

The Depressed Patient And Suicidal Patient In The Emergency Department: Evidence-Based Management And Treatment Strategies

Abstract

There are approximately 12 million emergency department (ED) visits related to mental health/substance abuse annually. Approximately 650,000 patients are evaluated annually for suicide attempts. Evidence to guide the management and treatment of depression and suicidal ideation in the ED is limited. A large variation exists in the quality of care provided due to the lack of standardized guidelines aiding emergency clinicians. Depression often manifests as unexplained somatic complaints, adding to the challenge of making this diagnosis in the ED. Recognition of depression by emergency clinicians has proved poor. Suicide is associated with multiple risk factors, of which a prior history of suicide attempts is the single strongest predictor. A systematic approach is required in the ED to identify patients with or at risk of having depression, and screening tools may offer utility to identify high-risk patients.

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CME Objectives

Upon completion of this article, you should be able to:

1. Identify the key signs and symptoms of major depressive disorder and its variants.
2. Identify risk factors in depression and suicide in patients presenting in the ED.
3. Assess for suicide risk in the ED and understand the rationale for inpatient versus outpatient management of depression and depression with suicidal ideation.

Prior to beginning this activity, see "Physician CME Information" on page 24.

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Case Presentations

Between managing a hypotensive patient with sepsis and another with an acute stroke, you note 3 patients waiting to be seen: a 28-year-old, apparently healthy man with a URI, an elderly man with a sprained ankle, and a woman needing a medication refill. These seem easy enough . . .

The young man indeed has a URI, but you also find out that he recently moved to the city and states that he is just feeling “overwhelmed” and “sad” and at times thinks he would be “better off dead.” He has never seen a psychiatrist and has never been told by his primary care clinician that he has any sort of psychiatric illness. You start thinking to yourself: “Is this person pathologically depressed? Can I diagnose this in the ED? And is this person safe to go home or does he require a psychiatric consultation and possible psychiatric admission?”

Hoping for a faster case, you enter the next bay to manage the patient with the ankle sprain. As you enter, you are met by an anxious-appearing woman stating that she is concerned that her father, who twisted his ankle, has been increasingly depressed and had said to her on several occasions, “Maybe I’d be better off dead.” When talking to the patient, he states he does occasionally have thoughts of wishing he was dead but has not had any specific plan to carry out his intentions. The ankle ends up being inconsequential, but you now wonder: is the patient safe to go home? You also wonder what steps you should take to ensure his safety.

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Available Online At No Charge To Subscribers

EM Practice Guidelines Update: “Current Guidelines For ED Management Of Urticaria And Angioedema,” www.ebmedicine.net/UrticariaAngioedema

Fulfilling the rule that things come in threes, the next patient is an elderly woman whose family is also concerned that she is “depressed.” On your examination, you note some psychomotor retardation as well as blunted affect. When asking her about her mood, she states that she feels “There is a heavy weight on my mind, and I feel really sad.” She has a history of hypothyroidism and medication noncompliance, hence the medication refill. You wonder if the clinical presentation could be due to her thyroid disease and if there is anything that needs to be done in the ED . . .

At the end of the shift, you reflect on the 35 patients you managed: neither the hypotensive septic patient nor the acute stroke ended up being your most challenging patient; instead, the 3 depressed patients were the biggest management dilemmas, and you reflected on how their outcomes were directly related to the decisions you made.

Introduction

Mental-health-related chief complaints account for a significant number of ED visits. In 2007, there were 12 million ED visits in the United States involving a diagnosis related to a mental health/substance abuse issue.¹ Among the broad spectrum of mental illness complaints managed in the ED, mood disorder was the most common (42.7%), followed by anxiety disorders (26.1%), and alcohol-related conditions (22.9%). Often presenting in conjunction with depressive symptoms, suicidal ideation is another common chief complaint in the ED. Suicide is a leading cause of death, and attempted suicide is a leading cause of economic and personal disability. Data from the United States Public Health Service shows that annually nearly 650,000 individuals are evaluated in EDs for suicide attempts.² Despite the large numbers of mood-disorder-related presentations and suicidal ideation, there are few standardized guidelines or strategies outlined for ED diagnosis and management, so there is a large variation in the quality of care provided to these patients. Complicating the care provided in the ED to patients with mood disorders are the challenges in recognition of depression in either the primary or secondary complaint—a challenge exacerbated by the volume and acuity of patients being seen in the ED. Often, depression is manifested in seemingly unrelated somatic complaints, such as unexplained abdominal pain or chest pain.³ Additionally, sociocultural differences among ethnic groups in the manifestation of depression may make the diagnosis of depression symptoms difficult. Among the elderly, signs of depression can be misinterpreted as early dementia, and vice versa, which may lead to an erroneous management strategy and disposition.²

Despite the challenges of recognizing a mood disorder, depression exists as a frequent presenta-

tion to the ED. Work by Kroenke found that among outpatient medical visits in a busy urban center, approximately 20% to 25% of patients had somatic complaints that were unexplained, and within that group, measures of depression and anxiety were significantly higher compared to the general population.⁴ Meldon et al have also noted the challenges of detecting depression in the ED, finding that recognition of depression by emergency physicians in a group of geriatric patients was poor, with a sensitivity of 27%.⁵ Added to this is the concern that many external resources such as mental health programs and community resource centers are often stretched to their resource limits, and patients may look to the ED in desperation for help with acute and subacute psychiatric concerns. Taken together, the disease burden of depression is a critical condition that emergency clinicians must be aware of.

The goal of this issue of *Emergency Medicine Practice* is to examine the broad literature base on depression and depression with suicidal ideation as it pertains to the practice of emergency medicine. Risk factors associated with depression and suicide are reviewed as well as validated screening measures that may be useful for identifying depressed patients in the ED. Current management strategies and recommendations regarding acute care of the depressed patient and the depressed suicidal patient in the ED are provided.

Critical Appraisal Of The Literature

The primary references and articles for this review were collected from Ovid MEDLINE®, Web of Science, Cochrane Database of Systematic Reviews, and PubMed. A search of PubMed was performed using the terms *depression, suicide, suicidal ideation, depression in the emergency department, behavioral emergencies, biology of depression, depression treatment, suicide attempt treatment, suicide, and emergency department*. The range of studies included articles from 1980-2011. A review was done under www.guidelines.gov, which provided a guidelines summary for the clinical practice of the management of major depression in adults released in 2008. A Cochrane review of depression revealed nearly 555 review summaries. Among those, a review of the subgroup articles involving antidepressant treatment, adult population, elderly population, assessment by nonpsychiatrists, and intervention narrowed the number of review articles used in this article to 14.

The evidence to guide the management and treatment of depression and suicidal ideation in the ED is limited. Despite a large volume of current work devoted towards understanding the pathophysiology, outcomes, and treatment of depressed as well as suicidal patients, there are no standardized guidelines to date released by either the body of the

American Psychiatric Association or the American College of Emergency Physicians (ACEP) regarding management of acute depressive episodes or suicidal patients in the ED. There are multiple screening guidelines published in other disciplines (such as general internal medicine and family medicine) for depression and suicide, but none were found specific for emergency practice.⁶

Nomenclature And Classification

In the United States, classification of psychiatric conditions has been largely based on the *Diagnostic and Statistical Manual IV-TR (DSM-IV-TR)*.⁷ Major depressive disorder (MDD) is defined as an episode consisting of 5 or more symptoms (**see Table 1**), lasting for most of the day, nearly every day, for a minimum of 2 consecutive weeks, with at least 1 symptom to be either loss of interest/pleasure or depressed mood.

A conceptual approach to thinking about the varied symptoms of depression is to group them into 3 broad categories: (1) emotions (depressed mood, loss of interest or pleasure), (2) ideation (worthlessness or guilt, death, or suicide), and (3) neurovegetative or somatic symptoms (sleep, appetite or weight, energy, psychomotor, concentration). A common mnemonic to help remember the 9 symptoms is "SIG: ESCAPE": Sleep, Interest, Guilt, Energy, Suicidality, Concentration, Appetite, Psychomotor, Emotion (depressed mood).

There are multiple subtypes of major depression. Among the most commonly encountered in the ED are the following:

- **Major depression with melancholic features:** This subtype is marked by the presence of near-constant and profound depression often associated with severe neurovegetative symptoms (hypersomnia, near loss of appetite). Major depression with melancholic features is also notable for thought-process disturbances such as ruma-

Table 1. DSM-IV-TR Diagnostic Criteria For Major Depression

An episode consisting of 5 or more of the following symptoms, lasting for most of the day, nearly every day, for a minimum of 2 consecutive weeks with at least 1 symptom to be either loss of interest/pleasure or depressed mood.

- Low energy
- Poor concentration
- Thoughts of worthlessness or guilt
- Depressed mood
- Loss of interest or pleasure in most or all activities
- Insomnia/hypersomnia
- Change in appetite or weight
- Psychomotor retardation or agitation
- Thoughts of worthlessness or guilt

tive thinking, often dwelling on negative themes of worthlessness and value of life. This subtype of depression is concerning for its increased rate of suicide attempts.⁸

- **Major depression with psychotic features:** This subtype includes patients with major depression and psychotic features that are most commonly delusions/auditory hallucinations. These delusions are often mood-congruent and consistent with the depressed mood (ie, voices emphasizing the patient's worthlessness).
- **Seasonal affective disorder (SAD):** This subtype involves recurrent major depressive episodes in a seasonal pattern, which may respond to light therapy in addition to (or instead of) psychotherapy or medications.

Epidemiology

Depression is among the most common forms of Axis I psychiatric diseases in the United States. Based on the 2005 National Epidemiologic Survey of Alcoholism and Related Conditions, which surveyed 43,093 individuals, the prevalence of 1-month *DSM-IV-TR* MDD was 5.28%, with an overall lifetime prevalence of major depression in the United States at 13.23%.⁹ Another recent large survey carried out by the Behavioral Risk Factor Surveillance System (BRFSS) study and analyzed by the Centers for Disease Control and Prevention (CDC) found that among 235,067 adults surveyed in the general population from 2006-2008, 9% met the criteria for major depression.¹⁰

Attempted suicide, defined as injury from self-directed aggression/violence, is a leading cause of death and disability in the United States. Based on data collected in 2007, suicide was the 11th-leading cause of death and accounted for 34,598 deaths.¹¹ Suicide has a tremendous personal and economic impact. In 2000, the estimated cost of self-directed violence (both fatal and nonfatal) was nearly \$33 billion (\$32 billion in productivity losses and \$1 billion in medical costs).¹² The most common method of suicide in the United States was by firearms for both men and women (57% overall and 62% of suicides in men)¹³; the second leading cause was poisoning for women and hanging for men. For every completed suicide, there are an estimated 10 to 40 nonfatal suicide attempts, with an estimated 20% of suicide victims having had a history of previous suicide attempts.¹⁴

Published risk factors for depression are summarized in **Table 2**. Based on a review of previous studies, there appears to be a difference in gender, ethnicity, and age with regard to depression risk. In a survey of nearly 73,000 adults from 15 countries, the reported prevalence of MDD was nearly 2 times as high in females compared to males, and a lifetime prevalence of MDD and dysthymia (so-called "mild

depression") was 1.9 times higher in females.¹⁵ Within the United States, the prevalence of MDD in males was 3% to 5%, compared with 8% to 10% in females.¹⁶ The BRFSS study noted that the incidence of major depression in women was 4%, versus 2.7% in men.¹⁰

In general, MDD is more common in younger than older adults living in the same community.¹⁷ A survey of nearly 10,000 adults found that while the prevalence of MDD was 19% to 23% among adults younger than 65, the prevalence was 10% in adults 65 and above.¹⁸ The BRFSS study also noted a difference among age groups, with the prevalence of major depression to be 2.8% among individuals aged 18-24, 4.6% among those aged 45-64, and 1.6% in those over 65. However, within the older population, subsets of older adults had higher rates of MDD compared to both older adults and younger population groups; these groups included older adults with multiple medical comorbidities, residents of assisted living or skilled nursing facilities, and widowed older men.^{19,20}

Differences in the prevalence and incidence of depression among different racial groups in the United States have also been noted. A survey of adults living in the United States, matched for age and gender, found lifetime prevalence rates of blacks to be 10%, compared to whites at 18%.⁶ However, the more-recent BRFSS study noted that Hispanics and non-Hispanic blacks were significantly more likely to report major depression (4.3% and 4% respectively) compared to non-Hispanic whites (3.1%).¹⁰

Suicide

Suicide is associated with multiple risk factors, but the single strongest predictor is prior history of suicide attempts.¹⁴ An individual who has made a previous suicide attempt is nearly 6 times more likely to make another attempt.²¹ One in 100 people who have attempted suicide will ultimately die of suicide within the year of the initial suicide attempt.²² Elderly white men aged 80 and older have the highest suicide rate in the United States (51.6/year per 100,000).^{10,11} While rates of suicide are highest in older adults, younger adults attempt suicide more often.^{2,24} Additionally, while females attempt suicide nearly 4 times more frequently than males, males are nearly 3 times as successful in completing suicide; these differences are thought to be related to the method by which males and females choose to commit the act.²

Table 2. Risk Factors For Major Depression

- Gender (female)
- Young age or older age in a nursing facility
- Never-married, widowed, or divorced
- Black or Hispanic American

It has been found that more than 90% of individuals attempting suicide meet criteria for 1 or more major psychiatric disorder(s),²⁴ with another study finding that patients with a psychiatric diagnosis have suicide rates nearly 3 to 12 times higher compared to other patients.²⁵ Among individuals with comorbid psychiatric conditions, individuals who have had symptoms severe enough to warrant psychiatric admission have been found to have an increased lifetime risk of suicide (8.6% compared to 0.5% for the general population).²⁶ Among the psychiatric conditions most associated with suicide risk, major depression was the most common, followed by schizophrenia, personality disorders, borderline personality disorder, bipolar disorder, and posttraumatic stress disorder (PTSD).^{27,28} Other risk factors for suicide are presented in **Table 3**.²⁹⁻³²

Pathophysiology

While there is no current universally accepted model for the etiology of depression or suicide, there has been a recent explosion of interest in attempting to better understand the etiology of major depression. Current work on the etiology and pathophysiology of depression draws upon a multidisciplinary, multifactorial model and includes neurochemical, neuroanatomical, environmental, and social/cultural components.

Biological Perspectives

Current models have conceptualized depression as a complex interplay between neurochemical and neural circuitry lesions. Evidence supports the presence of decreased dopaminergic activity/transmission in the striatal cortex of individuals with depressive symptoms as well as deficits in gamma-aminobutyric acid (GABA) uptake in the prefrontal cortex.³³⁻³⁵ Other research has documented the presence of serotonergic uptake abnormalities along the hippocampus.³⁶ Neuroanatomical models making use of functional magnetic resonance imaging (fMRI) and other imaging modalities have noted the presence of prefrontal cortex, hippocampal, and striatum hypoactivation in depressed individuals compared to controls.³⁷

Table 3. Risk Factors For Suicide

- History of suicide attempt
- Older white male
- Never-married, widowed, separated, or divorced
- Recent unemployment
- History of childhood abuse
- Family history of suicide attempt
- Comorbid psychiatric illness
- Alcohol/drug use
- Impulsivity

One model attempting to integrate neuroanatomical and neurochemical processes in depression has theorized that decreased affect is a complex interplay of hypodopaminergic activity preferentially in the left prefrontal region.^{38,39} Initial interest in this theory came about from case reports noting that post-trauma patients with left-frontal-cortex damage often manifested depressive-like symptoms,⁴⁰ and subsequent studies have found samples of clinically depressed subjects who had associated decreased left-frontal activity compared to matched nondepressed controls.⁴¹ Many current pharmaceutical interventions for depression capitalize on the concept of a neurochemical imbalance. For example, selective serotonin reuptake inhibitors (SSRIs) prevent the reuptake of serotonin between synapses, functionally raising the amount of serotonin available.

While there have been several forays into understanding possible neurochemical correlates of suicide, most work has been mixed. Earlier studies have investigated the possibility of a relationship between serotonin levels and suicidal behavior, noting that decreased levels of serotonin or receptor modulators were associated with suicidal behavior.^{42,43} However, the evidence regarding the specific serotonergic receptors and gene loci have been mixed and inconclusive.⁴⁴

There also appears to be some genetic component associated with depression. A study of nearly 15,000 monozygotic and heterozygotic twin pairs found a concordance rate of 38%.⁴⁵ However, there has been little consistent work towards documenting a reliable and specific chromosomal pattern, single gene, or multiple gene loci.⁴⁶⁻⁴⁸ A meta-analysis carried out by Roy and Segal examined existing published twin case reports for suicide from 1967-2001 and noted an increased concordance rate for monozygotic twins compared to dizygotic twins (23% vs 0.7%).⁴⁹

Cognitive Perspectives

Cognitive theories of the etiology of depression focus on the development of maladaptive thinking patterns or "schema," or ways of processing information about the world.⁵⁰ Depressed individuals may develop a pattern of thinking/cognitive processing that interprets and frames social interactions and beliefs about themselves in a negative light such that they may have a predominance of thoughts resulting in helplessness, hopelessness, self-blame, and decreased self-worth.^{50,51} These maladaptive cognitive patterns may perpetuate a negatively biased framework on viewing the world. One concept in the literature – the theory of learned helplessness – was based on early animal studies in which animals given a noxious stimuli in a setting in which they could not escape would eventually cease attempts to avoid the noxious stimuli, even when their

initial restrictions were lifted.⁵² This idea of learned helplessness has been extrapolated to the realm of clinical depression, with the idea that clinical depression may represent a cognitive state of inertia and resignation by patients that their negative affect is a state/condition with which there is no escape, and as such, little benefit would come from attempting to reframe or adjust their current depressed status.^{53,54} The notion of the creation and perpetuation of negative schema and attributional style has been a cornerstone of cognitive perspectives on depression and a foundation upon which cognitive therapies are directed towards helping patients to structure and organize their depressive symptomatology.⁵⁵

Social Perspectives

Multiple social factors have been documented to play a role in the development of major depression. Incidents such as social isolation,⁵⁶ early social trauma,⁵⁷ and persistent criticism from family members⁵⁸ have all been associated with higher rates of depression. Taken together with the cognitive and biological studies on depression, it appears that major depression is a multilevel, multifactorial disease with varied modulators and driving factors.

Differential Diagnosis

The differential diagnosis for MDD is broad and can be thought of from the framework of differential mood disorders (ie, other Axis I disorders that present with depressive symptoms) and depressive symptoms secondary to an identifiable medical cause.

In addition to major depression, there are other types of mood disorders that manifest in the ED. While it is not expected for the emergency clinician to have memorized the *DSM-IV-TR* criteria for all such mood disorders, it is critical for the emergency clinician to be aware of the diversity in the spectrum of mood disorders, as it may have significant implications for evaluation and ultimate management in the ED. Among the critical mood disorder variants seen in the ED, the following are of note: dysthymia adjustment disorder with depressed mood, bereavement, depressive disorder not otherwise specified (NOS), bipolar disorder, and mood disorder secondary to a medical cause. A brief discussion of these disorders follows.

Dysthymia

Dysthymia can be conceptualized as a chronic mood disorder manifesting as depressed mood for most of the day, occurring more days than not, and associated with a number of somatic/cognitive symptoms. (See Table 4.) In contrast to major depression, the disease course is more chronic in nature but less severe than in major depression. Dysthymia is important to recognize in the ED because individuals with

dysthymia can be at increased risk for developing major depression, and symptoms elicited in the ED should arouse a higher degree of suspicion for signs of major depressive disorder and safety for self. For example, a 10-year follow-up study noted that among patients with dysthymia, nearly 75% experienced some period of time where they also met criteria for major depression, and that among the patients who had met criteria for depression, nearly 70% experienced a relapse into another episode of depression in the 3 years following recovery.^{59,60}

Adjustment Disorder With Depressed Mood

Adjustment disorder is characterized as a development of emotional or behavioral symptoms in response to an identifiable stressor (or stressors) occurring within 3 months of the stressor. (See Table 5.) In the setting of this adjustment disorder, patients may also manifest some aspects of clinical depression. The key aspect of adjustment disorder with depressed mood takes place within the context of an identifiable stressor, and as such may differ in terms of management strategies. An awareness of this mood disorder in the ED may be useful for both the emergency clinician as well as any potential consulting psychiatry service in identifying tailored management strategies.

Bereavement

Within the *DSM-IV-TR* classification system, a diagnosis of bereavement encompasses a specific manifestation of psychiatric symptoms that may manifest as clinical criteria for major depression but is in the context of a loss of a loved one that has occurred within an acute time frame (in the *DSM-IV-TR*, this is defined as 2 months). For the emergency clinician, an awareness of bereavement is important because it is often an expected response to a significant loss, and while initiation of supportive counseling and close medical follow-up is often indicated, it may not indicate the initiation of pharmacologic intervention (assuming no severe vegetative, suicidal, or psychotic symptoms). (See Table 6.)

Table 4. Diagnostic Criteria For Dysthymic Disorder

Dysthymic disorder is defined as a depressed mood for most of the day, occurring more days than not for a minimum of 2 years, and accompanied by at least 2 of the following symptoms:

- Insomnia or hypersomnia
- Low energy or fatigue
- Low self-esteem
- Poor concentration
- Difficulty making decisions
- Poor appetite or overeating
- Feeling of hopelessness

Bipolar Disorder

Patients with bipolar disorder are a frequent manifestation to the ED and often have a separate and distinct management pattern. Bipolar disorder may present with a variety of symptoms. (See Table 7, page 8.)

Depressive Disorder Not Otherwise Specified

Patients may present to the ED with depressive features that do not meet criteria for the aforementioned mood disorders (ie, major depressive disorder, dysthymic disorder, adjustment disorder with depressed mood, or bipolar disorder). Such patients may be classified under *depressive disorder not otherwise specified*. Variations include premenstrual dysphoric disorder, minor depressive disorder, and post-psychotic depressive disorder of schizophrenia. The key aspect of this diagnosis is the recognition that while some patients may not meet criteria for all of the characteristics for a specific mood disorder, the emergency clinician should maintain a high degree of suspicion for further evaluation and management for patients endorsing some features of a depressed affect symptomatology.

Mood Disorder Secondary To A Medical Cause

A crucial aspect in the evaluation of the patient with depressive symptoms is to identify potentially secondary causes of decreased mood. This manifestation of depressive-like symptoms is often driven by etiologies that entail different management strategies and treatment. The approach to the differential should be systematic, and this disorder should be considered in all patients in the ED presenting with depressive symptoms. Clues based on the patient's medication regimen, medical history, and physical examination may all suggest a potentially reversible cause for acute depressive-like presentation. Among the most common causes of a reversible depression in the ED

Table 5. Diagnostic Criteria For Adjustment Disorder With Depressed Mood

1. The development of emotional or behavioral symptoms in response to an identifiable stressor(s) within 3 months of the onset of the stressor(s). These symptoms or behaviors are clinically significant as evidenced by either of the following:
 - Marked distress in excess of what is expected from exposure to the stressor
 - Significant impairment in social or occupational functioning
2. The stress-related disturbance does not meet criteria for another specific Axis I disorder and is not merely an exacerbation of a pre-existing Axis I or Axis II disorder.
3. The symptoms do not represent bereavement.
4. Once the stressor (or its consequences) has terminated, the symptoms do not persist for more than additional 6 months.

are toxic ingestions, infectious processes, toxic-metabolic causes, and trauma. (See Table 8, page 8.)

Emergency Department Evaluation

The presentation of the depressed/suicidal patient varies widely in terms of history, physical examination, and overall clinical impression. At times, a patient may present with depression as the chief complaint; at other times, the symptoms of depression may manifest as physical ailments such as nonspecific body pain, fatigue, or restlessness.⁴⁸ It is critical to have an efficient – yet systematic and thorough – approach to these patients. Among the immediate interventions for patients presenting with a mood disorder is to ensure safety for the patient and others. Such activities include (but are not limited to) a thorough examination of patient's clothing and personal belongings for potentially dangerous objects or medications; obtaining 1:1 observation for the patient; and if the patient is at imminent risk to self or others, a medical order to hold the patient against his or her will, using physical or chemical restraints until the workup/evaluation is complete.

History

In evaluating the depressed and/or suicidal patient, it is advisable to approach the interview process with a flexible approach and with the goal of assessing the degree of imminent risk to the patient and/or others. In addition to information from the patient, the history is aided by information from family and friends, while remaining cognizant of patient confidentiality rights.

It is key to integrate the chronology of the symptoms of depression and their impact on the patient's functional status (personal/family/professional). Alleviating and aggravating factors are also useful in identifying potentially reversible causes of depression. A review of systems incorporates infectious, toxic-metabolic, and neurologic complaints. Contributing factors can be elicited from recent medical events (eg, myocardial infarction) and a complete list of medications ingested.

A thorough examination of past psychiatric history includes any history of previous psychiatric hospitalizations or treatments, suicide attempts/gestures, and dangerous behavior to oneself. Additionally, the presence of anxiety symptoms and alcohol or other substance abuse have all been shown to be

Table 6. Diagnostic Criteria For Bereavement

- The patient's symptoms are associated with the loss of a loved one that has occurred during the past 2 months.
- The patient may or may not meet the symptom criteria for major depression.

associated with a worsening course and severity of depression and should be taken into consideration when assessing the patient's potential for harm to self and overall safety. Conversely, individuals presenting with alcohol or substance abuse-related complaints may have depression as an underlying factor driving the abuse.

Assessment of suicide risk is paramount for all patients presenting with depressive symptoms, regardless of overt suicidal statements. The presence of any positive/ambivalent response should be followed up with questions regarding the nature of the ideas as well as intention, plan, and specific action. Additionally, other key aspects of the history for the potentially suicidal patient include a documentation of history of suicide attempts (including date, circumstances, and method), family history of suicide, recent life stressors, and current living situation (ie, social support, safety at home). Some clinicians have been concerned that for the patient not endorsing suicidal ideation, such questioning may somehow encourage or introduce the idea of suicide; however, the literature has not supported this hypothesis and has demonstrated that direct questioning about suicidal thoughts is not associated with increased suicidal behavior.^{61,62} (See Table 9.) Furthermore, it has been found that when asked about suicidal ideation, there is no associated induction of negative

Table 7. Diagnostic Criteria For Key Aspects Of Bipolar Disorder

1. Characterized by the occurrence of 1 of more manic episodes and no past major depressive episodes:
 - The manic episode is not better accounted for by schizoaffective disorder and not superimposed on schizophrenia, schizophreniform disorder, delusional disorder, or psychotic disorder not otherwise specified.
 - The manic episode is defined as distinct; ie, a distinct period of abnormally and persistently elevated, expansive, or irritable mood, lasting at least 1 week (or any duration if hospitalization is necessary).
2. During the period of mood disturbance, 3 (or more) of the following symptoms have persisted (4 if the mood is only irritable) and have been present to a significant degree:
 - Inflated self-esteem or grandiosity
 - Decreased need for sleep (eg, feels rested after only 3 hours of sleep)
 - More talkative than usual or pressure to keep talking
 - Flight of ideas or subjective experience that thoughts are racing
 - Distractibility (ie, attention too easily drawn to unimportant or irrelevant external stimuli)
 - Increase in goal-directed activity (either socially, at work or school, or sexually) or psychomotor agitation
 - Excessive involvement in pleasurable activities that have a high potential for painful consequences (eg, engaging in unrestrained buying sprees, sexual indiscretions, or foolish business investments)

affect/mood.⁶³ Taken together, the evidence suggests that there should be no hesitation for the emergency clinician to perform a thorough suicide evaluation for patients who express depressive symptoms or who may be a suicide risk.

During the physical examination, be aware of possible co-ingestions or medications. Although patients will often readily detail the specific ingestion, at times a patient will be unwilling or unable to acknowledge ingestion of a potentially toxic substance. The reliability of reports from patients with psychiatric complaints who deny ingestions is a common concern among emergency clinicians. This has been studied particularly in intentional acetaminophen (paracetamol) and aspirin ingestion. The overall conclusions from the limited number of studies addressing this question suggest that, in general, patients admitting some aspect of suicidality will often report an accurate ingestion history, but there is a small but significant number of patients who will not.^{64,65} Additionally, an accurate ingestion history may also be confounded by the concern that patients may present obtunded or otherwise unable or unwilling to detail their ingestion. A high index of suspicion should remain for potential co-ingestion of multiple substances. Additional information may be gathered from the delivering emergency medical services (EMS) staff that was at the scene, regarding medication/bottles seen at the site; other information may be corroborated through family/friends.

Interviewing Strategies

Eliciting intimate details of a patient's psychiatric background is a challenging endeavor but is even more so for the emergency clinician, given the limited established relationship, time constraints, and emergent nature of the visit. The emergency clinician

Table 8. Medical Conditions That May Manifest Symptoms Suggestive Of Mood Disorder

- Endocrine: hypothyroid, Cushing, hyperparathyroidism, Addison
- Nutritional deficiencies
- Central nervous system disorders: Alzheimer's, multiple sclerosis, seizure disorders, microangiopathic lesions
- Infectious process: meningitis, encephalitis, Lyme disease, HIV encephalopathy
- Medication side effects: common medications include antihypertensive (beta-blockers, calcium-channel blockers), steroids, hormone therapy (progesterone, testosterone, gonadotropin-releasing hormone)
- Intracranial process: space-occupying lesions and infections
- Inflammatory conditions such as systemic lupus erythematosus
- Toxic-metabolic process
- Nutritional deficiency (commonly B12, B6/pyridoxine, thiamine)
- Obstructive sleep apnea

should attempt to maximize the patient's privacy, when possible (ie, avoiding interviewing in hallways or stretchers), and should use a patient, nonjudgmental approach. Open-ended questions (eg, "What brought you here today?") versus closed-ended questions (eg, "Did you mean to kill yourself today with these pills?") may help elicit more detailed and helpful information and thus a better understanding of the patient and their ability to contract for safety.

Screening Tools

While not widely adopted in many EDs, the use of standardized screening/assessment tools may be useful in evaluating patients with mood-disorder-related complaints, allowing the emergency clinician to quantitatively assess for potentially high-risk patients in a quick, structured format. Several screening questionnaires have been developed for depression; among the most-used in the primary care setting include the Geriatric Depression Scale, the Beck Depression Inventory for Primary Care (BDI-PC), and the Patient Health Questionnaire (PHQ-9). The scales have shown wide variability in sensitivity and specificity, with sensitivities ranging from 50% to 97% (median 85%) and specificities from 51% to 98% (median 74%).⁶ While many of these tools have been validated in controlled settings, the ED poses challenges that may be difficult to overcome. In attempting to address this, several of these screening tools have been abbreviated.

Another potentially useful tool that may help emergency clinicians structure the interview of patients with depressive symptomatology is to use the modified SAD PERSONS scale, which has been validated and used in the ED in the assessment of depression and suicide risk.⁶⁶ (See Table 10.)

Geriatric Depression Scale

The Geriatric Depression Scale was originally a 30-item questionnaire that was designed to identify depression risk in geriatric (aged 65 and older) patients,⁶⁷ and it has been validated in a large sample of geriatric patients as well as in younger adults (despite its name).⁶⁸ A 15-item form has been validated and is now widely used, as well as a 5-question geriatric depression version, which have been shown to be as sensitive in detecting depression in multiple clinical settings (hospital, outpatient clinic, and nursing home).⁶⁹ (See Table 11, page 10.)

Table 9. Key Elements Of History For The Potentially Suicidal Patient

- Presence of suicidal ideation: intent and plan
- History of suicide attempts
- Family history of suicide
- Recent life stressors
- Current living situation (ie, social supports)

Beck Depression Inventory For Primary Care

The BDI-PC is a 7-item scale adapted from the larger 21-item Beck Depression Inventory (BDI) that has been used as a depression screening tool. The original BDI has been extensively studied and validated across gender, age, and multiple specific medical populations.⁷⁰⁻⁷² A BDI-PC score of 4 or greater has been found to have a sensitivity of 95% and specificity of 99% in a group of primary care outpatients, though this study was limited by a small sample size (60 men and 60 women).⁷³ While this tool has been used infrequently in the ED, the full BDI has been used in previous ED-based screening studies looking at the incidence of depression among depressed adults and adolescents.⁷⁴

PHQ-9 And PHQ-2

The Patient Health Questionnaire (PHQ) is a self-administered questionnaire which is based on the Primary Care Evaluation of Mental Disorders (PRIME-MD) diagnostic instrument for detection of common mental disorders.⁷⁵ The PHQ-9 is a 9-question depression scale that has been found to be a valid and reliable measure of depression.^{75,76} (See Table 12, page 10.) Unlike other tools, the PHQ-9 is not a screening tool but involves all elements of the depression diagnosis; thus, it establishes the clinical diagnosis of depression and does not need further confirmation. It has been studied extensively and has been found to be reliable and valid while screening for depression severity across gender and different culture contexts, including Southeast Asia, eastern Africa/Kenya, and western Africa/Ghana.⁷⁷⁻⁸⁰ Another feature of the PHQ-9 is the ability to gauge and follow clinical severity of depression.⁸¹

An even briefer version of the PHQ-9, the 2-item PHQ-2, has also begun to be used in several

Table 10. SAD PERSONS Assessment Scale⁶⁶

Factor	Points
Sex (male)	1
Age < 19 or > 45	1
Depression or hopelessness	1
Previous suicide attempts or psychiatric hospitalization	1
Excessive alcohol or drug use	1
Rational thinking loss	2
Single, divorced, or widowed	1
Organized or serious suicide attempt	2
No social support	1
Stated future intent	2

Scoring:

< 6 = Outpatient management

6-9 = Emergency psychiatric evaluation

> 9 = Inpatient hospitalization

clinical settings. (See Table 13.) A study by Kroenke et al found that among 6000 patients in 8 primary care clinics and 7 obstetrics-gynecology clinics, the PHQ-2 had a sensitivity of 83% and specificity of 92% for major depression compared to the standardized structured patient interview.⁸¹ Other work carried out by Corson et al found that a PHQ-2 score greater than 3 was 97% sensitive and 92% specific for detecting major depression and suicidality in patients,⁸² although a recent study by Arroll et al looking at 2642 patients in a busy primary care setting found that the PHQ-2 sensitivity and specificity for detecting major depression was 86% and 78%, respectively, compared to a PHQ-9 sensitivity and specificity of 74% and 91%.⁸³

Screening Tools Summary And Recommendations

With various screening tools now available for potential use in the ED, there are multiple options for their implementation in practice. The use of such psychiatric tools has not been extensively studied in the ED. However, based on the authors' review on the existing literature and practice, we recommend use of scales such as the PHQ-9 and, to a lesser extent, the PHQ-2. The PHQ-9 has been used to identify high-risk patients for depression in multiple inpatient and outpatient contexts⁷⁷⁻⁸⁰ by both physicians and nurses⁸⁴ and across different age groups.⁸⁵ Taken together, with its ease of use and clear scoring system, the PHQ-9 represents a rapid tool that may aid the emergency clinician in practice. The creation of an even more focused scale, the PHQ-2, while promising, has yet to be shown to be as effective and valid in such a broad group of settings.

Physical Examination

Approaching the physical examination in a person presenting with depressive symptoms is a twofold task. In addition to identifying clues that would suggest an underlying medical or organic cause to the symptom presentation, data from the physical examination can help guide the emergency clinician towards understanding the severity and scope of the depression. Additionally, the physical

Table 11. Five-Item Geriatric Depression Scale

- Are you basically satisfied with your life?
- Do you often get bored?
- Do you often feel helpless?
- Do you prefer to stay at home rather than going out and doing new things?
- Do you feel pretty worthless the way you are now?

A single point is given for a 'no' response to the first item and a 'yes' response to each of the other 4 items. A score of 2 points or greater is considered a positive screen for depression.

examination should collect the requisite information in a systematic manner, allowing an efficient and information-rich communication with a psychiatrist, should a consultation with one be needed. Beginning with a review of the vital signs, assess for evidence of reversible causes of altered mental status such as fever, hypoxia, hypotension, or hypoglycemia. In the setting of a suspected ingestion, note evidence of a toxic syndrome, "toxidromes." If there is anything in the history to raise the suspicion of trauma, a comprehensive evaluation, with the patient completely undressed, should be conducted to identify any injuries. General appearance is critical. Note the patient's eye contact, speech, and overall motor activity. Depressed patients may have a blunted affect and avoid eye contact; conversely, manic episodes may be manifested by pressured speech and increased psychomotor activity. The neurologic examination, with a focus on cranial nerves II, III, IV, and VI, identifies focal neurologic deficits that may clue the emergency clinician to an intracranial mass. Evidence of any endocrine abnormalities (ie, enlarged thyroid) alerts the emergency clinician to potential reversible causes of depression. The skin examination looks for evidence of drug use, signs of self-injury, or soft tissue lesions.

Evaluation of the patient's psychiatric/mental status is a critical portion of the physical examination. It is imperative to have a systematic approach such that information may be collected to assist under-

Table 12. The Patient Health Questionnaire-9

Patient is asked "Over the last 2 weeks, have you had the following problems?" The patient is asked to respond "not at all" (0 points), "several days" (1 point), "more than half the days" (2 points), "nearly every day" (3 points).

1. Little interest or pleasure in doing things
2. Feeling down, depressed, or hopeless
3. Trouble falling asleep or staying asleep, or sleeping too much
4. Feeling tired or having little energy
5. Poor appetite or overeating
6. Feeling bad about yourself or that you are a failure or have let yourself/family down
7. Trouble concentrating on things like reading the newspaper or watching TV
8. Moving or speaking so slowly that other people have noticed; or the opposite: being so fidgety or restless that you have been moving around a lot more
9. Thoughts that you would be better off dead or of hurting yourself

Score is added:

- 1-4 = minimal depression
- 5-9 = mild depression
- 10-14 = moderate depression
- 15-19 = moderately severe depression
- 20-27 = severe depression

For a sample questionnaire, visit www.ebmedicine.net/PHQ9

standing of the patient and to guide workup and management. Furthermore, the physical examination should be collected in such a way that identifies and addresses key information to be conveyed to consulting psychiatry service should they be involved in the management of the patient in the ED. See Table 14 for a summary of the recommended examination.

General Appearance

The emergency clinician should make note of the patient's general appearance during the interview/examination. Items such as a patient's overall grooming, clothing, and posture may illustrate normal variants or a particular abnormality (ie, patient is disheveled, poorly groomed, wearing winter clothing in summer, etc.)

Orientation

During the examination, a formal attempt should be made to assess the patient's orientation. This may be accomplished by asking the patient his or her full name, the full date (day, month, year), and place where the patient is currently located. Such information is useful towards helping evaluate the patient's cognitive status and impairment.

Speech

The psychiatric examination should make note of the patient's speech, including volume, rate, articulation, coherence, and spontaneity. Such commentary is useful, as many Axis I disorders are associated with speech disturbances. For example, slowed speech may be present in patients with depression while pressured speech may be present with patients with bipolar disorder.

Motor Activity

The assessment should include comment on the patient's motor behavior, including gait, gesture, overall general body movement, and tics. Certain Axis I disorders may manifest themselves with exaggerated movements (ie, bipolar affective disorders) while other conditions such as MDD may be associated with marked psychomotor retardation. Of note, extrapyramidal movement may be present as a result of psychotropic medication.

Table 13. Patient Health Questionnaire-2

Patient is asked, "Over the last 2 weeks, have you had the following problems?" The patient is asked to respond "not at all" (0 points), "several days" (1 point), "more than half the days" (2 points), "nearly every day" (3 points).

1. Little interest or pleasure in doing things
2. Feeling down, depressed, or hopeless

Score of 3: sensitivity for detecting major depressive disorder: 82.8%, specificity: 90%, positive predictive value: 38.4.

Affect

Affect, defined as a patient's expressed emotional state, should be noted on the examination.³⁹ Descriptive terms such as *blunted affect*, *sullen*, or *agitated* can be used. The emergency clinician should note if there is emotional lability during the examination (ie, the patient switches affect rapidly during the examination). Additionally, a comment should be made on whether there is mood congruency during the interview. For example, a mood-incongruent context may arise in the setting of a patient laughing when speaking of his suicide attempt or crying while discussing a recent positive experience.

Mood

Mood is a more historical aspect of the interview, in the sense that the emergency clinician should ask the patient to report his or her mood for the past few days/weeks. This is a subjective report by the patient, and the emergency clinician must determine what the patient means. When possible, the emergency clinician should use words directly used by the patient (ie, "I have felt terrible and depressed over the last week"). A note should also be made if the patient's mood and affect are congruent during this phase of the examination (ie, noting the patient's affect while he is stating he has felt terrible and depressed over the last week). Patients who may use denial or who lack insight into their problems may not realize that their ostensibly nonchalant, cheerful affective expression may not match their reported depressed mood.

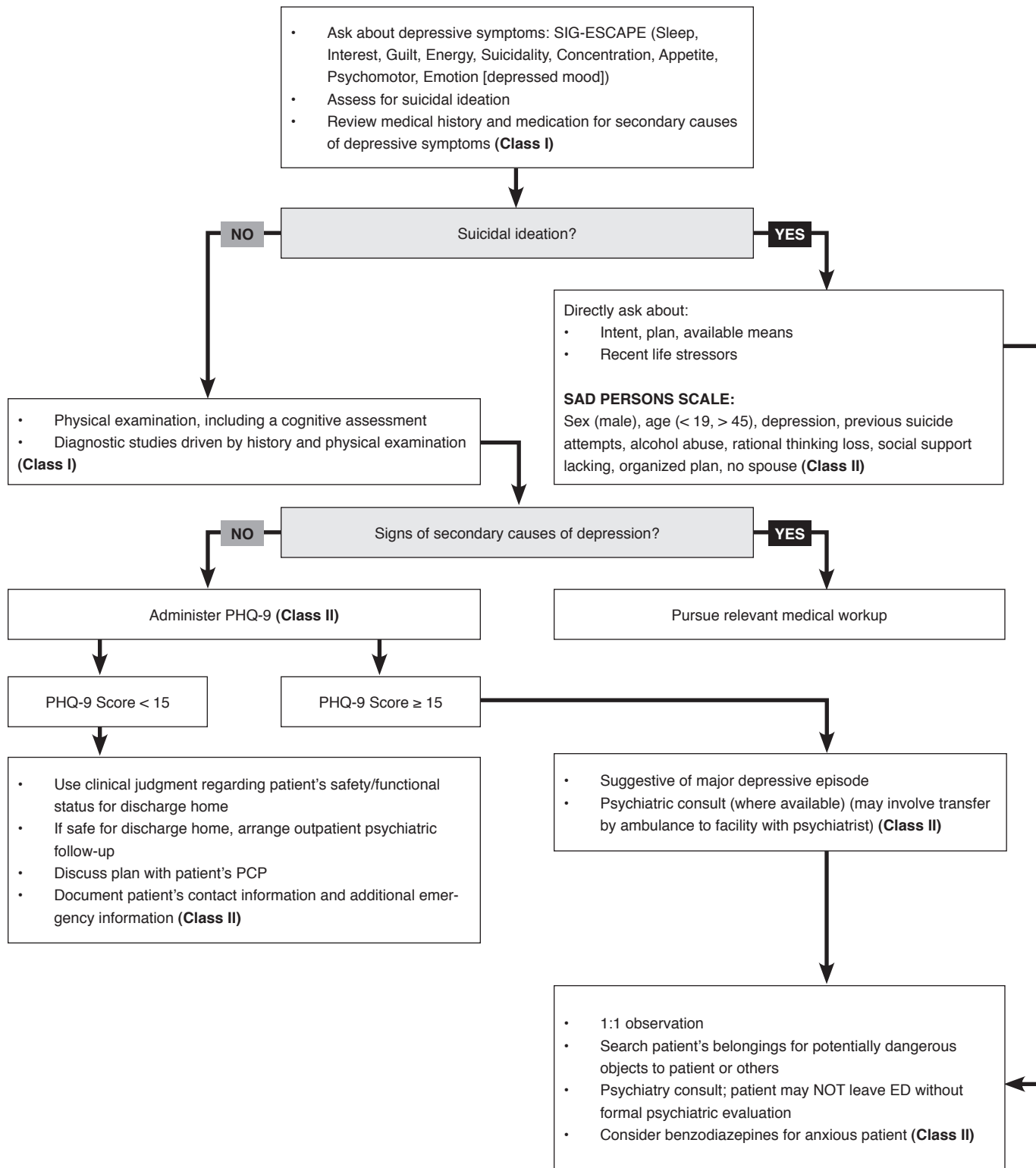
Thought Process

The emergency clinician should note during the examination how the patient's thoughts/ideas are expressed during the interview. This includes an assessment of the patient's thought production and flow and commentary over whether the patient's thinking is logical, tangential, goal-directed, or shows a loosening of associations or flight of ideas (ie, the ideas expressed by the patient are not logically connected to each other). Such a lesion in thought process may be evident in certain illnesses such

Table 14. Key Aspects Of Mental Status Evaluation On Physical Examination

- Cognitive status
- Appearance
- Speech
- Motor
- Affect/mood
- Thought content
- Thought process
- Perceptual disturbances
- Suicide/homicidal thoughts

Clinical Pathway For Assessing For Depression



Abbreviations: ED, emergency department; PCP, primary care provider; PHQ-9, 9-item Patient Health Questionnaire.

For Class of Evidence Definitions, see page 13.

as bipolar disorder, particularly during the manic phase,⁴³ and may be a clue that some toxic-metabolic process may be present and the symptoms expressed may be secondary to an underlying etiology.

Thought Content

The content/material of the patient's speech should be noted during the interview and examination. In particular, the emergency clinician should pay attention to any general/repetitive themes or the presence or absence of delusion as well as suicidal/homicidal thoughts. Delusional thinking can be defined as fixed false beliefs and may present in a multitude of ways, including delusions of persecution, grandiosity, or somatic complaints. Obsessions are defined as recurrent persistent thoughts that may intrude involuntarily into a person's thinking and may not be based in reality. Such symptoms may be present in anxiety disorders such as obsessive-compulsive disorder but may also be present in MDD or bipolar disorder.

Perceptual Disturbances

The interviewer should note whether the patient is experiencing any disturbances in perception such as auditory, visual, olfactory, or somatosensory disturbances. Perceptual disturbances in the absence of actual sensory stimuli are defined as hallucinations.³ The emergency clinician should attempt to clarify this with the patient in clear language such as, "Do you ever hear voices talking to you and then realize that no one else is hearing those voices or that you are actually alone?" Such symptoms may be present in depression with psychotic features or schizophrenia. The emergency clinician should make note of the patient responding to such internal stimuli (ie, talking to the voices that are talking to him).

Suicidal And Homicidal Ideation

It is critical to include an assessment of suicidal- and homicide thoughts/behavior in patients

presenting with psychiatric symptoms. The emergency clinician should, in a nonjudgmental fashion, explore the presence or absence of current suicidal ideation, intent (how much the patient would like to hurt himself), as well as plan (whether the patient has a specific method to kill himself). In a similar fashion, thoughts of hurting another individual or group of individuals should be assessed and studied in a systematic fashion such that intent and plan is clarified. One useful mnemonic/scale that has been developed for ED use in the rapid assessment of patients with suicidal ideation is the SAD PERSONS scale.⁶⁶ (See Table 10, page 9.)

Cognitive Status

Evaluation of cognition begins with assessing orientation to person, place, and time, followed by an assessment of immediate recall (immediately repeating 3 objects) and delayed recall (repeating the 3 objects after 3 minutes). (See Table 15, page 14.) If orientation and immediate recall are impaired, delirium must be considered. If the patient cannot store information, they will be unable to recall, in which case the emergency clinician needs to be careful not to misinterpret the impairment in delayed recall as a sign of dementia. In the case that orientation and immediate recall are intact but delayed recall is impaired, the emergency clinician must suspect an underlying dementing process and recommend a more comprehensive evaluation.⁸⁴

Diagnostic Studies

Depression and suicidality are clinical diagnoses based on a detailed history by the emergency clinician. Laboratory studies are used to assess for medical etiologies of the presentation as well as to identify any possible toxic-metabolic abnormalities such as those resulting from deliberate poisoning or substance abuse. Basic medical laboratory work often includes

Class Of Evidence Definitions

Each action in the clinical pathways section of *Emergency Medicine Practice* receives a score based on the following definitions.

Class I

- Always acceptable, safe
- Definitely useful
- Proven in both efficacy and effectiveness

Level of Evidence:

- One or more large prospective studies are present (with rare exceptions)
- High-quality meta-analyses
- Study results consistently positive and compelling

Class II

- Safe, acceptable
- Probably useful

Level of Evidence:

- Generally higher levels of evidence
- Non-randomized or retrospective studies: historic, cohort, or case control studies
- Less robust RCTs
- Results consistently positive

Class III

- May be acceptable
- Possibly useful
- Considered optional or alternative treatments

Level of Evidence:

- Generally lower or intermediate levels of evidence
- Case series, animal studies, consensus panels
- Occasionally positive results

Indeterminate

- Continuing area of research
- No recommendations until further research

Level of Evidence:

- Evidence not available
- Higher studies in progress
- Results inconsistent, contradictory
- Results not compelling

Significantly modified from: The Emergency Cardiovascular Care Committees of the American Heart Association and represen-

tatives from the resuscitation councils of ILCOR: How to Develop Evidence-Based Guidelines for Emergency Cardiac Care: Quality of Evidence and Classes of Recommendations; also: Anonymous. Guidelines for cardiopulmonary resuscitation and emergency cardiac care. Emergency Cardiac Care Committee and Subcommittees, American Heart Association. Part IX. Ensuring effectiveness of community-wide emergency cardiac care. *JAMA*. 1992;268(16):2289-2295.

This clinical pathway is intended to supplement, rather than substitute for, professional judgment and may be changed depending upon a patient's individual needs. Failure to comply with this pathway does not represent a breach of the standard of care.

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complete blood count (CBC), chemistries, urinalysis, electrocardiogram (ECG), urine pregnancy test (if female), serum drug levels for alcohol and/or medication, and urine toxicology screen for drugs of abuse. If the patient is on certain psychotropic medications with known toxic effects (such as lithium), levels should be drawn. A clinical policy released by ACEP in 2006 regarding diagnosis and management of the adult psychiatric patient in the ED noted a Level B recommendation for obtaining routine laboratory testing in alert, cooperative patients with normal vital signs and a nonfocal history and physical examination.⁸⁵ Furthermore, a Level C recommendation was made for the routine use of urine drug screen in the same population of alert, cooperative psychiatric patients. In other words, urine toxicology screens for drugs of abuse should not delay patient evaluation for transfer to a psychiatric facility; such conversations should be had institution-to-institution between the two services.

Though rare, imaging studies of the brain such as computed tomography or magnetic resonance imaging might be indicated if there is a high degree of suspicion for an anatomical lesion. Endocrine etiologies of depressive symptoms are always a consideration, and there is a low threshold for checking a thyroid stimulating hormone (TSH) level in depressed patients.

Treatment

Patient Safety And Involuntary Containment In The Emergency Department

The acute management of the depressed patient in the ED requires a multifaceted approach. One central concern is assessment of the safety of the patient as well as others. Patients who endorse active suicidal thoughts or thoughts of hurting other individuals are usually not safe for discharge and need emergency psychiatric evaluation. For patients who refuse such an evaluation, it may be necessary to involuntarily hold them in the ED until a complete psychiatric and safety evaluation is performed. Statutes governing such involuntary holds are governed by state law, and procedures vary from state to state. The United States Supreme Court has ruled that involuntary hospitalization/and or treatment without evidence of risk violated an individual's civil rights and subsequently, individual states have

Table 15. Key Aspects Of Mental Status Evaluation On Physical Examination⁸⁵

- Orientation to person, place, and time
- Registration: immediate recall of 3 objects
- Attention and calculation: spelling "world" backwards or serial 7s
- Delayed recall: repeating 3 objects back after 3 minutes

changed their statutes to reflect this principal. In general, an individual must be exhibiting behavior that is an imminent danger to himself or others, the hold must be for an evaluation only, and a court order must be received for more than a very short-term treatment/hospitalization (in many states, this is 72 hours). Emergency clinicians must be cognizant of the laws and document explicitly their concern for the patient's safety for himself and/or potential to harm himself and/or others. While the actual process of involuntary (or "civil") commitment is a legal process that occurs outside of the ED, such commitment proceedings may follow a period of emergency hospitalization begun in the ED, and as such it is crucial for the emergency clinician to be knowledgeable about the applicable state and federal laws governing initial involuntary holds.

For patients who do not endorse active suicidal or homicidal ideation but endorse strong depressive symptoms, it is prudent to involve a mental health clinician to facilitate the development of an acute treatment plan. These patients may not require a mandatory inpatient psychiatric hospitalization but would benefit tremendously from an integrated effort to coordinate the follow-up care required to facilitate outpatient management. Care may include referral to outpatient psychiatric treatment, partial hospitalization, or voluntary hospitalization programs. Typically, these dispositions and care plans will be facilitated by either consultation with the psychiatric service or with other mental health professionals in the ED.

Depression Treatment: Pharmacotherapy

The administration of psychotropic medications typically used to treat depression is not routinely initiated in the ED. Because the clinical effects of many antidepressants are usually not seen for at least 2 weeks after starting treatment, from an ED standpoint this does not reflect prudent clinical practice, given lack of follow-up and the risk for serious adverse side effects.⁸⁶ However, because many depressed patients in the ED may be currently using these types of medication, **Table 16** lists the most commonly used antidepressants, their presumed mechanism of action, and their side effects. If antidepressant medications are prescribed in the ED, it is best done in consultation with psychiatry. In some depressed patients with significant anxious features, a short course of anxiolytics pending follow-up with psychiatry may help bridge therapy; however, a literature search through 2011 identified no studies discussing the implications/effectiveness of such strategies, so no specific recommendations can be made at this time regarding this practice. There have been multiple studies examining the various overall efficacy of the available SSRIs (citalopram, escitalopram, fluoxetine, fluvoxamine, paroxetine,

sertraline, venlafaxine) compared to selective norepinephrine reuptake inhibitors (SNRIs) (mirtazapine, venlafaxine), serotonin-norepinephrine reuptake inhibitors (SSNRIs) (duloxetine), and other second-generation antidepressants (bupropion, nefazodone). Three multicenter randomized double-blind studies examined the differences in effectiveness of various second-generation antidepressants such as setraline, citalopram, paroxetine, and fluoxetine, and all 3 studies noted no significant differences in the effectiveness of the medications towards management of depressive symptoms.⁸⁷⁻⁸⁹

The choice of which specific antidepressant to be used for patients should ideally be made in consultation with a psychiatry provider or primary care team following the patient, as ongoing follow-up is essential for monitoring efficacy and impact of any intervention.

Management Of Suicide Risk

Patients with suicidal ideation, suicidal behavior, or risk factors that increase their potential for suicide are the most common psychiatric emergency seen in hospital EDs. It is important that every ED develop a policy and procedure for assessing and managing patients who are a suicide risk. Those who pres-

ent with overt suicidal statements or behaviors are readily identifiable, but screening mechanisms for the assessment of suicidal ideation should occur with patients who present with high-risk conditions including depression, psychosis, severe anxiety, acute substance abuse, and serious medical illness with recent exacerbation. Screening should include directly asking if patients have recently thought about harming themselves and, if so, whether they have a specific plan.

Individuals with active suicidal risk warrant an emergent psychiatric evaluation. Patients may be unwilling to cooperate with such an assessment, and prevention of the patient leaving the ED may be necessary until such an evaluation can be completed. Patients are at increased risk of self-harm and/or elopement during this period. Effective suicide precautions should include mechanisms to alert medical and nursing staff to the potential safety risk and appropriate search of the patient and his belongings so that dangerous items (medications, weapons, etc.) can be removed. The physical environment of the patient's room should be assessed to minimize potential risk, including removal of tubing and needles. Patients at acute safety risk may also warrant constant observation, as suicidal behavior may be impulsive in nature.

Table 16. Antidepressants Commonly Prescribed For Major Depression

Medication Class and Names	Mechanism	Common Side Effects
Selective serotonin/norepinephrine reuptake inhibitors: fluoxetine (Prozac®), paroxetine (Paxil®)	Block serotonin reuptake at synaptic level	<ul style="list-style-type: none"> • GI upset • Sexual dysfunction • Serotonin syndrome
Venlafaxine (Effexor®), duloxetine (Cymbalta®)	Block norepinephrine reuptake at synaptic level	
Atypical antidepressants: bupropion (Wellbutrin®), mirtazapine (Remeron®)	Mechanism often involves reuptake inhibition, norepinephrine and dopamine reuptake inhibitors (bupropion), combination reuptake inhibitor and receptor blocker (mirtazapine)	Less sexual dysfunction/GI upset compared to SSRIs
Tricyclic antidepressants: amitriptyline (Elavil®), desipramine (Norpramin®, Pertofrane®), clomipramine (Anafranil®), doxepin (Adapin®, Silenor®, Sinequan®), imipramine (Tofranil®), nortriptyline (Pamelor®), selegiline (Atapryl®, Carbox®, Eldepryl®, Zelapar®), trimipramine (Surmontil®)	Block both serotonin and norepinephrine reuptake at synaptic level	<ul style="list-style-type: none"> • Cardiotoxicity • Long QT • Arrhythmia
Monoamine oxidase inhibitors: phenelzine (Nardil®), tranylcypromine (Parnate®)	Prevent degradation active neurochemical	<ul style="list-style-type: none"> • Uncontrolled hypertension with dietary interaction, particularly with substances containing tyramine (ie, aged cheeses). Tyramine is metabolized by MAO and in setting of MAO inhibitors, high levels of tyramine result in adrenergic surge, leading to hypertension, increased heart rate, and so called "cheese effect" • Insomnia • Orthostasis

Abbreviations: GI, gastrointestinal; MAO, monoamine oxidase inhibitors; SSRI, selective serotonin reuptake inhibitor.

Emergency departments would be wise to develop policies and protocols regarding suicide precautions, patient searches, and constant observation.

Some controversy exists as to whether patients assessed to be at risk of harm to themselves should be disrobed. In general, it is best to encourage the patient to change into a hospital gown, but forced disrobing should only occur when the risk is felt to be significant. Again, the development of disrobing policies in the ED can help minimize conflicts and inconsistent behavior on the part of staff. Training in de-escalation approaches and restraint techniques for ED staff can help avert unnecessary physical confrontations or, when necessary, help minimize the risk to staff and patient. Where security officers exist as part of the ED staffing, they should participate in such training.

The acute management of the patient who has made a suicide attempt is often focused on the method of self-harm that the patient utilized. General strategies for the most common methods are outlined below. The assessment and management of ingestions begins in parallel to the underlying psychiatric evaluation; early involvement of a local poison center is advisable. Administration of charcoal, gastric lavage, and other measures may be indicated depending on the time to presentation and the substance ingested. While most patients with ingestions remain cooperative and alert, the emergency clinician must always be vigilant in case the airway needs to be secured.

Suicide contracts have at times been utilized in the ED in the acute management of patients presenting with suicidal ideation.⁹⁰ These verbal/written agreements between the patient and the emergency clinician (also known as a “no-harm” contract) are intended to have the patient articulate that they will not attempt to hurt themselves. Initially developed in the realm of psychiatry,⁹¹ this technique has been used variably in a wide range of contexts from the psychiatry treatment setting to primary care physicians in both inpatient and outpatient settings.⁹¹ Studies examining the clinical utility of the no-harm contract are mixed; one study found that 41% of psychiatrists who had used such contracts still had patients who went on to commit suicide or suicide attempts⁹² and a review by Lewis⁹³ found that suicide contracts were not associated with a significant reduction in later suicide attempts; thus, the current data are equivocal at best on the use of such contracts within the scope of acute management for the emergency clinician and should be done with discussion with the psychiatry consulting service.

Controversies And Cutting Edge

Alcohol Intoxication And Suicide Risk In The Emergency Department

Patients with depression are at significantly in-

creased risk of alcohol abuse and dependence. Data suggests that this relationship is bidirectional. Depressive illness often fosters hopelessness, social isolation, and dysphoria, all of which can lead to the use of alcohol. Conversely, the impact of alcohol on mood is generally in the direction of worsening depression. Furthermore, alcohol has the general effect of disinhibition of brain function, which may lead to worsening suicidal thoughts and decreased ability to control suicidal behavior. As a result, alcohol abuse is a major lifetime risk factor for completed suicide.²⁹ In addition, individuals who make suicide attempts or present with suicidal ideation are more likely to be acutely intoxicated.

Such patients often present to the ED intoxicated or under the influence of alcohol, which can make it a challenge to evaluate their intentions to harm themselves or others. Patients may endorse suicidal ideation or a wish to harm others while intoxicated but may deny such thoughts or intentions when sober. This change in verbalized intent may impact disposition, which explains why many mental health providers will insist that the patient be “sober” before they do an assessment. Thus, the emergency clinician and consulting mental health providers are faced with a paradox. Population-based studies clearly indicate that such patients have an increased lifetime risk of death due to suicide. However, there are no data to support that patients who are no longer suicidal when intoxication clears are at increased acute safety risk. Therefore, the decision whether to seek psychiatric hospitalization for these patients is a difficult one. Emergency clinicians are advised to develop a consistent but thoughtful approach to the assessment of intoxicated suicidal patients, which should involve the following concepts:

- It is prudent to allow the patient to achieve a reasonable level of sobriety before completing the evaluation. Sober individuals are more likely to be organized in their thinking and more accurate in their assessment of their own safety.
- Guidelines for establishing when the patient has achieved an effective level of sobriety should be based on clinical assessment and not blood alcohol levels. Chronically alcohol-dependent individuals may be sober despite significant blood alcohol level.
- When possible, consultation with a psychiatrist or qualified mental health provider is indicated.
- Patients in active withdrawal should be aggressively treated throughout their stay in the ED.
- The clinical assessment should evaluate for comorbid mood disorders, severity of alcohol and other substance dependence, history of prior suicide attempts, and recent serious psychosocial changes in the patient’s life.
- Strength of social supports and/or ongoing outpatient treatment should be assessed, and family

and treaters should be involved in the emergency care and decision-making when possible.

Once an assessment is completed, it is often more apparent whether acute safety concerns are present. Patients who are truly suicidal will typically reveal this during assessment, even when sober. For patients without evidence of acute ongoing safety risk, acute but voluntary treatments may still be indicated. This may include outpatient substance abuse treatment, referral to a detoxification center, day treatment, or combined substance abuse/psychiatric hospital unit (often known as “dual diagnosis unit”). Efforts should be made to identify the level of care the patient is motivated to participate in rather than attempting to coerce treatment. Again, involving people with an established relationship with the patient in this process, such as family and outpatient treaters, may increase the likelihood of patient participation in treatment.

The 2006 ACEP/American Association of Emergency Psychiatrists guidelines support this type of approach, recommending a personalized approach to intoxicated psychiatric patients.^{94,95} The guideline emphasized evaluating the patient’s cognitive abilities rather than the specific blood alcohol level as the guiding factor in deciding whether emergency clinicians should pursue a formal psychiatric assessment. Future research in this area may explore the correlation of blood alcohol with decision-making capability, but currently it is recommended to evaluate patients as a function of their individual presentation as well as a period of observation for intoxicated patients with psychiatric symptoms to evaluate for possible resolution of psychiatric symptoms as the patient sobers.

Serotonin Reuptake Inhibitors And Suicidality/Age Interaction

Recent changes in specific types of medications or a new medication may be associated with suicidal ideation. In particular, SSRIs have been noted in several case studies to be associated with an increased risk of suicidal behavior either with the commencement of the medication or a change in dosage.⁹⁶ A meta-analysis by Barbu et al found that the use of SSRIs was associated with a reduced risk of suicide in adults with depression but an increased risk among adolescents.⁹⁷ The underlying process for this potential interaction is unknown, but if the presence of suicidal ideation is abrupt and novel to the patient’s clinical presentation, such a medication change may warrant further exploration and discussion with the prescribing physician.

Special Populations

Military Veterans

With the recent military engagement in the Middle East and beyond, there has been a growing interest in the effects of traumatic events and incidence of psychiatric complications such as PTSD, depression, and suicide.^{98,99} Numerous emergency facilities within the Veterans Administration medical system have noted an increased rates of depressive symptoms among returning military veterans.¹⁰⁰ The ramifications for the emergency clinician are broad, whether or not one practices in a military-affiliated hospital. As with many other mental disorders, the downstream effects of Axis I conditions such as MDD, suicide, and PTSD affect not just the patient but family, friends, and other contacts. Care must be taken to inquire about the patient’s adjustment back to civilian life and to pursue further questioning/workup when concerning history is elicited. When evaluating recent military veterans, a high degree of concern should be maintained to ensure that such patients have adequate social and professional support in place. This may be done in conjunction with social work services in the ED or with the patient’s primary care team. There has been a surge of interest in this area, but there are multiple unanswered questions: from the actual disease burden noted in military groups to the possible differential vulnerability of veterans based on age, military experience, gender, or race. It is incumbent upon emergency clinicians in both military and civilian EDs to be aware of this potential association and remain vigilant in these patients to ensure they receive appropriate evaluations and support.

Disposition

Patients presenting with depressive symptoms in the ED often represent challenging disposition dilemmas. Of paramount concern is patient safety and their ability to care for themselves. Based on this concept, the present standard of care for the depressed patient presenting with active suicidal ideation is to have the patient remain in the ED, both voluntarily and involuntarily, for a formal psychiatric assessment and likely inpatient psychiatric hospitalization. Additionally, depressed patients who present with psychotic symptoms also warrant a psychiatric inpatient hospitalization after ruling out acute medical causes. Patients with severe depressive symptoms (ie, depression with melancholic features) who may endorse passive suicidal ideation and who have significant deficits in functional status in social/occupational contexts also warrant an inpatient psychiatric hospitalization in consultation with psychiatric colleagues. Finally, individuals with severe depression without suicidal ideation but with

Risk Management Pitfalls For Depression In The Emergency Department

- 1. “The patient is a frequent flyer and often comes to our ED intoxicated and leaves when sober. I thought he was just drunk and wanted to sleep.”**

Patients who make frequent visits to the ED often get broadly overlooked for an acute change in their presentation. There is an increased incidence and prevalence of suicide and depression among individuals with substance abuse issues; it is critical to review the vital signs and perform a safety assessment for these patients and a reevaluation when sober.
- 2. “I was afraid that if I asked the patient if he had a specific plan it might give him an idea and encourage him to do it.”**

Multiple reports have found that direct questioning about suicide does not result in an increase in suicidal ideation; for many patients, it is only through direct questioning that the emergency clinician is able to ascertain safety risk.
- 3. “She said she only took a few diphenhydramine pills to get some attention.”**

Patients who have made a suicide attempt are often unreliable and uncertain about the amount and type of medication/pills they have ingested. In cases of intentional ingestion, it is prudent to obtain a full toxicology screen and anticipate a possible decline in clinical status while awaiting for initial studies; in this situation, it is prudent to assume the worst.
- 4. “I thought he was just looking for attention when he told his girlfriend that he was thinking of jumping off the bridge.”**

All statements of suicide or self-harm, however casual the context or tone, warrant serious investigation and questioning. Not all patients who make such statements ultimately require a psychiatric hospitalization. However, it is the responsibility of the emergency clinician to evaluate the patient’s ability to maintain safety for themselves as well as others and to involve psychiatry expertise when necessary.
- 5. “She kept on talking about how her chest hurt, and she never mentioned anything about being depressed or suicidal.”**

Depression is a complex condition that often manifests in both cognitive as well as physical/psychomotor symptoms. Physical ailments
- such as chest pain and abdominal pain have been found to be among the most common symptoms endorsed by depressed patients when presenting to their healthcare providers. Keep a high index of suspicion for depression.
- 6. “We thought grandma was just feeling sad and that her leg pain and fatigue were due to her feeling down.”**

Conversely, be sure to always do a full physical examination and evaluation for patients with psychiatric complaints; other medical conditions can be missed by not doing a full examination.
- 7. “I didn’t think she needed 1:1 observation; she looked so calm and was so cooperative despite saying she wanted to kill herself.”**

Patients with active suicidal ideation often require 1:1 observation to prevent any occurrence of self-inflicted harm while in the ED.
- 8. “He didn’t look like the type who would get violent in the ED.”**

Patients endorsing active suicidal ideation should have all of their belongings searched by hospital staff for any potentially dangerous materials that could be used on themselves and others.
- 9. “The patient just wanted a prescription for a few anxiolytics to calm down.”**

Prescribing large amounts of anxiolytics for patients with acute depressive symptoms is challenging, given the risk for intoxication as well as poor follow-up. Ideally, prescriptions should be done in collaboration with the patient’s outpatient psychiatrist/primary care provider to ensure follow-up as well as appropriateness.
- 10. “The patient just got diagnosed with metastatic lung cancer and said she felt life was over and she wanted to die. I thought it was normal to feel like that after getting such a diagnosis.”**

Patients with tremendous life stressors such as the case mentioned above will often present with acute depressive symptoms and passive or even active suicidal ideation. The emphasis should always be on safety of the patient, and a full psychiatric and safety evaluation should be made by the emergency clinician when seeing these patients.

social/occupational impairment may benefit from a voluntary inpatient hospitalization. This group of patients may differ from the depressed patient with psychotic features or the actively suicidal patient in that such patients may be admitted voluntarily, unlike the previous groups mentioned.

Once the decision has been made to arrange for an inpatient hospitalization, discussion with the patient requires a nonjudgmental and supportive manner. Emphasis on the genuine interest of the patient and his overall well-being must be stressed (ie, "We really want the best for you, and we are worried that since you are saying you want to hurt yourself that it's not safe for you to go home") rather than a tone that may be interpreted as punitive (ie, "You can't leave now because you said you wanted to kill yourself"). Keeping patients active participants in their care helps to maintain a sense of collaboration as well as focus on their welfare. However, if a high-risk patient refuses to cooperate or is unwilling to be admitted, then it is necessary to begin the procedures for involuntary commitment as applicable to the specific civil law. Extreme care should be made not to escalate the situation unless necessary. In the setting of an involuntary admission, some patients may react in verbal or physical outbursts. It is critical for the emergency clinician to maintain an emphasis on safety for both the patient and staff. Maintaining 1:1 observation, verbal de-escalation, pharmacologic interventions, and, if necessary, physical restraint with the aid of hospital security all fall within the realm of acceptable practice within the proper context.

While the severely depressed patient with active suicidal ideation may appear to have a clearly laid-out disposition, in many ways, it is the patient who endorses some elements of severe depression as well as passive suicidal ideation that presents the most challenging disposition dilemma. It is in these contexts that an evaluation of the patient's social support and resources as well as healthcare support is paramount in deciding whether or not a person is safe for discharge. For the patient with moderate depression (determined either subjectively or quantitatively with screening methods such as the PHQ-9) or passive suicidal ideation, a discussion with a mental health provider is warranted. If a patient has an existing psychiatrist who could provide timely follow-up, then discharge may be possible. One scenario would be an ED evaluation by the psychiatry team followed by a discharge home with an intensive outpatient psychiatric day program in conjunction with the existing primary psychiatrist. In this setting, the evaluation of the patient's existing social support structure (family, friends) is crucial, as frequent surveillance is important. Furthermore, as discussed earlier, while the ED administration of long-term antidepressant medications is usually not indicated without coordination by psychiatry, in

certain cases outpatient therapy in conjunction with the patient's psychiatrist or ED psychiatry team may be planned post-discharge.

Follow-up is essential for patients discharged from the ED with depressive symptoms or suicidal ideation. Patients who no longer express suicidal ideation and have been evaluated by a psychiatrist and deemed safe for discharge should have explicit instructions for immediate return to the ED for worsening suicidal ideation or other concerning psychiatric or behavioral symptoms. These precautions must be clearly discussed and written for the patient. Additionally, if possible, provide a list of potential resources for the patient regarding mental health support structures. Document thoroughly the interaction between the patient as well as the thought process and discussion with psychiatry when discharging these patients. Tools used in the outpatient setting such as a "suicide contract" offer no medical-legal protection for emergency clinicians, so a clearly written and well-documented note is of great importance.

Summary

Depression with and without suicidal features is a common presentation in the ED and presents many challenging aspects both to patient workup, management, and care. The evaluation of such patients requires the emergency clinician to maintain a flexible and compassionate approach to the patient with a focus on safety and overall functioning. While many of these patients may be safely managed on an outpatient basis, patients often present with such debilitating symptoms that they warrant an inpatient hospitalization either voluntarily or involuntarily. A multispecialty collaborative approach with psychiatry is crucial. The long-term wellbeing of the depressed patient with and without suicidal ideation is based on many factors, and the emergency clinician can play a significant positive role in the overall wellbeing of such patients through the administration of compassionate, thorough, and thoughtful care.

Case Conclusions

After a more detailed psychiatric history and examination, you discern that the 28-year-old man has been having thoughts of hurting himself on and off over the last 3 months and has been feeling worse over the last 3 weeks with thoughts increasingly of "drinking himself to death." In fact, the weekend before, he said he attempted to drink a liter of vodka by himself to "put myself out of my misery." With this concerning history for possible dysthymia with an overlying major depressive episode history and suicide attempt, you formally consult psychiatry and the patient was evaluated for safety. Given his active suicidal ideation

and depressed mood, the patient is placed for psychiatric hospitalization. The patient is cooperative and amenable to the plan but given his active suicidal ideation and your concern for his wellbeing, the patient is formally sectioned (ie, placed on a temporary involuntary hold).

After discussing with the elderly patient his thoughts of hurting himself, you flesh out his comments. It appears he does not wish himself dead at this time, although he states that when he is home alone, at times he thinks "Perhaps I would be better off dead." There is no plan, he has not had a history of suicide attempts in the past, and he has no known comorbid psychiatric illness. He does not see a psychologist/psychiatrist, and on your evaluation of his depressive symptoms using the PHQ-9, his score is an 8 (ie, mild depression). While you are not concerned that he is actively suicidal and do not think he needs to be involuntarily held against his will, because of his presenting symptoms and his lack of psychiatric follow-up, you formally consulted psychiatry. They evaluated him and agreed that he did not require an involuntary hold; however, he was placed in a voluntary outpatient partial hospitalization program.

While the lady seeking the medication refill stated that she felt depressed, she was not suicidal and had no thoughts of hurting herself or others. You sent a complete metabolic panel including TSH levels to the lab. The results showed her TSH level was nearly 3 times higher than previously recorded for her 45 days ago. With this concerning presentation and lab values consistent with hypothyroidism, you returned to the bay, and she stated that she doesn't remember whether or not she has been taking her thyroid medication. You contacted her primary care physician, who recommended restarting her home regimen of synthroid and would be seeing the patient in her clinic the next day. After reviewing her most recent set of vital signs and ensuring she does not want to harm herself or others and feeling that the depressed mood is not overwhelming her functional status, you discharge her home with 24-hour follow up in her primary care provider's clinic.

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Evidence-based medicine requires a critical appraisal of the literature based upon study methodology and number of subjects. Not all references are equally robust. The findings of a large, prospective, randomized, and blinded trial should carry more weight than a case report.

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1. **Which of the following can be associated with depressive-like symptoms?**
 - a. Endocrine abnormalities
 - b. Medication side effects
 - c. Intracranial trauma
 - d. Toxic-metabolic syndromes
 - e. All of the above
2. **Directly questioning a patient about suicidal thoughts in a patient expressing depressive symptoms:**
 - a. Should only be done if there is a high degree of suspicion, because asking about suicidal ideation may encourage a patient to entertain suicide
 - b. Is appropriate and indicated for all depressed patients
 - c. Should be done in consultation with the psychiatry team
 - d. Should be done following a medical evaluation to rule out other causes of depression
3. **Patients presenting to the ED with suicidal ideation, with intent and plan:**
 - a. Require formal psychiatric consultation and hospitalization (either voluntary or involuntary)
 - b. May be safely discharged home if an outpatient therapist can see the patient in a timely manner
 - c. Require hospitalization only if the patient does not have an adequate outpatient treatment plan
 - d. May be discharged home with antidepressant medication
4. **Which of the following is not a risk factor for suicide?**
 - a. Married
 - b. Never been married
 - c. History of depression or other Axis I illness
 - d. History of recent unemployment
5. **The approach to the physical examination for depressed patients:**
 - a. Should be focused on an adequate psychiatric examination and a brief cursory overall physical examination
 - b. Is not indicated unless the patient shows other systemic symptoms or signs on history or psychiatric examination
 - c. Is indicated on all patients with psychiatric chief complaints
 - d. Is indicated in the setting of trauma or other historical flags concerning for secondary causes of depression
6. **If a patient is on a monoamine oxidase inhibitor antidepressant, what types of food should be avoided?**
 - a. Green, leafy vegetables
 - b. Aged cheeses
 - c. Potatoes
 - d. Watermelon
7. **Patients who endorse some suicidal ideation:**
 - a. Must be held involuntarily in the ED under all cases and admitted to a psychiatric facility
 - b. Must have a complete physical examination and suicide history, evaluation by the emergency clinician, and discussion with the psychiatry team regarding need for hospitalization and possible involuntary hold
 - c. May be discharged if the patient denies suicidal ideation on the most-recent examination
 - d. Should be immediately evaluated by a psychiatrist before the emergency clinician's evaluation
8. **Additional information about a patient's current social/functional status regarding mental health wellbeing may be collected from:**
 - a. The patient's family and friends
 - b. Review of the patient's medical record
 - c. Discussion with the patient's outpatient therapist
 - d. All of the above

9. **Starting a new psychotropic medication for an acutely depressed patient:**
- Should be done in consultation with the patient's outpatient physician/therapist or consulting psychiatry team to ensure proper follow-up
 - Is never done in the ED
 - Should be routinely started in the ED with or without psychiatry input
 - Can be done only for patients who are on an involuntary hold

10. **Selective serotonin reuptake inhibitors typically show their clinical effect:**
- Immediately
 - Within 6-8 hours
 - In 1-2 days
 - In 6-8 weeks



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