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## Behavioral Emergencies

Management of the agitated /violent patient is a dual challenge- the patient must be safely and adequately restrained, and a potential coexisting medical condition must be identified and treated.

There are several considerations which must be addressed when the emergency team is confronted with an agitated patient;

- Scene safety /patient and staff safety
- Does the patient have a potentially life –threatening condition?
- Maintaining control of *the patient and situation* so that an adequate medical assessment can be performed
- Providing necessary emergency treatment to stabilize the condition

## Medical Causes

There are many potential medical causes for agitation and disturbed behavior, and patients with acute changes in mental or behavioral status must be presumed to have a medical origin for their condition.

These medical conditions include but are not limited to:

- Hypoglycemia- low blood sugar can cause a multitude of symptoms and can mimic stroke or seizure disorders. The hypoglycemic patient can be agitated or delirious. A blood glucose should be checked on all patients experiencing “Change in Mental Status”
- Hypoxia can cause change in mental status. The patient may become agitated as the brain, which is dependent upon oxygen, is deprived of this vital substance
- Thyrotoxicosis is a condition which results in excessive amounts of thyroid hormone. The patient appears “revved up” and hypermetabolic. The agitation will be accompanied by rapid heart rate.
- Alcohol withdrawal is a potentially life threatening situation which requires prompt recognition and treatment. Minor withdrawal can begin within 6 hours after alcohol consumption. The patient can be anxious, tremulous, tachycardic, hypertensive, and hyperreflexic. These symptoms may progress to hallucinations, profound confusion and seizures. The combination of autonomic hyperactivity in combination with electrolyte disruption (hypomagnesemia and hypokalemia) can lead to **fatal arrhythmias**.
- Opiate withdrawal can cause agitation and other symptoms but is not considered a potentially life-threatening condition
- Poisonings and overdoses are common causes of agitation and behavioral disruption. Cocaine and amphetamines are notorious and commonly used recreational drugs. Amphetamine derivatives include MDMA (Ecstasy) and Methamphetamine. Overdoses are characterized by overdrive of the sympathetic nervous system, and symptoms include tachycardia, hypertension, dilated pupils, and agitation. PCP (Angel Dust) can cause extreme CNS excitation and lead to

violent behavior. Because PCP has anesthetic properties, the patients often feel little or no pain. A multitude of other drugs and toxins can cause agitation (steroids, salicylates, anticholinergic agents, etc).

- CNS conditions can cause agitation. These include trauma, meningitis, certain strokes and brain bleeds. The history and physical examination would provide essential clues to the presence of CNS conditions.
- Infections (sepsis, encephalitis, brain abscess) can also lead to disruptive behavior.

The complete list of medical causes of agitation is exhaustive and cannot be included here.

## **Psychosis**

Acute Psychosis refers to impairment of both thought content and thought process (the patient has perceptions not based upon reality and presents them in an illogical or disorganized manner).

Schizophrenia is the psychiatric disorder most often associated with psychosis. One out of every 100 persons in the United States suffers from psychotic symptoms, which are usually brought on by stress. Most psychotic disorders initially manifest in adolescents and young adults. Clinically, these patients present with hallucinations, (usually auditory), illusions (misperception about a patient's surroundings) and delusions (misinterpretation of events).

## **Protect the Staff and Patient**

Regardless of the cause of the violent or disruptive behavior, there are certain caregiver precautions and procedures which are universal. First and foremost protection of the patient and caregiver is essential. More than 70% of ED nurses have reported being the victim of physical violence during their career. Weapons may be carried by patients or family members. I have personal experience with ED violence when I was medical director of an ED in Michigan City, Indiana. A psychotic patient presented to the ED. He was mildly agitated. His wife had a loaded pistol in her purse. After triage, the wife and patient were brought into the examination room. The wife handed the gun to the patient and he began shooting. He shot another ED patient, and two security guards before running out of the ED. Patients most likely to carry weapons are those with schizophrenia and paranoid ideation. Many violent patients are intoxicated with alcohol and illicit drugs. Fortunately, there are warning signs of impending violence. Escalating psychiatric illness, history or prior violence, alcohol and drug abuse, ED arrival in police custody and male gender are warning signs. *Verbal and nonverbal clues* provide evidence for impending violence. The patient's voice may rise; their hand gestures are more pronounced and animated. They may appear restless. Emotional stress, prolonged waiting times and communication gaps can provoke an attack.

## **Attempt to De-Escalate, but Restrain if Necessary**

If an EMT encounters a potentially or frankly violent situation, the police should be notified immediately. A show of force often will serve to deter any violent intentions. Speaking to the patient in calm, reassuring tone of voice may be helpful. Advise the patient that "we are here

to help you.” Use straightforward speech and be honest. Shouting or arguing with the potentially violent patient only serves to induce more agitation. The EMT is best served by checking the emotions and avoiding any behavior which will escalate the situation. Some patients will respond favorably to these measures, others will not. For those who progress to violent or potentially violent acts, restraints become necessary for protection of everyone. In the field, the police may initiate physical restraints / handcuffs/hogties/tasers. In the ED, physical restraints may be continued via cloth or, more likely, leather restraints. A Philadelphia collar may be used on patients who attempt to bite. There are complications which might occur with the use of physical restraints (bruising, abrasions, and positional asphyxia which can lead to death).

### **Chemical Restraints**

Chemical restraints are generally given involuntarily in order to control a patient’s dangerous behavior. These are often used in conjunction with physical restraints in the ED. **Haldol** has been used successfully for decades. It is a butyrophenone *antipsychotic agent* and has *fewer* anticholinergic and hypotensive side effects than Thorazine. Dystonic reactions may occur with Haldol, but can be reversed with Benadryl. Haldol can be given in 2.5 to 10 mg dosages and repeated in one-half hour if needed. Benzodiazepines can be also used, either alone or in combination with Haldol (“Benzadol cocktail”). *Benzodiazepines are first line agents for alcohol withdrawal and agitation caused by stimulant drugs.* **Ativan** is given in 1 to 2 mg increments as frequently as every 15 minutes until sedation occurs. Ativan has onset of action 15 to 30 minutes and lasts three hours. **Versed** is used if rapid sedation is required. Versed has a short half life (45 minutes if given IM). As with all benzodiazepines, over sedation and respiratory depression are dangerous side effects. **Geodon** is very effective in treatment of acute agitation in schizophrenia and manic patients. This relatively newer agent is not the first choice in the patient with an unclear etiology for the agitation. The typical dose is 10 mg IM. QT prolongation can occur in patients given Geodon.

### **SUMMARY**

There are many causes for agitation and violent behavior. It is our responsibility to protect the staff and the patient during an aggressive encounter. De-escalation techniques should always be used. EMTs and emergency team members should maintain control of their emotions and not respond to the patient in a hostile or aggressive manner. Police should always be notified when an aggressive or potentially violent patient is encountered. Physical restraints are often necessary to control the patient and prevent harm. Chemical restraints are often alone, or in conjunction with physical restraints. A medical screening evaluation is necessary to rule in or rule out *medical causes* of agitation in every patient. – Andrew Garlisi MD MBA MPH VAQSF