WHEN EVERY

minute

Current PSYCHIATRY

counts

What workup is sufficient for diagnosis under pressure?

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Determining an exact diagnosis in the ED is less important than establishing a diagnostic category to guide emergency psychiatric treatment.

Police officers bring Mr. A, age 25, to the emergency department (ED) in handcuffs after an alleged assault at work. He is calm but will provide no information about himself. ED staff don't know if he has been using illicit substances, is on medications, or has any medical conditions.

Mr. A says the FBI is after him, but he makes no threats to ED staff. He talks about milking cows on a farm and of hearing animal sounds, though he lives in the city. After about 30 minutes, he consents to a lab draw and provides a urine sample.

Because no charges are pending and Mr. A is semi-cooperative, police remove his handcuffs and leave him in the care of two ED security officers. He is given something to eat and drink and seems fairly content. He asks how long he will need to stay in the room but does not demand to leave.

In a fast-paced ED, physicians might not notice signs of psychiatric illness, such as Mr. A's paranoid and delusional thinking. By being familiar with techniques to manage patients' psychiatric emergencies, you can help your ED colleagues:

- establish working psychiatric diagnoses and medical causes of psychiatric symptoms in the fast-paced ED
- maintain a safe ED environment for patients and clinicians.

WHAT ED PATIENTS WANT

To understand how ED patients feel, put yourself in Mr. A's shoes. You were at work and began to hallucinate. You believed your boss was out to harm you, and in fear you made comments perceived as threatening.

The next thing you know, you're in a police car with handcuffs on. All of your coworkers witnessed your embarrassment. Now you are in a small ED room, wondering what's going to happen next. Are you going to be put in a straight jacket and a padded room?

Patients may experience anxiety-provoking thoughts whether they come to the ED voluntarily or involuntarily. Fear and confusion can affect their behavior in the ED, and how providers respond to patients in crisis can escalate or de-escalate an already-difficult situation.

Even when informed of symptoms, ED physicians rarely diagnose psychiatric disorders

PSYCHIATRIC ILLNESS IN THE ED

Mr. A may have a psychiatric disorder, as do at least 3% of patients seen in EDs.[1] This figure may be low, however:

- Kunen et al[2] asserted that EDs are underdiagnosing psychiatric disorders, given a U.S. Department of Health and Human Services 1999 estimate that 20% to 28% of Americans have psychiatric illnesses. Using ED discharge records across 6 months in three emergency departments, the authors found the psychiatric diagnosis rate to be 5.27% in 33,000 ED visits.

They also found that psychiatric disorders were underdiagnosed in Caucasian and African-American patients, but underdiagnosis occurred more often in African Americans.

- Another study, done in a university teaching hospital ED, showed that ED physicians trained to focus on patients' presenting problems often missed comorbid medical or psychiatric illnesses.

In the randomized, controlled trial by Schriger et al,[3] 218 patients with nonspecific complaints suggesting occult psychiatric illness (such as chronic headache, abdominal pain, or back pain) completed the Primary Care Evaluation of Mental Disorders (PRIME-MD) questionnaire. This 27-item self-report asks questions about mood, alcohol use, obsessive-compulsive symptoms, phobias, and somatoform symptoms.

Participants were then randomly assigned to "report" or "nonreport" groups, depending on whether or not ED physicians received their PRIME-MD scores. Even when informed of patients' psychiatric symptoms, ED physicians rarely diagnosed or treated psychiatric disorders. Lack of mental status documentation and psychiatric interviews was apparent, the authors noted.

CASE CONTINUED: A TOXIC COCKTAIL

Mr. A's urine drug screen and lab results are positive for benzodiazepines, methamphetamines, and cannabis. The staff decide Mr. A will require further observation and detoxification, and he is told this. A bed is not available at the hospital, however, and calls to nearby facilities find no empty beds.

As time passes, Mr. A shows signs of agitation and arousal. He paces the examination room—his jaw clenched and his face flushed—and begins raising his voice, asking to be discharged.

Recommendations. Unpleasantness is sometimes unavoidable, but no one in the ED has tried to create an alliance with Mr. A (*Box, page 21*). Try to make patients' ED experiences as positive as possible. Make it clear that you share a common goal: to help the patient feel better. In fact, psychiatric patients and emergency psychiatrists have similar ideas about what constitutes quality ED care. When surveyed,[4] ED patients said they preferred:

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- verbal interventions compared with medications
- a collaborative approach with ED physicians
- having medications selected for their specific problems, medication experiences, and choices
- benzodiazepines rather than conventional antipsychotics such as haloperidol.

A PRAGMATIC WORKUP

Medical illnesses such as delirium, stroke, drug toxicity, or urinary tract infections can trigger or worsen psychiatric illness (*Table 1, page 22*).[5] Comorbidities such as diabetes, hypertension, obesity, and heart disease are common in patients with psychiatric disorders, and psychotropics can cause or exacerbate these conditions.

In the high-pressure ED, a sufficient workup for complicated medical conditions lies somewhere between extensive/unnecessary and inadequate. Thus, determining an exact diagnosis is not as important as establishing a diagnostic category to guide emergency treatment.

Think of psychiatric disorders as they are organized in DSM-IV-TR—mood, anxiety, psychotic, substance use/withdrawal/intoxication, cognitive, adjustment, somatoform, and personality disorders—and whether they are primary or secondary to a general medical condition or substance use. For example:

- Anxiety disorder secondary to a general medical condition means the history, physical exam, or lab reports suggest a medical condition is the direct physiologic cause of the mood disturbance.
- Methamphetamine-induced psychotic disorder would be the diagnosis if methamphetamines are presumed to be causing a patient's psychotic symptoms.

Hospitalization. ED staff often develop a treatment plan based on a patient's clinical picture and a working diagnosis. The plan hinges on deciding if the patient needs to be admitted to the hospital. Admission may be warranted for life-threatening medical conditions or safety issues, such as threats to self or others or inability to care for oneself at home. Other issues come into play—such as starting or changing medications and follow-up to ensure continuity of care—if you decide to discharge the patient.

Even after medical clearance, patients in the psychiatric emergency service may have underlying medical illnesses (*Table 2, page 24*).[6]

OVERWHELMING DEMAND

In the study of ED patient preferences,[4] one-fifth of patients said they went to the ED because they

Box

For a safer ED, take steps to build trust

Treat patients with respect, and preserve their sense of dignity

Offer patients choices when reasonable to help them feel they have some control

Strongly (and early) encourage smokers to accept nicotine replacement to avoid withdrawal and heightened arousal

Offer food, beverages, a blanket, or other comfort measures that would not compromise safety (do not give hot coffee, in case the patient throws the cup at someone)

Allow patients to call a loved one, friend, or pastor (offer a cordless phone to avoid strangulation attempts)

Allow relatives or friends to sit and talk with the patient if this would not compromise safety

Keep patients informed on what is going on and why

Answer questions asked by the patient and family or friends

Offer oral medications first

Get to know your security staff well

Table 1

Medical disorders that can cause psychiatric symptoms

Medical/toxic disorders	Examples
Alcohol and drugs of abuse	Amphetamines (including methamphetamine), cocaine, heroin, Jimson weed, ketamine, marijuana, MDMA ('Ecstasy'), LSD, PCP
Prescription drugs	Antibiotics, anticholinergics, anticonvulsants, antihypertensives, benzodiazepines, chemotherapeutic agents, cimetidine, corticosteroids, digitalis, narcotics, propranolol, sleep medications, tricyclic antidepressants
CNS disease	Hypertensive encephalopathy, intracranial aneurysm, metastases, normal pressure hydrocephalus, postictal nonconvulsive status, primary CNS infection, seizure disorders, stroke, subdural hematoma, tumor
Infections	Acute rheumatic fever, diphtheria, malaria, Legionnaires' disease, pneumonia, Rocky Mountain spotted fever, sepsis, syphilis, typhoid fever, urinary tract infection
Metabolic/endocrine disorders	Adrenal disease, diabetic ketoacidosis, hepatic encephalopathy, hypoglycemia, pituitary dysfunction, renal disease, serum electrolyte imbalances (sodium, potassium, calcium), thyroid disease, vitamin deficiencies, Wilson's disease
Cardiopulmonary disease	Arrhythmias, congestive heart failure, COPD/asthma, myocardial infarction, pulmonary embolism
Miscellaneous	Anemia, lupus, multiple sclerosis, temporal arteritis, vasculitis

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lacked access to routine mental health care. Therefore, besides psychiatric conditions caused by medical illnesses, ED physicians can see patients with any primary psychiatric diagnosis, including mood and anxiety disorders and psychosis.

Under pressures of time and limited collateral information, ED staff must:

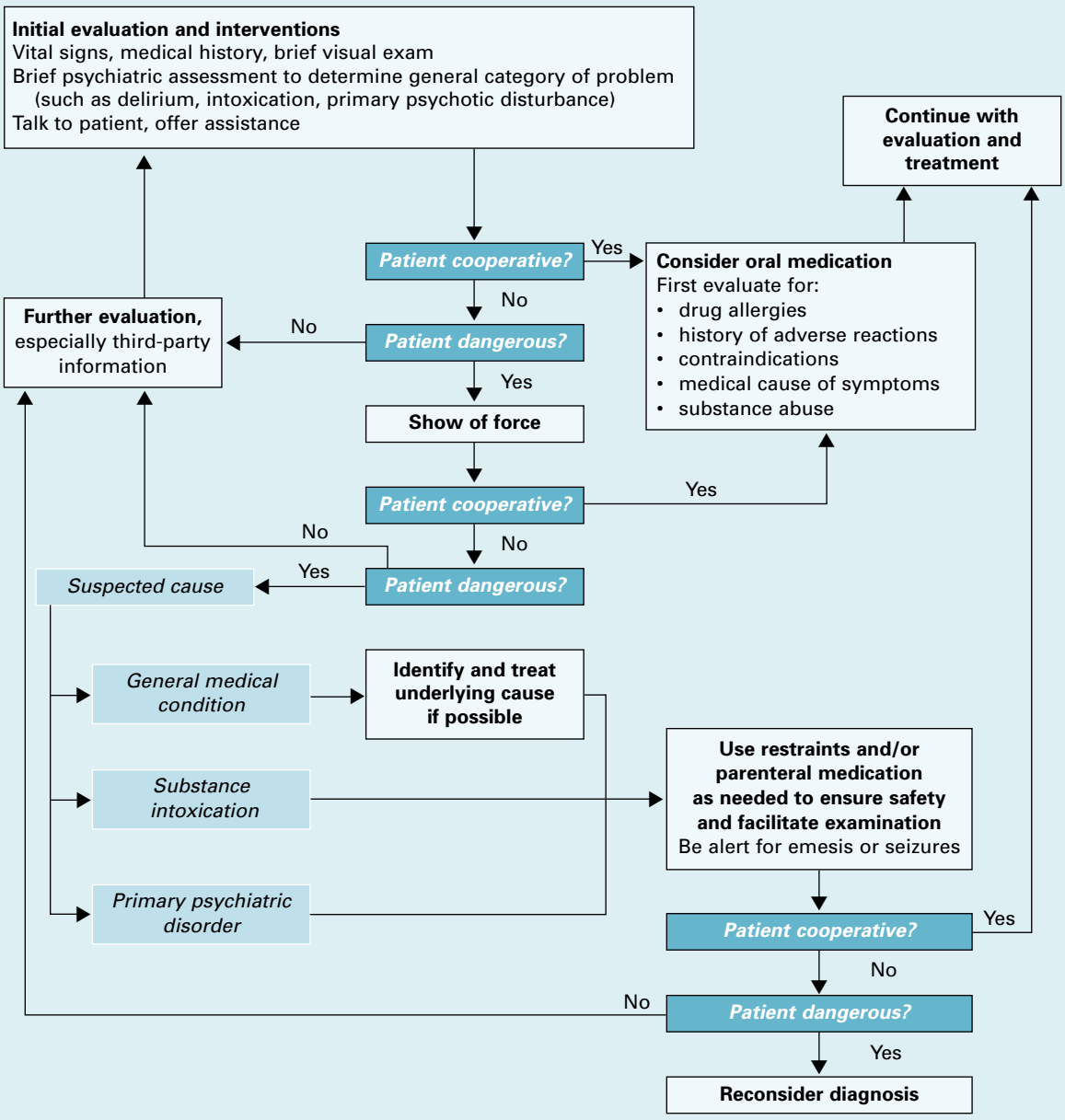
- individualize psychiatric treatment
- consider use of medications and/or restraints
- rule out life-threatening causes for psychiatric symptoms
- stabilize patients and prevent injury to self and others.

These tasks are becoming increasingly difficult as more and more patients present to emergency rooms. Nationally, ED visits increased from 19 million in 1992 to 108 million in 2000, according to the U.S. Department of Health and Human Services.[1]

Psychiatric patients are seeking ED care in greater numbers, and the number of those staying longer than anticipated ("boarding") also has increased, according to a 2004 survey of 340 physicians by the American College of Emergency Physicians, American Psychiatric Association, National Mental Health Association, and National Alliance for the Mentally Ill. Surveyed

Algorithm

Consensus guideline for treating a behavioral emergency



Source: Reprinted from Allen MH, Currier GW, Hughes DH, et al. The Expert Consensus Guideline Series: treatment of behavioral emergencies. *Postgrad Med* 2001;May:1-90, with permission from Comprehensive Neuroscience, Inc. Copyright 2001.

Table 2

Reasonable medical assessment in psychiatric emergencies

DO

Obtain a medical history, the best determinant of medical need

Listen to patients. If they say they have a medical condition, believe them; if they say they don't, try to believe them

Thoroughly check vital signs

Conduct a focused physical examination

Maintain a high index of suspicion

Be selective with laboratory testing. Check:

- thyroid-stimulating hormone in those with known thyroid disease
- electrolyte levels in volume-depleted patients or those in withdrawal
- lead levels in high-risk youth
- urine in elderly patients with acute mental status changes

DON'T

Order blanket laboratory screening

Order an ECG in healthy young patients in the absence of clinical findings

Order chest radiography in the absence of known disease/exposure/symptoms

Source: Reprinted from Currier GW. Medical assessment on the psychiatric emergency service. *Psychiatric Issues in Emergency Care Settings* 2004;3(July):17, with permission from Cliggott Publishing Group of CMP Healthcare Media. Copyright 2004.

physicians blamed inadequate Medicaid funding and bed shortages for the increasing ED visits.[7]

In crowded emergency rooms, where patients wait longer and longer to be seen, the influx of acutely ill psychiatric patients increases the risks of agitation, violence, and injury, as well as litigation.[8]

CASE CONTINUED: GOING UP IN SMOKE

Recognizing Mr. A's arousal, ED staff tries to reassure him and offers him food, something to drink, a phone call, and a magazine. When these attempts fail to de-escalate his agitation, staff offers to make him more comfortable by giving oral lorazepam, which he adamantly refuses. He is told again that he must stay until a transfer facility is found for him.

Mr. A then demands to go outside "for a smoke." When he is told ED patients cannot leave to smoke and is offered nicotine replacement, he begins to scream and lunges at one of the security officers. He is extremely strong, and additional officers are summoned. He retreats inside the room, slams the door, shatters the door window with a chair, and begins punching the broken glass. He slides to the floor in a vasovagal reaction at the sight of his bleeding hands but soon becomes combative again.

Staff give Mr. A IM haloperidol, 10 mg, and lorazepam, 2 mg, to manage his extreme agitation and place him in physical restraints to protect him and others. Within 25 to 30 minutes he is calm, and a safe environment has been re-established. The lacerations on his hands are sutured, and he is admitted to an inpatient psychiatric hospital for further stabilization and treatment.

NO PLACE FOR COMPLACENCY

Mr. A's experience illustrates how situations can become dangerous when precautions are not taken. Five steps can help you prepare and protect yourself when evaluating patients in the ED:

- seek the patient history
- evaluate the context in which the patient is being assessed
- identify arousal states (fear, anger, confusion, and humiliation)

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- structure the interview for safety
- keep your guard up during the clinical encounter.[9]

Risk is high when law enforcement officers bring a patient to the ED. Be on guard, even if the patient is 80 years old and in a wheelchair. Complacency has no place in the ED; prepare as much as you can before interviewing the patient.

When restraints are needed. Involuntary medication and/or restraints may be necessary when reasonable interventions have failed, the patient will not cooperate, and he or she is exhibiting behavior/symptoms that could result in injury. Approximately 10% to 20% of psychiatric patients require physical or chemical restraint in the ED.[10]

When possible, offer oral medications first. IM medications carry risks, such as acute dystonia

Expert consensus guidelines suggest starting with verbal intervention, voluntary medication, and show of force, although emergency medication may be a reasonable first treatment (*Algorithm, page 23*).[11] Offer oral medication first; IM medications carry risks including acute dystonia and akathisia, although these can be treated.

Lorazepam, 1 to 2 mg oral/IM, combined with haloperidol, 2 to 5 mg oral/IM, is a reasonable start in most cases. If the patient remains extremely agitated, the same medications and dosages can be repeated 30 to 60 minutes after the initial administration.[12]

Conventional oral/IM agents are usually more readily available in the ED than atypical antipsychotics, which must be ordered from the pharmacy. Recent FDA black-box warnings also emphasize that atypical antipsychotics are approved only for treating schizophrenia, acute manic and mixed episodes of bipolar I disorder, and for maintenance treatment in bipolar disorder. When compared with placebo, atypical antipsychotics have been associated with:

- increased risk for cerebrovascular events in elderly patients with dementia
- death in elderly patients with dementia-related psychosis.

Atypicals may be more appropriate than conventional antipsychotics for emergency treatment of agitation and aggression in some patients with complicating medical conditions or histories. For example, avoid high-potency conventional antipsychotics in patients with a history of extrapyramidal side effects and in those with mental retardation/developmental delay.[11] Similarly, avoid benzodiazepines in patients with chronic obstructive pulmonary disease (COPD) or a history of drug-seeking behavior or drug abuse.

Of course not all psychiatric interventions in the ED are involuntary. For example, the ED physician may start an antidepressant for a patient diagnosed with mild to moderate depression for whom hospitalization is not indicated. Characteristics of patients who may be good candidates for starting antidepressants in the ED include a clear diagnosis, no substance abuse, low suicide risk, no psychosis or agitation, available social supports, clear

Bottom Line

Consider possible life-threatening medical conditions or existing psychiatric conditions in patients presenting to the ED with behavioral symptoms. Seek information before interviewing patients who arrive involuntarily. Be empathetic, and try to establish a treatment alliance while remaining on guard. When indicated for safety, use restraints to manage violent behavior.

Related resources

- Allen MH, Currier GW, Hughes DH, et al. The Expert Consensus Guideline Series: Treatment of behavioral emergencies. *Postgrad Med* 2001;May(Spec No):1-88.
- American College of Emergency Physicians. www.acep.org
- National Alliance for the Mentally Ill. www.nami.org

DRUG BRAND NAME
Fluoxetine • Prozac
Haloperidol • Haldol
Lorazepam • Ativan

DISCLOSURE
The authors report no financial relationship with any company whose products are mentioned in this article or with manufacturers of competing products.

follow-up plan, desire to begin treatment, and ability to pay for and obtain medications.[13]

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