

## Self-Injurious Behavior in an Adolescent

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Case scenarios are written to express typical situations that family physicians may encounter; authors remain anonymous.

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### Case Scenario

A 16-year-old girl with no remarkable medical history presented to my clinic for a routine well-adolescent appointment. During the visit, I discovered multiple well-healed linear scars on her upper arms and legs. When I questioned her about these lesions, she admitted to cutting herself during the past several months, but denied any suicidal intent or ideation. She said that she cut herself because it was the only way she felt anything and it was a stress release. She further admitted to feeling depressed and to using alcohol over the past year since the divorce of her parents. I was concerned, especially with her cutting behaviors, but unsure what to do next. How do I know if she is at risk of suicide? How should I approach this situation?

### Commentary

The behavior of this patient is nonsuicidal self-injury, defined as the intended destruction of body tissue without suicidal intent. Nonsuicidal self-injury is a common biopsychosocial disorder observed in adolescents. Community estimates of nonsuicidal self-injury range from 7.5 to 25 percent, with a higher prevalence in older adolescents.<sup>1</sup> Although nonsuicidal self-injury is considered a diagnostic criterion of borderline personality disorder, it is not a separate diagnosis in the *Diagnostic and Statistical Manual of Mental Disorders*, 4th ed. (DSM-IV). However, nonsuicidal self-injury is included in proposed DSM-V revisions.<sup>2</sup> Currently, it is classified as an impulse control disorder, not otherwise specified, and is found under the *International Classification of Diseases, Ninth Revision* (ICD-9) diagnosis of unspecified, nonpsychotic mental disorder. The term “deliberate self-harm” has also been cited in the literature, but this term often includes

self-harm with suicidal intent or as self-mutilation in pervasive developmental disorders.

### RISK OF SUICIDE

Although most cases of nonsuicidal self-injury is maladaptive coping (i.e., attempts to influence the behaviors of others or deal with internal emotions),<sup>3</sup> the risk of suicide is real. In a review of adolescents presenting for emergency care following a suicide attempt, almost one-half had engaged in nonsuicidal self-injury in the previous 24 hours.<sup>4</sup> In another study, patients engaging in nonsuicidal self-injury were six times more likely to attempt suicide than those who did not report nonsuicidal self-injury.<sup>5</sup> There is no validated model to determine suicide risk in those with nonsuicidal self-injury, although there is some evidence to suggest the following may relate to suicide risk: (1) severity of depressive symptoms; (2) level of self-esteem; (3) parental support; (4) suicidal ideation; and (5) reason to live.<sup>1</sup>

### EVALUATION

Initial evaluation of patients with nonsuicidal self-injury should address immediate medical and safety issues (e.g., suicidal intent, access to weapons). Immediate psychiatric consultation should be obtained if a patient expresses acute suicidal ideation, or if the physician remains concerned about the risk of suicide after evaluating the patient, despite patient denials of suicidal intent. If the physician determines that a patient has nonsuicidal self-injury, it is advisable to interpret the behavior as a symptom of other underlying disorders. A biopsychosocial approach for evaluation of associated comorbidities, such as a HEADSS (home life, education, activities, drugs, suicide, sex) assessment, may be appropriate.<sup>6</sup>

Questioning patients about their home life can help determine the level of social support available. Learning about their education and activities can give insight into self-esteem and related difficulties with peers or school. Lack of parental support, lower socioeconomic and education levels, and unemployment have been associated with an increased risk of all forms of deliberate self-harm, with and without suicidal intent.<sup>7</sup>

It is also important to screen patients for eating disorders, substance abuse, and high-risk sexual behaviors, because an increased number of cases have been reported in those with nonsuicidal self-injury.<sup>8,9</sup> Validated screening tools are available, such as the SCOFF screening tool<sup>10</sup> for detecting eating disorders (<http://www.aafp.org/afp/2003/0115/p297.html>) and the CRAFFT screening tool<sup>11</sup> for identifying substance abuse (<http://www.aafp.org/afp/2008/0201/p331.html>). In addition to high-risk sexual behaviors, higher rates of sexual abuse are found in patients with nonsuicidal self-injury. Gay, lesbian, bisexual, and transgender patients are at particular risk of nonsuicidal self-injury and suicide.<sup>12</sup>

Other commonly cited psychiatric comorbidities of nonsuicidal self-injury include mood and anxiety disorders, especially depression and posttraumatic stress disorder, in addition to personality disorders, such as borderline personality disorder.<sup>7</sup> A useful adolescent depression resource that includes validated screening and management tools is the Guidelines for Adolescent Depression—Primary Care (<http://www.glad-pc.org/>).

### MANAGEMENT

Evidenced-based recommendations for treatment of nonsuicidal self-injury are lacking, because most studies have considered self-harm behaviors regardless of intent. A Cochrane review evaluating psychosocial and pharmacologic interventions for all forms of self-harm showed an overall trend toward reducing repetition of self-harm, although specific treatment recommendations could not be made.<sup>13</sup> If depression or anxiety disorders are present and severe enough to warrant pharmacologic therapies, such as selective serotonin reuptake inhibitors (SSRIs), physicians may consider prescribing medication,

regardless of whether nonsuicidal self-injury is present. Although increased suicidal ideation with SSRI use in adolescents prompted a boxed warning in 2004 from the U.S. Food and Drug Administration, actual suicides decreased with treatment.<sup>14</sup> In conjunction with appropriate counseling, safety discussion, and close follow-up, the benefits of SSRI therapy may outweigh potential risks.

Ultimately, the patient's comorbidities, the physician's comfort and experience levels, and the availability of community resources should dictate treatment and referral strategies. Most patients require a multidisciplinary approach, with an emphasis on coping skills, communication, stress management, and social support.<sup>3</sup>

### DISCUSSION WITH PARENTS

Patient confidentiality is important to consider throughout the evaluation and management process. Although most state laws protect mental health–related visits, this is often with the caveat of immediate safety. Given the complexity of nonsuicidal self-injury, it may be helpful to involve parents or other social supports. Parents should be counseled on the serious, yet nonsuicidal, nature of the behavior. However, other information obtained during the patient encounter that is not immediately relevant to ensuring the patient's safety or getting the patient help, such as disordered eating behavior or sexual identity issues, should be maintained in confidence. Ideally, the physician should discuss the need for disclosure of information, the specific information to be disclosed, and the plan of care with the patient, and obtain his or her assent to disclosure before discussion with the parents. This will help maintain the therapeutic alliance as much as possible while getting the patient the help he or she needs.

### CASE RESOLUTION

For this patient, the initial approach should focus on patient safety, referral to a behavioral health specialist, consideration of SSRI therapy if clinically indicated, discussion with parents or other social support, and close follow-up (within one to two weeks). Further evaluation and follow-up should be dictated by comorbidities and response to treatment.

## Curbside Consultation

The opinions and assertions contained herein are the private views of the authors and are not to be construed as official or as reflecting the views of the U.S. Army or Navy Medical Departments, or the U.S. Army or Navy Services at large.

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## REFERENCES

1. Brausch AM, Gutierrez PM. Differences in non-suicidal self-injury and suicide attempts in adolescents. *J Youth Adolesc*. 2010;39(3):233-242.
2. American Psychiatric Association DSM-5 development. <http://www.dsm5.org>. Accessed February 10, 2010.
3. Lloyd-Richardson EE, Perrine N, Dierker L, Kelley ML. Characteristics and functions of non-suicidal self-injury in a community sample of adolescents. *Psychol Med*. 2007;37(8):1183-1192.
4. Cloutier P, Martin J, Kennedy A, Nixon MK, Muehlenkamp JJ. Characteristics and co-occurrence of adolescent non-suicidal self-injury and suicidal behaviours in pediatric emergency crisis services. *J Youth Adolesc*. 2010; 39(3):259-269.
5. Whitlock J, Knox KL. The relationship between self-injurious behavior and suicide in a young adult population. *Arch Pediatr Adolesc Med*. 2007;161(7):634-640.
6. Goldring JM, Rosen DS. Getting into adolescent heads: an essential update. *Contemp Pediatr*. 2004;21(1):64-90.
7. Fliege H, Lee JR, Grimm A, Klapp BF. Risk factors and correlates of deliberate self-harm behavior: a systematic review. *J Psychosom Res*. 2009;66(6):477-493.
8. Brown LK, Houck CD, Grossman CI, Lescano CM, Frenkel JL. Frequency of adolescent self-cutting as a predictor of HIV risk. *J Dev Behav Pediatr*. 2008;29(3):161-165.
9. Favaro A, Ferrara S, Santonastasi P. Self-injurious behavior in a community sample of young women: relationship with childhood abuse and other types of self-damaging behaviors. *J Clin Psychiatry*. 2007;68(1):122-131.
10. Hill LS, Reid F, Morgan JF, Lacey JH. SCOFF, the development of an eating disorder screening questionnaire. *Int J Eat Disord*. 2010;43(4):344-351.
11. Knight JR, Sherritt L, Shrier LA, Harris SK, Chang G. Validity of the CRAFFT substance abuse screening test among adolescent clinic patients. *Arch Pediatr Adolesc Med*. 2002;156(6):607-614.
12. Skegg K, Nada-Raja S, Dickson N, Paul C, Williams S. Sexual orientation and self-harm in men and women. *Am J Psychiatry*. 2003;160(3):541-546.
13. Hawton K, Townsend E, Arensman E, et al. Psychosocial and pharmacological treatments for deliberate self harm. *Cochrane Database Syst Rev*. 2009;(1):CD001764.
14. Olsson M, Shaffer D, Marcus SC, Greenberg T. Relationship between antidepressant medication treatment and suicide in adolescents. *Arch Gen Psychiatry*. 2003;60(10): 978-982. ■

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