



Comprehensive Medical and Psychiatric Evaluation of Screaming Behavior in the Adult Person with Mental Retardation and Developmental Disabilities (MR/DD)

1. The Overview

The frequency of disruptive vocalization otherwise referred to as screaming behavior, is unknown in persons with MR/DD. Loud, disruptive vocalization can be common in persons with moderate to severe retardation, regardless of their location of residence. Many types of screaming behaviors are the products of behavioral precipitants that require strict behavioral interventions. Pharmacological interventions are not usually effective at reducing screaming behavior; however, medications can be effective for underlying diseases that produce screaming.

2. Etiology of Screaming Behaviors

The cause of screaming behavior can be behavioral, medical, psychiatric, or environmental (**See Table 1**). Patients with mild retardation should not scream on a regular basis and the occurrence of this behavior suggests a behavioral management problem. Patients with mild retardation should be capable of explaining precipitants for the behavior. Patients with moderate to severe retardation are generally incapable of explaining their loud verbal outbursts. Chronic, screaming behavior is often the product of behavioral or environmental issues, while acute onset, screaming behavior signifies a new medical or psychiatric problem **(1)**. Psychiatric problems can produce screaming behavior. Patients may scream in response to hallucinations **(2)**. Anxiety and depression may manifest as disruptive vocalizations **(3)**. Manic patients may scream during manic excitation **(4)**. Specific medication side effects can produce screaming, including akathisia, from SSRIs or antipsychotics as well as intoxication produced by benzodiazepines.

Table 1
**Differential Diagnosis of Acute Onset of
Screaming Behavior in Adult Persons with
Moderate or Severe MR/DD**

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| <ol style="list-style-type: none"> 1. Behavioral <ul style="list-style-type: none"> • Boredom • Anxiety • Learned response 2. Medical <ul style="list-style-type: none"> • Focal, diffuse, visceral or neuropathic pain • Delirium 3. Psychiatric <ol style="list-style-type: none"> 1. Depression 2. Mania 3. Psychosis 4. Anxiety 4. Environmental <ol style="list-style-type: none"> 1. Noisy, chaotic events 2. Unmet ADL needs, e.g., wet, soiled 3. Abuse |
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Abrupt onset of screaming behavior may be produced by acute or chronic pain (1), (2). Unrecognized fractures, reflux esophagitis, rectal impaction, urinary tract infection, dental disease, and infections of the ear, nose, and throat should be excluded through careful evaluation and X-ray, if required. Older patients may scream from angina, neuropathic pain produced by diabetes, GERD, gall bladder disease, or other silent medical problems. Delirious patients may begin to scream as a manifestation of worsened confusion and the clinical team should evaluate all new medications (**See Delirium Handout #71**).

Patients with acute onset screaming behavior may be given Tylenol or other simple analgesics on a regular dosing schedule for 7 days to determine whether the screaming is diminished. Response to the Tylenol strongly suggests pain is an etiology and the clinician should renew their assessment to identify potential causes of pain.

3. Assessment of New-Onset Screaming Behavior

The assessment of screaming behavior begins with a careful behavioral analysis to determine precipitants, reinforcers and other features. The assessment of screaming behavior begins with documentation of frequency of events, duration, time of day, and interventions that improve or reduce the behavior. Patients require a careful, physical examination, dental exam, appropriate laboratory studies, and psychiatric assessment.

Patients may exhibit screaming behavior as a manifestation of psychiatric disorder. Once there is reasonable certainty that there are no medical explanations for the screaming behavior, an assessment of psychiatric symptoms should be conducted. Individuals with intellectual disabilities are more likely to have behavioral manifestations of psychiatric symptoms when they occur and are less likely to be able to verbalize in a sophisticated way about what they are experiencing. Some assessment tools designed for aiding the identification of psychiatric symptoms in individuals with intellectual disabilities include the DASH-II (Diagnostic Assessment for the Severely Handicapped – II), the ADD (Assessment of Dual Diagnosis), and the REISS Screen. These instruments have taken symptoms for the various diagnostic categories in the DSM and translated them into descriptions of behaviors that have been associated with particular diagnostic categories. This kind of assessment can also help sort out which behaviors are manifestations of a psychiatric disorder and which behaviors are a result of learning. Functional behavioral assessments need to be conducted for the latter when identified.

4. Management of Screaming Behavior

Medical and pharmacological management of screaming behavior focuses on treating underlying medical or psychiatric causes that produce the behavior. Depression is best treated with antidepressants, while psychosis is better treated with antipsychotics (5). Mania can be treated with a combination of atypical antipsychotics and mood stabilizing agents. Anxiety is best treated with antidepressants or Buspar. Benzodiazepines can produce significant confusion or disinhibit patients and are not helpful for screaming behavior (See **Delirium Handout - DDMED #71**).

Medical problems producing pain, e.g., fractures, GERD, UTI, should be treated with the appropriate medical intervention. When conditions are identified that produce chronic pain, e.g., compression fracture of the vertebrae, the patient should be treated with a progressive analgesic medication program starting with regular acetaminophen or non-steroidal anti-inflammatory, working up to narcotic analgesics. Pain of sufficient severity that causes screaming behavior requires aggressive treatment to lower the suffering and improve the quality of life for the patient. Neuropathic pain can be treated with anticonvulsants such as Neurontin or Tegretol (6). The new antidepressant, Cymbalta, is also effective for some neuropathic pain.

Specific medical problems, such as irritable bowel, migraine headaches, and others should be treated with disease specific medical interventions. Individuals with seizure disorder may scream during periods of post-ictal confusion or in response to injury produced by unrecognized seizures, e.g., fracture, dislocated shoulder, etc. Anti-epileptic medications levels should be assessed for these individuals to assure therapeutic blood levels.

Sedative-hypnotics, major tranquilizers, and other sedating medications rarely improve screaming behavior. Therapeutic trials in moderate to severely of antipsychotics or antidepressants may be indicated when there is a reasonable expectation that unrecognized psychosis or depression is provoking the behavior.

Patients who scream for attention or as a form of self-stimulation are not improved with the use of psychotropic medications. Boredom is best managed through structured activities.

Behavioral management of screaming in response to distress or psychiatric symptoms should include behavioral interventions. Behavioral analytic procedures can be included with other treatment modalities for a person who

has both a psychiatric diagnosis and intellectual disabilities. Behavioral specialists can determine appropriate training strategies to assist a person with intellectual disabilities to gain better coping skills for dealing with their psychiatric symptoms. Triggers for the symptoms can be identified and strategies taught to staff, family members, and the individual to prevent escalation of the behavioral symptom. Counseling can be provided, keeping in mind that discussions need to be geared toward the level of understanding of the individual. Most counseling should take the form of skill-building and include the chance for positive reinforcement during the learning process. For example, if an individual becomes angry easily due to an impulse control problem, anger management training may be successful when presented in simplistic terms, modeled by the clinician, and practiced repeatedly by the individual in more than one or two sessions. As the person learns the management techniques, positive reinforcement should be delivered to assist with the acquisition and maintenance of the skills.

Conclusion

Screaming behavior is produced by many clinical conditions. Therapy for screaming focuses on the cause rather than achieving sedation.

REFERENCES

1. Ryan R, Sunada K. Medical evaluation of persons with mental retardation referred for psychiatric assessment. *General Hospital Psychiatry* 1997;19:274-280.
2. Kastner T, Walsh KK, Fraser M. Undiagnosed medical conditions and medication side effects presenting as behavioral/psychiatric problems in people with mental retardation. *Mental Health Aspects of Developmental Disabilities*, July/August/September 2001;4(3):101-107.
3. Khreim I, Mikkelsen E. Anxiety disorders in adults with mental retardation. *Psych. Annals* 1997;27(3):175-181.
4. Marston GM, Perry DW, Roy A. Manifestations of depression in people with intellectual disability. *Journal of Intellectual Disability Research* 1997;41(6):476-480.
5. Mikkelsen EJ, McKenna L. Psychopharmacologic algorithms for adults with developmental disabilities and difficult-to-diagnose behavioral disorders. *Psychiatric Annals* 1999;29(5):300-314.
6. Kaplan HI, Sadock BJ, eds. *Comprehensive Textbook of Psychiatry/V*, Baltimore: Williams & Wilkins, 1989.