Distinguishing Suicidal Attempt from Autoerotic Asphyxiation

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Suicide is the act of intentionally taking one's own life. It is often related to severe distress, the etiology of which can be attributed mostly to psychosocial stressors and mental illness such as depression, bipolar disorder, and schizophrenia, or alcoholism or other substance abuse.[1,2] Suicide is a major but preventable public health problem. The US Centers for Disease Control and Prevention (CDC) reports suicide as the 10th most common cause of death in the United States, accounting for 41,149 deaths in 2013.[3] Among people ages 15 to 34 years, suicide is the second leading cause of death. Among various mechanisms, suffocation was the second leading mechanism of suicide deaths in 2013 (3.2 per 100,000), a 70% increase from 1999.[4]

Aborted, interrupted, or nonfatal suicide attempt is referred to as a failed attempt in which the person survived either intentionally or accidentally. Although there are no national statistics on attempted suicide in the United States, the CDC estimates about 25 suicide attempts[5] for each completed suicide in the general population compared with 100 to 200 attempts[6] among those age 15 to 24 years. Although survival rates are very high in young adults, a failed suicide attempt is still a matter of great concern. A previous suicidal attempt is the strongest known clinical predictor of eventual suicide, so future outcome depends on efforts to prevent future suicide attempts by treating mental illness and substance-related illness, addressing and resolving psychosocial stressors, and limiting access to firearms or other possible weapons.

Autoerotic asphyxiation (AEA) is an extremely risky and life-threatening paraphilia that induces hypoxic euphoria by asphyxiation, which in turn produces or enhances sexual gratification.[7] AEA is likely under-reported and there are no national statistics or records available on its epidemiology. The device used to asphyxiate typically occludes blood-flow to the brain, which creates a euphoric effect and exhilaration, diminished ego controls, giddiness, and light-headedness, all of which heighten self-pleasure and intensify orgasm.[8] It has been increasingly identified over the past few decades as a cause of accidental death.[9] The most common scenario in adolescents is thrill-seeking behavior and/or sexual experimentation merged with a pseudo-masochistic fantasy of bondage and pain.[1] The risk of sudden accidental death due to loss of consciousness and loss of control of the strangulation device differentiates this behavior from attempted suicide, so it should be treated, and future care planned, accordingly.[9]

CASE DESCRIPTION

A 19-year-old man presented to our emergency department. He was a high school graduate who had dropped out of college

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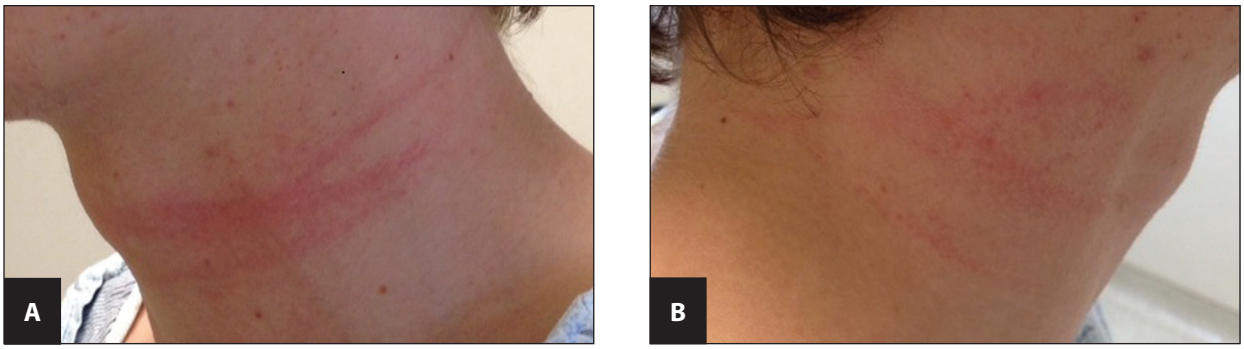

Figure 1. Ligature marks on the patient's neck.

after finishing his first semester. He recently became unemployed and was financially supported by his family. The patient was in his usual state of good health until the patient ended a relationship with his girlfriend 5 months ago. After that, the patient started abusing substances more frequently and consistently. During this period, he was exhibiting agitation, impulsive behavior, and verbally abusive language. His family became concerned and asked for help from a cousin, who took the patient to Connecticut, during which time that patient reportedly was stable and sober. The patient returned back home 1 month later and met his ex-girlfriend at a gathering where attempts to reunite were made by the patient. The patient was unsure of the outcome of this attempt, and the insecurity and stress caused him to relapse back into substance abuse.

Earlier in the day when the patient presented to the emergency department, he received a call from his ex-girlfriend stating her interest in another man. The patient could not handle this acute situation; he repeatedly tried calling his ex-girlfriend but she did not answer his calls. The patient then called his mother to ask for alternate contact information for his ex-girlfriend. The patient's mother left work and came home quickly because she was concerned that her son sounded very upset, anxious, and impulsive. The mother saw red "strangulation" marks (**Figure 1**) around her son's neck and confronted him about it. The patient admitted his suicidal intent and attempt to his mother, but in the emergency department he denied both. The patient rationalized his statement by claiming that he was seeking sexual pleasure by strangulation and was embarrassed to disclose that to his mother. The patient reportedly has been using cannabis daily with concurrent occasional abuse of opioids, cocaine, and anxiolytics. The patient reported symptoms of easy irritability, hypersomnia, and muscle fatigue for the past 2 weeks.

The patient had a history of attention-deficit/hyperactivity disorder that was diagnosed at age 5 years. He had no history of suicidal ideation or attempt and no history of dangerous self-pleasurable behavior or paraphilias. The patient had no history of inpatient institutionalization, but twice had been enrolled in an intensive outpatient rehabilitation program for substance abuse-related problems. Currently, the patient was not seeing a therapist or psychiatrist and was not taking any psychotropic medications.

The patient was admitted to our inpatient psychiatric unit due to recent acute stressors and significant substance abuse history. The patient was given treatment in accordance with a suicide attempt. The patient was discharged after receiving psychoeducation in collaboration with intense family meetings.

DIAGNOSIS

Suicidal Attempt

DISCUSSION

AEA syndrome has been described as "eroticized repetitive hanging," which is very different than suicidal attempt with intention to end life. In this current case, the patient reported this behavior for enhancement of sensation during masturbation, but recent acute psychosocial stressors and signifi-

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TABLE 1.

Factors Related to Suicidal Attempt

- Evidence of recent stressor
- Suicidal ideation or intent
- History of suicidal ideation or attempt
- Significant depressive, manic, anxiety, or psychotic symptoms
- Asphyxiation without safety precautions and self-rescue mechanism
- No significant relation to other paraphila
- No significant relation to autoerotic behavior
- Diminished sexual activity or hypersexuality

TABLE 2.

Factors Related to Autoerotic Asphyxiation

- No evidence of recent stressor
- No suicidal ideation or intent
- No history of suicidal ideation or attempt
- No significant depressive, manic, anxiety, or psychotic symptoms
- Asphyxiation with safety precautions and self-rescue mechanism
- History of other paraphila
- History of dangerous autoerotic behavior
- Evidence of solo sexual activity

cant substance history made that statement highly suspicious.

Table 1 and **Table 2** summarize the difference in factors between these two different acts. The common physiologic mechanism by which sexual arousal is obtained is by constriction of the neck. People most commonly engaging in this practice would have no significant clues or recent history of acute stress, and they would have no previous history of suicidal thoughts or attempts.[8,10] As seen in this case, the most common method used is neck constriction. This is carried out by using a systems of knots around the neck that is constructed to execute constriction with pressure control and an escape mechanism.[11] Hence, a person engaging in this act has all intention to seek sexual pleasure or thrill rather than having suicidal ideation or intent. Therefore, protective means, such as body positioning and padding around neck, are of important consideration.[7] During this practice a transient cerebral hypoxia is produced, causing physical helplessness and self-endangerment to the degree that life is threatened and the victim's self-control and judgment are weakened. Thus, this may occasionally result in accidental death from the failure or inability to operate previously arranged self-rescue mechanisms.[10]

AEA practitioners are more likely to present with multiple paraphilias such as bondage and transvestitism or show sadomasochistic interest.[8] This act is usually performed solo and should be delineated from diminished sexual activity or hypersexual behavior related to major psychiatric illnesses.[12,13]

CONCLUSION

Of the various types of abnormal sexual behavior (ie, paraphilias), probably the most bizarre and dangerous is AEA. It is very important to distinguish it from suicidal attempt, as it will be important in the future care and management of the patient. Also, parents should be educated about certain warning signs that indicate this type of behavior. For example, a strange impression on the neck, presence of opposite sex's clothing, pornography in their bedroom, short ropes under their bed, padded ropes, neckties tied in odd knots, red eyes secondary to subconjuctival hemorrhage, and locked bedroom doors with delayed response. If family members can identify these behaviors, then the appropriate psychoeducation can be provided, and misinterpretation and maltreatment to prevent serious life-threatening outcomes in the future can be avoided.

As opposed to suicidal attempt, in which risk factors are identified (eg, psychosocial stressors, mental illness, and substance-abuse disorders), the focus of intervention usually is on treating these disorders as well as addressing suicide risk directly.

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