

# Evaluating teen self-injury: Comorbidities and suicide risk

## Improved affect modulation, coping skills can help teens stop harming themselves

**A**lysha, age 15, is an “A” student and top athlete who feels her parents push her to be perfect. After getting a B on a test, she feels overwhelmed by shame and guilt. She locks herself in the bathroom and begins cutting her arm with a razor blade.

Self-injurious behavior (SIB) in adolescents can be associated with internalizing, externalizing, and substance abuse disorders (*Table 1, page 72*). For most practitioners, such as Alysha, a major goal of SIB is to relieve intolerable stress and negative affect.<sup>1</sup>

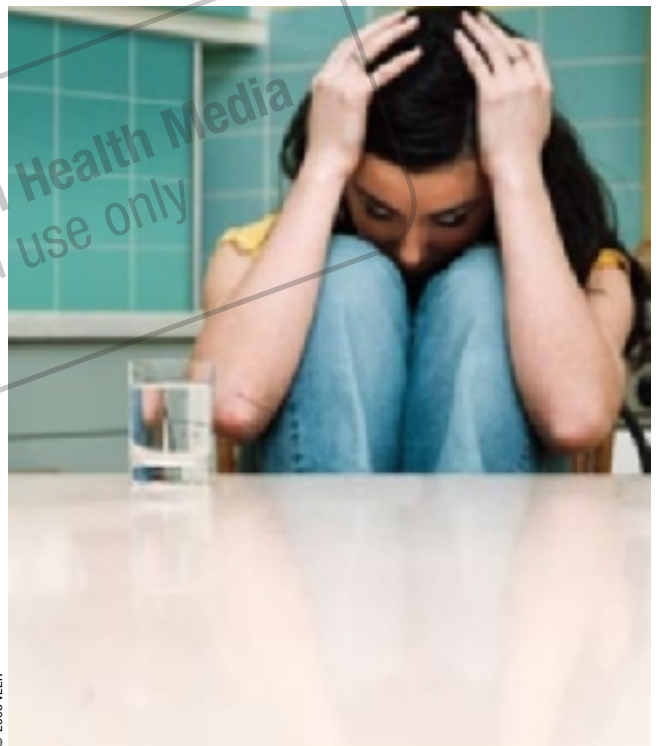
Although this secretive, highly addictive, learned behavior can be difficult to control, some clinical approaches can help these distressed teens and their parents. This article examines the dynamics of SIB, the association between suicidal ideation and SIB, and recommended treatments such as substitute behaviors and dialectic behavioral therapy.

### Growing problem in adolescents

SIB is the deliberate infliction of harm to oneself, either internally or externally, without suicidal intent.<sup>1</sup> This behavior is also known as impulsive self-injury, non-suicidal self-injury, self-mutilation, cutting, and self-harm. Once reported primarily in adults with borderline personality disorder, SIB is becoming common among adolescents:

- Among 663 teens in community-sample survey, 46% engaged in some form of SIB in the past year, and 28% engaged in serious, repetitive behaviors.<sup>2</sup>

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## Teen self-injury

### Clinical Point

Adolescents with SIB frequently experience anger that they turn inward because they are unable to express it toward others

Table 1

## Common Axis I disorders among teens with SIB

Axis I disorder	Prevalence*
<b>Any internalizing disorder</b>	<b>52%</b>
Major depressive disorder	42
Posttraumatic stress disorder	24
Generalized anxiety disorder	16
<b>Any externalizing disorder</b>	<b>63</b>
Conduct disorder	49
Oppositional defiant disorder	45
<b>Any substance use disorder</b>	<b>60</b>
Alcohol abuse	18
Alcohol dependence	17
Nicotine dependence	39
Marijuana abuse	13
Marijuana dependence	30
Other substance abuse	3
Other substance dependence	6

\*Among a sample of 89 adolescents who engaged in SIB  
 Source: Nock MD, Joiner TE Jr, Gordon KL, et al. Non-suicidal self-injury among adolescents: diagnostic correlates and relationship to suicide attempts. *Psychiatry Res* 2006;144(1):68. Reprinted with permission from Elsevier.

- 13% to 23% of teenagers have engaged in SIB, according to literature review.<sup>3</sup>
- Children as young as 9 have presented with SIB.

**Not just cutting.** Besides cutting, other methods of self-injury include:

- burning
- swallowing objects or substances
- hitting oneself with the fist or against an object
- cutting circulation to a digit
- picking at skin
- pulling out hair.

Individuals with chronic illnesses can engage in SIB by not complying with treatment, such as a diabetic taking too much or too little insulin or an epileptic not taking medication.

Socially sanctioned behaviors, such as body piercing and tattoos, usually are not considered SIB. They can be used as SIB, however, by teens who impulsively self-pierce or tattoo without appropriate hygiene or anesthetic agents. Their purpose is not to make a fashion statement but to produce pain or discomfort. Cultural behaviors that cause scarring as a rite of pas-

sage, such as the Native American Sun Dance, are not considered SIB.<sup>1</sup>

Despite increasing prevalence among adolescents, SIB remains a solitary behavior. Based on my clinical experience, teens may share ideas about SIB, but they generally don't practice it in groups.

### SIB psychodynamics

Adults and adolescents with SIB frequently have:

- difficulty regulating emotions
- unstable interpersonal relations
- limited coping strategies.<sup>1</sup>

Adolescents with SIB frequently experience anger, and their self-harm can result from turning this anger inward because they are unable to express it toward others. This is seen in a patient who describes a cutting episode that occurred while you were on vacation but sees no connection between your absence and the SIB.

Shame is also common and can be a major barrier to diagnosing SIB. Adolescents who are ashamed of the behavior will go to great lengths to hide it from others, including clinicians. Despite the shame, many adolescents feel unable to stop engaging in SIB because it fulfills a powerful need.

Adults and adolescents who practice SIB most often report their behavior is motivated by affect regulation and tension release.<sup>4</sup> Some adolescents engage in a different, manipulative form of SIB not to relieve tension but as a threat to prevent loss (*Box*).<sup>4</sup>

**Behavioral reinforcement.** An acute stressor—such as parental limits on behavior, feelings of rejection or abandonment by peers, or failing to achieve an unrealistic goal—triggers an escalating, intolerable affect. By experimentation or accident, an adolescent discovers that SIB provides rapid relief of the intolerable state—a calmness that may last for minutes, hours, or days. This relief reinforces the behavior, and the adolescent repeats SIB when faced with the next stressor.

Most individuals with SIB report a similar sequence of events. There is a trigger event, usually involving a real or perceived

feeling of loss, rejection, or abandonment. The adolescent tries to resist the impulse to self-harm, feels escalating emotional distress, engages in SIB, and feels immediate relief.<sup>5</sup>

Inducing pain or bleeding as a means of relieving intolerable stress may be an attempt to:

- turn emotional pain into more manageable physical pain
- direct anger that cannot be expressed at others onto oneself
- punish oneself for perceived misdeeds.<sup>4</sup>

SIB tends to escalate over time. Those who engage in it may require more frequent or intensive self-injury to achieve relief. Because the emotional state improves quickly and the adolescent feels a sense of control over the behavior, SIB rapidly can become habitual and difficult to interrupt.

#### CASE 2

#### Lingering effects of trauma

Melissa, age 13, has been sexually abused by her foster brother. She briefly returns to the home where her foster brother still resides.

continued

#### Box

### Anger, fear can trigger manipulative SIB

Peter, age 17, is fighting with his girlfriend, who threatens to leave. He grabs a knife and threatens to cut his arm. The girlfriend tries to take the knife. In their struggle, Peter accidentally cuts a tendon in his arm, which results in a permanent loss of function in his hand.

Unlike SIB for affective or tension release, manipulative or “in your face” SIB is not secretive. Adolescents who engage in manipulative SIB do so as a threat to control or induce guilt in others.<sup>4</sup> This behavior is triggered primarily by attempts to change another person’s behavior or decision. Unlike the dynamics of impulsive SIB, this type of SIB does not seem to relieve tension; in fact, tension may increase. Manipulative SIB can be particularly dangerous because adolescents may accidentally cause injuries more severe than they intended.

#### Clinical Point

Over time, patients who engage in SIB may require more frequent or intensive self-injury to achieve relief of intolerable stress

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## Teen self-injury

### Clinical Point

Because the line between SIB and passive suicide can be thin, monitor SIB patients for suicidal ideation and behavior

Table 2

## SIB: Spotting behavioral clues

### Adolescents

- Wearing long sleeves or pants in warm weather
- Becoming increasingly isolated from family and peers
- Spending long periods of time in the bathroom or bedroom
- Deteriorating school performance
- Decreasing hygiene

### Parents

- Finding blood on teen's clothing or in unusual places in the home
- Discovering sharp instruments are missing or placed in unusual locations

He has torn up her room, and her mother—who supports the foster brother—has left the room that way for her to find. Melissa returns to her current residence, cuts her arm 15 times, and pierces her tongue.

In therapy, she denies being angry or upset and does not know why she cut her arm or pierced her tongue.

An adolescent with a history of childhood trauma might have difficulty identifying and expressing internal states and developing trusting relations with others. He or she also can have high levels of anger and shame.

Even an adolescent who experienced neglect or loss of attachment object without overt physical or sexual abuse might have trouble establishing a therapeutic alliance because of difficulty with trust.<sup>6</sup> He or she may have little or no capacity to identify emotional states, which limits insight into the behavior.<sup>5</sup>

**Dissociation.** Some adolescents use SIB to try to feel something or to bring themselves back from a dissociative state. They report feeling lost, alone, and disconnected from others and themselves. Some report seeing blood as a way of reconnecting with being alive.

Dissociation may occur in adolescents with a history of trauma, particularly in childhood. Abused individuals who engage in SIB may be identifying with the aggressor, attempting to cut away internalized

negative images of the abuser or to control anger they are unable to acknowledge.<sup>6</sup>

### Clues prompt further assessment

SIB assessment begins with screening for the behavior. If you find any indicators that suggest SIB (Table 2), question the adolescent about self-injury. Many adolescents want help—and will respond accurately to questions about self-injury—but need to be asked. They usually won't volunteer the information during an initial evaluation.

Once you have identified SIB, explore the behavior. Document:

- number, location, and age of injuries
- depth of cuts (if applicable)
- signs of infection.

Determine if the adolescent needs medical intervention. Discuss how the adolescent causes the injury, and what precipitates it. If possible, obtain some form of safety contract in which the adolescent agrees to not engage in SIB and to notify a designated adult if he or she feels like engaging in SIB or has done so.

**Suicide screening.** By definition, SIB does not include an intention to die, and most teenagers with SIB will deny suicidal intent. However, because the line between SIB and passive suicide can be thin, careful screening and ongoing monitoring for suicidal ideation and behavior in teens with SIB is essential. In one study:

- 70% of adolescents who engaged in SIB had made one suicide attempt
- 55% had made multiple attempts.<sup>7</sup>

A separate study found suicidal ideation and depression are keys to identifying adolescents with SIB at risk for suicide attempts.<sup>8</sup> Because SIB and suicidal ideation/behaviors can co-occur, SIB safety contracts must cover both.

**Address the parents' concerns.** During your assessment, also focus on the adolescent's parents. They often are highly distressed, confused, and angry. They typically learn about the SIB from their child's school counselors or peers and feel betrayed and guilty. They may want to be excessively intrusive and punitive and

need support, information, and guidance to address their child's safety.

### Treatment recommendations

Always take SIB in adolescents seriously, and not as something they will "outgrow." Adolescents with SIB need help modulating affect, stabilizing interpersonal relationships, and developing more adaptive coping strategies and problem-solving skills. Underlying dynamics—especially childhood trauma—must be explored and resolved.

Few evidence-based studies have evaluated SIB treatment in adolescents. Clinicians have extrapolated suggested interventions from the adult literature; however, much of this data was obtained from treating adult women with borderline personality disorder.

No medications are FDA-approved for treating SIB. Use pharmacologic interventions to treat underlying disorders, such as depression or anxiety, so that patients are better able to participate in other therapeutic interventions.

**Dialectical behavioral therapy (DBT)** is the only therapeutic entity shown in controlled trials to successfully treat SIB.<sup>10</sup> Weekly individual psychotherapy and skills training groups focus on:

- regulating emotions
- tolerating distress
- improving interpersonal relationships
- reducing identity confusion and maladaptive cognitions.<sup>9</sup>

Other types of therapy—including psychoanalysis, self psychology, object relations, and interpersonal approaches—have a similar understanding of impulsive SIB and employ similar approaches.

**Substitute behaviors.** The treatment goal is for patients to substitute less destructive behaviors in response to intense emotional states. Some can use techniques such as snapping a rubber band or rubbing ice against the skin, both of which cause discomfort without injury. Patients can listen to music, create art, write in journals, or engage in other physical activities. Each patient has to find a different behavior that works.

continued

### Clinical Point

The goal of treatment is for patients to substitute less destructive behaviors in response to intense emotional states

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## Teen self-injury

### Clinical Point

Because SIB is ritualistic, denying access to preferred tools used to self-injure can help reduce the frequency of the behavior

**Prevention.** Although SIB can be done with any object, most adolescents have a preferred method for causing self-injury and may have a “kit” of equipment. Identify and remove any tools the adolescent uses for self-injury. Because SIB is a highly ritualistic behavior, denying access to the preferred tools can help reduce self-injury frequency and convey that the behavior is unacceptable.

One individual should be designated to monitor the adolescent for SIB. Adolescents are seeking trust and do not respond well to constant questions about their behavior. Because some parents can become intrusive, monitoring may be best assigned to the adolescent’s therapist or a less emotional parent.

#### CASE 3

### Scars provoke relapse

Claudia, a musically talented teen with SIB, withdraws from her choir when they choose costumes with short sleeves. She had not engaged in SIB in >1 year but has scarring and cheloid from the cuts. Years later she starts cutting again after laser treatments fail to remove the scars. She is frustrated because she will always have to wear long sleeves.

**Risk of relapse.** Therapy for SIB tends to be intense and difficult, with frequent relapses. To overcome SIB, the adolescent must want to stop and work hard at other coping strategies.

Treatment is essential, however, because this behavior can last for decades and

## Related Resources

- Levenkron S. *Cutting: understanding and overcoming self-mutilation*. New York: W.W. Norton & Company; 1998.
- Favazza AR. *Bodies under siege: self-mutilation and body modification in culture and psychiatry*. 2nd ed. Baltimore: The Johns Hopkins University Press; 1996.

### Disclosure

The author reports no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

leave scars that might interfere with future goals. The longer the adolescent has been dependent on the behavior, the more difficult it is to treat.

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## Bottom Line

Adolescents who engage in self-injurious behavior (SIB) typically have difficulty regulating emotions, unstable interpersonal relations, and limited coping strategies. SIB and suicidal ideation/behavior can coexist. No medications are FDA-approved for treating SIB. Research on adults with SIB suggests dialectical behavioral therapy can be effective.