

PREVALENCE STUDY AND REPORT OF AN OUTPATIENT CASE OF NON-SUICIDAL SELF- HARM AT THE FEDERAL UNIVERSITY OF SÃO PAULO

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Abstract: Goals. Non-suicidal self-injury is a behavior that has shown a great increase in prevalence, becoming an important public health issue in recent years. This study aims to describe a clinical case of a patient treated at an outpatient medical service and to survey the annual frequency of ALNS. methods. A retrospective survey of data from medical records of patients treated at an Adolescent Medicine service at the Federal University of São Paulo was carried out during the year 2019. The report describes a 14-year-old female patient, with a complaint of self-harm for approximately 1 year. year, taken for medical care by her mother and started psychiatric treatment. Results. In 2019, 300 adolescents were assisted, of which 6.3% reported ALNS, half of them with suicidal ideation or attempt. The age ranged from 12 years and 4 months to 17 years and there was a significant predominance of girls. It was also identified sexual orientation different from heterosexual, psychiatric disorders, history of some type of abuse (physical/psychological) and changes in family dynamics. Conclusions. There was a similarity between the data obtained and the literature, showing the need for an active search and an attentive look at the behaviors of our adolescents. The patient in the case brought up several previous issues of risk for emotional disorders which could have been seen, discussed and mediated by education and health professionals, indicating the need to create and implement public policies aimed at improving media dissemination and understanding of this issue. behaviors, as well as their active pursuit.

Keywords: Adolescent, adolescent health, non-suicidal self-harm.

INTRODUCTION

Adolescence is a period characterized by physical, psychological and social changes,

the construction of identity and the search for autonomy. It is, therefore, a phase subject to vulnerabilities, such as violence, accidents, unwanted pregnancy, use of illicit substances, among others (1). These alterations can be accompanied by great suffering and difficulty in coping with frustrations, thus being a risk factor for risky externalizing behaviors (2), which can manifest as non-suicidal self-injury (ALNS) and have been showing a significant increase in frequency and severity. in recent years, becoming an important public health issue. In 2019, in Brazil, according to Law 13.819, art. 6, became a compulsory notification grievance (3). In the Diagnostic and Statistical Manual of Mental Disorders - DSM 5, ALNS is now described as a disorder in itself, not just a symptom. It is characterized by the repeated behavior of the individual himself of inflicting superficial injuries against his body, which are not socially accepted (example: piercing) and with a declaration of absence of suicidal intent. The acts are associated with a desire to relieve feelings and/or solve personal problems, with great psychological suffering and interference in important areas of functioning (4).

Araujo et al (2016) describe the Favazza classification, which establishes three degrees of severity, according to the damage caused to the body and the frequency of episodes: the severe form, associated with psychosis or intoxication, which manifests as amputation of limbs and enucleation of the eyes, for example; stereotyped, commonly associated with other psychiatric diagnoses, such as autism spectrum disorder, in which the person sustains repeated, rhythmic injuries (such as hitting the head or biting themselves); and the superficial form, in turn classified as compulsive, episodic or repetitive (5).

EPIDEMIOLOGY

Studies show a great variation in the prevalence rates, with a range from 4 to 46.5% according to the groups evaluated (2). Greydanus et al (2011) show different rates of prevalence according to the population groups and scenarios studied in different countries, ranging from 1 to 37% (6). Higher prevalence is seen in female adolescents, with rates of 3:1 to 4:1, which increase from 13 to 15 years of age and decrease after young adulthood (2).

Bennardi et al (2016) sought to identify a pattern of recurrence and risk factors for recurrence of self-injury among adolescents and adults up to 29 years of age. Of the individuals who presented themselves to the emergency services for the first time, 40.5% were adolescents. Of these, 45% had at least one recurrence episode over the eight years of study. Age was identified as a risk factor for recurrence only among women (mainly adolescents aged 15 to 19 years), as well as a method of “cutting” in comparison the “overdose”. The risk of recurrence was also increased with the number of previous events (7).

The frequency of self-mutilation is directly related to the risk of suicide attempt, as well as the variety of methods used. The six months following an episode represent the period of greatest risk for suicide, with up to 70% of self-mutilating adolescents reporting having already tried(8).

ASSOCIATED FACTORS AND PSYCHOPATHOLOGY

Self-injurious behaviors are the result of a complex interaction between biological, psychodynamic and socioeconomic factors, in addition to being often associated with other psychiatric disorders (2, 9).

Studies looking for an association between neurobiological factors and ALNS found

alterations in the hypothalamic-pituitary-adrenal (HPA) axis - with hyporesponsiveness to stress situations, alterations in responses to B-endorphin and serotonin and alteration in skin neurotransmitters. A mutation in the gene encoding the serotonin transporter was identified, which would be associated with a higher probability of this type of behavior. Regarding B-endorphin, an analgesia hormone, it is believed that there is a relationship of dependence on the hormone and, consequently, evolution to tolerance, which would explain the repetition of the act and increasingly important injuries. People who cause skin lesions would have a higher concentration of neurotransmitters, resulting in greater activation of the axis (2,10).

However, it is not possible to explain this behavior solely on the basis of biological factors, which are commonly activated by external factors. These behaviors would be precipitated by the increase in tension, as an attempt to transfer psychic pain to physical pain, alleviating negative feelings. Thus, studies sought to identify directly related individual, family and social risk factors.

Gatta et al (2016) identified a positive association with greater difficulty in interpersonal relationships, with reported feelings of inadequacy, inferiority and anger, in addition to aggression; depression; alexithymia - which would also be associated with repeated injuries; and impulsivity (11).

Greydanus et al (2011) add body dissatisfaction, body image distortion and eating disorders. The risk factors for self-injurious behaviors and body image dissatisfaction overlap and suicide is the main cause of death for women between 14 and 25 years with anorexia nervosa (6). Other factors identified are sexual orientation other than heterosexual; substance abuse; personality disorders; history of serious illness and hospital admissions.

As for family history and problems related to childhood, direct and indirect domestic violence (the child as a witness), sexual and emotional abuse, neglect, relatives with alcohol and drug addiction, dysfunctional family, maternal and/or paternal depression are described. The social environment also presents risk factors, such as *bullying/cyberbullying* relationship with colleagues who harm themselves (9). Brown et al (2017) highlight the current role of the internet and social media (10), which could bring benefits such as reduced isolation and support for act avoidance and recovery, but it can also act as a behavior enhancer. ALNS-related terms were searched 42 million times a year on search engines and videos showing photos or practices were viewed over 2 million times.

In addition to biological and social factors, it is also possible to seek to understand self-injurious behavior from the perspective of psychoanalysis. Considering this behavior as a symptom, it would be the expression of an unconscious conflict. Araujo et al (2016) explain that self-mutilation would be a kind of agreement of the person with himself to avoid suicide and, consequently, a victory over the drive for life. It is understood, therefore, as an attempt by the individual to communicate a feeling and re-enter their state of normality. (5)

GOALS

Description of a clinical case of a patient treated in an outpatient medical service and the annual frequency survey of ALNS.

MATERIAL AND METHOD

Data collection was carried out from the medical records of patients treated at an Adolescent Medicine service at the Federal University of São Paulo during the year 2019. The data collected from all patients were: age, sex, presence or absence of ALNS report.

Among those who had a positive response, it was also added: suicidal ideation or attempt, presence or absence of associated mental disorder, drug treatment, chronic disease, dysfunctional family, social relationships, body self-image and gender identity.

CASE REPORT

Identification: A.M.W.D., female, 14 years and 7 months, white, student.

Complaint and duration: practice of *cutting* for approximately a year.

Previous history of the current illness: the teenager said that she started the practice approximately one year before the first consultation, motivated by the desire for pain relief and the feeling of loneliness and having as main trigger the arguments between mother and father. She referred emotional lability and negative self-image (“ugly and fat”). She started to wear long-sleeved blouses, as the preferred location for the cuts was in the region of the wrists and forearms, performed with a sharpener blade. She denied suicidal ideation or desire for isolation. Her mother noticed the injuries, noted her daughter’s pleas for help and photos on social media, and then chose to seek medical help.

Personal history: diagnosed with sickle cell anemia, with a history of multiple hospitalizations for pain crisis and acute chest syndrome.

Family history: reported alcoholism by her father and paternal grandfather (deceased).

Family context: the family consists of the mother, father and brother 2 years older, with a monthly income of approximately 6 to 7 minimum wages. She reported episodes of domestic violence (father against mother, verbal and physical).

He is in the 9th year of elementary school, with good performance and plans to enter higher education. Has access to extracurricular

activities and engages in regular physical activity.

Relationships: has a good bond with family members (except with the father) and friends; affective interest in both sexes; denied experimentation or use of tobacco, illicit drugs or alcohol - to which he referred to repulsion due to his father's behavior.

Follow-up: the adolescent continues to be followed up at the Adolescent Medicine Outpatient Clinic and began psychiatric follow-up, with the introduction of antidepressant medication, but without access to psychotherapy. During clinical follow-up, the patient relapsed with an episode of suicide planning and the need to increase the dose of medication; later, she came to present stability of the condition, without recurrence of ALNS suicidal ideation or planning, accompanied by greater stability of the family nucleus.

RESULTS

During 2019, 300 medical consultations were performed, of which 158 (52.66%) were female adolescents and 142 (47.33%) were male adolescents, with ages ranging from 10 years and 3 months to 20 years and 5 months.

Nineteen cases of ALNS were identified, representing 6.3% of all visits, with a higher proportion of cases among females (89.47% vs 10.52%). Of all the girls seen, 10.75% reported at least one episode of self-injury. The age at presentation ranged from 12 years and 4 months to 17 years.

Regarding sexual orientation and gender identity, 5 adolescents said they were homosexual or bisexual and 1 adolescent identified as transsexual, representing 26% of our sample of cases. More than half of those who reported ALNS (52.63%) had a diagnosis of some psychiatric disorder (borderline personality disorder, depressive syndrome, anxiety disorder, panic disorder and attention deficit hyperactivity disorder). Of these,

six were currently using medication, two reported previous use, one had refused drug treatment and two had no indication so far. Suicide attempt or ideation was reported by half of the subjects.

Chronic and genetic diseases were identified in 30% of cases. Sexual abuse was reported by a teenager. 35% report *bullying* current or previous.

Changes in family dynamics, with reports of alcohol and drug abuse, detention, rejection/abandonment, physical and/or verbal violence and suicide attempt by a close relative, appeared in 45% of the cases.

The analysis of body self-image was hampered by the lack of information in the medical records (in only 4 of the 20 cases there was information, of which only one said he was satisfied with his body).

DISCUSSION

Despite a greater predominance of females when compared to the literature (8.5:1, female/male), our prevalence of cases, mean age found and sex most associated with the disorder were similar to those found in previous studies (6, 7, 10).

We also identified among our cases the presence of risk factors, with significant values for family and social experiences, psychiatric disorders, chronic childhood illnesses and gender identity.

The patient in the case reported, in addition to being female and at an age of higher prevalence of the disorder, also presented several known risk factors for the development of this behavior, specifically: bisexual sexual orientation, history of violence and alcoholism in the family, presence of chronic disease and multiple hospital admissions, dissatisfaction with their body self-image.

It is known that most young people who self-mutilate do not seek help on their own, with concerns regarding confidentiality and

stigma being mentioned, and thus, they often acquire the behavior of hiding the injuries from their family members and peers. Thus, the diagnosis can occur late, demonstrating the importance of prevention strategies both for the general community and for groups at risk. Strategies must address associated factors such as sexual orientation, bullying, promoting help-seeking behaviors, and promoting self-esteem and resilience. Schools and communities can contribute through programs to address the issue and by training peers and family members to recognize risky behaviors. On the other hand, targeted and individualized measures are needed for populations at risk, such as psychosocial intervention (9).

Treatment must include the establishment of a support network, psychotherapy and drug treatment of associated psychiatric conditions (2,8). It is of fundamental importance that the adolescent feels welcomed and individualized, seeking a relationship of trust so that the professional can identify, through dialogue, the possible stressors and triggers of behavior, factors of greater risk for suicidal intent and possible mitigating factors, in this way, develop the best approach strategy.

In the field of psychotherapy, Ougrin et al demonstrated, through a meta-analysis, equivalent effectiveness of dialectical behavioral, cognitive behavioral and mentalization-based therapy approaches (12). It is important that the chosen approach works on coping strategies, mood regulation and problem-solving strategies, skills that are usually deficient in adolescents who self-injure. There is no specific drug therapy for the treatment or prevention of self-mutilation. However, associated psychiatric disorders must be identified and treated appropriately, and selective serotonin reuptake inhibitors may be used for depressive disorders or

atypical antipsychotics for personality disorder *Borderline*.

The main limitation of this study was the retrospective method of collecting data from medical records. Although the clinic has a script for the anamnesis, we still find it difficult to find the information, missing information and even illegible handwriting.

CONCLUSION

In our study, we observed a high prevalence of ALNS cases, with a history similar to that described in the literature. The patient in the case reported brought us numerous risk factors that could have been addressed during the longitudinal follow-up with prepared professionals and through strategic prevention actions.

We can then perceive the importance of actively searching for cases, knowing the risk factors for the development of self-injurious behaviors and, thus, developing preventive actions. With data on age, sexuality, family structure, social relationships, among others, it is possible to plan in which environment these programs must be implemented, target population and which issues must be worked on, seeking to create a support network and a safe space for confrontation.

REFERENCES

1. Vitale MSS, Silva FC. A Consulta do Adolescente. *In: VitaleMSS, Silva FC, Pereira AML, Weiler RME, Niskier SR, Schoen TH. Medicina do Adolescente - Fundamentos e Prática. São Paulo, Rio de Janeiro:Atheneu; 2019. p 27-31.*
2. Sociedade Brasileira de Pediatria. Autolesão na adolescência: como avaliar e tratar.Guia Pratico de Atualização. 2019Jul; 12.
3. Brasil. Decreto n.º 13.819, de 26 de Abril de 2019. Institui a Política Nacional de Prevenção da Automutilação e do Suicídio, a ser implementada pela União, em cooperação com os Estados, o Distrito Federal e os Municípios; e altera a Lei nº 9.656, de 3 de junho de 1998. Diário Oficial da União20 Abr 2019; 81(1):1.
4. American Psychiatric Association. Manual diagnóstico e estatístico de transtornos mentais DSM-5. 5ª ed. Porto Alegre: Artmed, 2014.
5. Araujo JFB, Chatelard DSO, Carvalho IS, Viana TC. O Corpo na dor: automutilação, masoquismo e pulsão. *Estilos Clin.* 2016 Mai/Ago 21(2): 497-515.
6. Greydanus DE, Apple RW. The relationship between deliberate self-harm behavior, body dissatisfaction, and suicide in adolescents: current concepts. *J Multidiscip Healthc* 2011May 4: 183-189.doi:10.2147/JMDH.S11569
7. Bennardi M, McMahon E, Corcoran P, Griffin E, Arensman E. Risk of repeated self-harm and associated factors in children, adolescents and young adults. *BMC Psychiatry* 2016Nov 16 (421).Doi: 10.1186/s12888-016-1120-2
8. Milani ACC, Mesquita ME. Suicídio e Automutilação. *In: Vitale MSS, Silva FC, Pereira AML, Weiler RME, Niskier SR, Schoen TH. Medicina do Adolescente - Fundamentos e Prática. São Paulo, Rio de Janeiro: Atheneu; 2019. p 499-504.*
9. Hawton K, Saunders KW, O'Connor RC. Self-harm and suicide in adolescents. *Lancet* 2012Jun 379: 2373-2382.
10. Brown RC, Plener PL. Non-suicidal Self- Injury in Adolescence. *Curr Psychiatric Rep* 2017 Mar 19 (3):20. doi:10.1007/s11920-017-0767-9
11. Gatta M, Del Santo F, Rago A, Spoto A, Battistella PA. Alexithymia, impulsiveness, and psychopathology in nonsuicidal self-injured adolescents. *Neuropsychiatr Dis Treat.* 2016Sep 2016: 2307-2317.
12. Ougrin D, Tranah T, Stahl D, Moran P, Asarnow JR. Therapeutic Interventions for Suicide Attempts and Self-Harm in Adolescents: Systematic Review and Meta-Analysis. *J Am Acad Child Adolesc Psychiatry* 2015Feb 54 (2):97-107.