studies dates to 2013 [4, 6].

Objective

The intent of the present study is to report a case of a male pediatric patient, with a clinical diagnosis of ASD without language or intellectual impairment, who made a suicide attempt. Clinical aspects and a possible association between autism spectrum disorder and suicidal behavior in this case were studied.

Methods

Written consent form was signed by the patient's mother. Ethics board of Faculdade de Ciências Médicas de Minas Gerais dismissed the assent form. Ethics board consolidated opinion number 6.552.595. Data was collected from medical registers of the patient at Centro Psíquico da Adolescência e Infância. Semi-structured interviews and simple psychiatric interviews were used to evaluate the patient. The patient's mother was interviewed

regarding data regarding his childhood. This study was registered in Plataforma Brasil (CAAE 70740623.1.0000.5134).

Case report

Male patient, 12 years old, without religion, attending elementary school, in an extremely poor situation, under the guardianship of his mother, with no previous history of psychiatric treatment, but with some care in the Emergency Department of Centro Psíquico da Adolescência e Infância. In October 2021, he was brought by family members for emergency care after experiencing a crisis of psychomotor agitation, domestic violence and suicidal ideation. At the time of this first emergency care, the patient was not hospitalized due to lack of family consent. During this service, as occurred in previous services, the client received a diagnostic hypothesis of a depressive disorder, due to the psychological and clinical characteristics presented by the patient that were consistent with this diagnosis, such as depressive/irritable mood, anhedonia, lack of concentration, loss of energy, suicidal thoughts, and a previous suicide attempt. These symptoms had started approximately 1 year prior.

The patient's family was advised to keep him under close supervision until the day of his next appointment. However, for unknown reasons, he did not show up on the scheduled date. Approximately 6 months after this service, after appearing again for emergency care at the same service, the patient and his family revealed that he had a suicide attempt 9 days after the day he should have come for daytime hospital care. The new treatment after the incident was, once again, due to agitation, aggression, and suicidal thoughts. It was necessary for the client to be hospitalized in a general hospital for approximately 12 days, in a ward, after the incident. Fortunately, there were no medical consequences.

In 2022, with the family's consent, this patient was admitted receiving comprehensive inpatient treatment at the Emergency service. He received longitudinal care and was assessed by a multidisciplinary team, including a psychologist and an occupational therapist. The patient's mother revealed a long story of social isolation and bullying suffered by him.

During the patient's longitudinal follow-up, a restriction of interests was observed, with the patient showing a great interest in topics such as botany and Norse mythology, while demonstrating normal intelligence and verbal language skills. Although, there were deficits in social-emotional reciprocity and difficulty of seeing the world from another person's perspective.

Before the suicide attempt committed by the patient, there was a history of non-suicidal self-harm. The patient revealed that he had been a victim of school bullying for at least 5 years and had not made specific plans to take his own life. The patient was able to use some social skills to camouflage the characteristics of his underlying situation.

A multidisciplinary approach was carried out in the service and an improvement was achieved in the client's psychiatric condition. There was an overlap between symptoms of ASD and depression in this case. The good level of control of mood symptoms, obtained with treatment, facilitated the diagnosis of ASD level 1. The diagnosis of ASD without language and intellectual impairment, with comorbidity with major depressive disorder was made clinically, in accordance with the description in DSM – 5 – TR.

Pharmacological treatment was performed with risperidone and fluoxetine. Benzodiazepines were used in crisis situations. The client progressed favorably with the treatment and continued to be monitored on a daytime hospitality basis at the service during almost 24 months of treatment. After this period, the patient was referred to continue his treatment with his general practitioner, in a primary care service.

Discussion

In the case report presented, a 12-year-old child attempted suicide days after failing to attend psychiatric care at the Centro Psíquico da Adolescência e Infância. At the time of this first emergency care at the Centro Psíquico da Adolescência e Infância, the patient's family did not authorize his stay as an inpatient at the service. The reasons why the client was not brought for care before and after the suicide attempt is unclear.

After the patient's hospitalization, a multidisciplinary team approach was carried out, and at the beginning of this treatment modality, aspects related to the patient's mood were observed. In this particular case, there was an overlap in symptoms of Autism Spectrum Disorder (ASD) and depression, which made it challenging to conduct a differential diagnosis. After the patient's depressive symptoms were brought under control, his difficulties in social relationships, intense interests in unusual subjects, and problems with non-verbal language became more evident. The drug treatment was performed to control the symptoms and avoid possible symptoms of aggression and impulsivity on the part of the client. As we

know, there are no specific medications to treat ASD [5, 6]. Due to the impairment of several functional aspects in this group of patients, the multidisciplinary approach is considered the gold standard approach [5, 7, 8].

The patient whose case report is being presented has a good cognitive level, and there are reports of good academic performance prior to the more intense manifestation of psychiatric symptoms. This child proved to be skilled enough to be able to imitate behavior patterns of children who do not have ASD [2 - 4, 9]. These are common features among patients with ASD who have attempted suicide. This caused diagnostic doubt to such an extent that the diagnosis would not have been adequately concluded without longitudinal follow-up and a multidisciplinary approach. Other risk factors for suicide identified in this patient's case were social isolation, major depressive disorder, non-suicidal self-injury, and lack of attention to the patient's individual needs [2 - 4, 9, 10].

Suicide attempts and completed suicide are a public health problem worldwide. The number of suicides and suicide attempts in children and adolescents has increased significantly over the years in several countries, including Brazil [11, 12]. The preventive approach to suicidal behavior is widely regarded as the gold standard.

While mood disorders are most strongly associated with suicidal behavior in children and adolescents among mental disorders, it is important to note that other mental disorders may also contribute to this type of behavior [11 - 15]. Furthermore, psychiatric comorbidities are more common in people with ASD [13, 14].

This case report serves to illustrate the need to carry out treatment on a regular basis and the importance of accessing patients longitudinally.

Conclusion

ASD require a multidisciplinary approach for both diagnosis and treatment [4, 7, 15]. Suicidal behavior is a possibility in children with ASD due to the presence of several risk factors, such as a higher chance of psychiatric comorbidity, social isolation, and the necessity of a longitudinal, accurate diagnosis [3, 6, 10, 15].

In the present case, a 12-year-old child undergoing irregular treatment, with ASD, made a suicide attempt. In this scenario, the presence of

depressive symptoms, social isolation, preserved cognition, and camouflage of symptoms characteristic of the condition constituted risk factors for suicide for this patient [2, 3, 9, 10]. This study has limitations. No scales or other standard measures were used to measure intensity of symptoms. Case reports do not generate the best evidence of scientific information. This study should be considered with caution.

To our knowledge, there are no other case reports of suicidal behavior in children with ASD in Brazil. Additionally, this work aims to encourage further research on suicidal behavior in children with ASD in the country.

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