

Psychiatric Disorders Secondary to Medical Conditions

BEACON HEALTH OPTIONS

Overview

- > According to the Diagnostic and Statistical Manual of Mental Disorders, the psychiatric presentation of a medical condition can be defined as “the presence of mental symptoms that are judged to be the direct physiological consequences of a general medical condition.”
- > Evaluation of patients who present with altered behavior can often be difficult and at times may lead to pre-mature psychiatric diagnosis.
- > The failure to identify the medical cause of psychiatric symptoms can be potentially dangerous because serious and frequently reversible diseases often get overlooked.

Features of Medical Origin

The following features suggest a medical origin for psychiatric symptoms:

- > Late Onset of Initial Presentation
- > Known Underlying Medical Condition
- > Atypical Presentation of a Specific Psychiatric Diagnosis
- > Absence of Personal and Family History of Psychiatric Illnesses
- > Illicit Substance Abuse
- > Medication Use
- > Treatment Resistance or Unusual response to Treatment
- > Sudden Onset of Symptoms
- > Abnormal Vital Signs
- > Waxing and Waning Mental Status

Medical Disorders that can Induce Psychiatric Symptoms

Medical and Toxic Effects	Central Nervous System	Infectious	Metabolic/Endocrine	Cardiopulmonary	Other
<ul style="list-style-type: none"> Alcohol Cocaine Marijuana Phencyclidine (PCP) Lysergic acid diethylamide (LSD) Heroin Amphetamines Jimson weed Gamma-hydroxybutyrate (GHB) Benzodiazepines Prescription drugs 	<ul style="list-style-type: none"> Subdural hematoma Tumor Aneurysm Severe hypertension Meningitis Encephalitis Normal-pressure hydrocephalus Seizure disorder Multiple sclerosis 	<ul style="list-style-type: none"> Pneumonia Urinary tract infection Sepsis Malaria Legionnaire disease Syphilis Typhoid Diphtheria Human immunodeficiency virus (HIV) Rheumatic fever Herpes 	<ul style="list-style-type: none"> Thyroid disorder Adrenal disorder Renal disorder Hepatic disorder Wilson disease Hyperglycemia Hypoglycemia Vitamin deficiency Electrolyte imbalances Porphyria 	<ul style="list-style-type: none"> Myocardial infarction Congestive heart failure Hypoxia Hypercarbia 	<ul style="list-style-type: none"> Systemic lupus erythematosus Anemia Vasculitis

*Adapted from Williams ER, Shepherd SM. Medical clearance of psychiatric patients. Emerg Med Clin North Am. May 2000;18(2):185-98.^[2]

Mental Disorders

Due to a General Medical Condition

DSM-IV-TR Category	Mental Disorders Due to a General Medical Condition
Delirium, dementia, amnestic and other cognitive disorders	Delirium due to a general medical condition
	Dementia due to other general medical conditions
	Amnestic disorder due to a general medical condition
Schizophrenia and other psychotic disorders	Psychotic disorder due to a general medical condition
Mood disorders	Mood disorder due to a general medical condition
Anxiety disorders	Anxiety disorder due to a general medical condition
Sexual disorders	Sexual dysfunction due to a general medical condition
Sleep disorders	Sleep disorder due to a general medical condition
Mental disorders due to a general medical condition not elsewhere classified	Catatonic disorder due to a general medical condition
	Personality change due to a general medical condition
	Mental disorder not otherwise specified due to a general medical condition

Mood Disorder Obstructive Pulmonary Disease (COPD)

DUE TO GENERAL MEDICAL CONDITION

1. A prominent and persistent disturbance in mood predominates in the clinical picture and is characterized by either (or both) of the following:
 - a) Depressed mood or markedly diminished pleasure in all, or almost all, activities
 - b) Elevated, expansive, or irritable mood.
2. There is evidence from the history, physical examination, or laboratory findings that the disturbance is the direct physiological consequence of a general medical condition.
3. The disturbance is not better accounted for by another mental disorder (e.g., adjustment disorder with depressed mood in response to the stress of having a general medical condition).
4. The disturbance does not occur exclusively during the course of a delirium.
5. The symptoms cause clinically significant distress or impairment in social, occupational, or other important areas of functioning

Mood Disorder

DUE TO GENERAL MEDICAL CONDITION

- > *Specifiers:*
- > **With depressive features:** if the predominant mood is depressed, but the full criteria are not met for a major depressive disorder
- > **With major depressive-like episode:** if all criteria for major depressive episode are met, except, clearly, for the criterion that the symptoms are not due to the physiological effects of a substance or a general medical condition
- > **With manic features:** if the predominant mood is elevated, euphoric, or irritable
- > **With mixed features:** if the symptoms of mania and depression are present, but neither predominates

Psychotic Disorder

Due to a General Medical Condition

1. Prominent hallucinations or delusions.
 2. There is evidence from the history, physical examination, or laboratory findings that the disturbance is the direct physiological consequence of a general medical condition.
 3. The disturbance is not better accounted for by another mental disorder.
 4. The disturbance does not occur exclusively during the course of a delirium.
- > *Specifiers:*
- > **With delusions:** if delusions are the predominant symptom
 - > **With hallucinations:** if hallucinations are the predominant symptom

Psychotic Symptoms

Due to a General Medical Condition

Symptoms	Site	Laterality
First-rank symptoms <ul style="list-style-type: none"> Thoughts spoken aloud Voices commenting Third-person voices arguing Made actions Made feelings Thought withdrawal Thought diffusion Delusional perception 	Temporal lobe	Dominant hemisphere
Complex delusions	Subcortical or limbic	
Anton syndrome	Occipital lobe, optic tract	Bilateral
Anosognosia	Parietal lobe	Non-dominant hemisphere
Misidentification syndromes	Parietal, temporal, frontal lobes	Non-dominant hemisphere, bilateral
Capgras syndrome Reduplicative par amnesia Fregoli syndrome Intermetamorphosis syndrome		

Anxiety Disorder

DUE TO A GENERAL MEDICAL CONDITION

1. Prominent anxiety, panic attacks, or obsessions or compulsions predominate in the clinical picture.
2. There is evidence from the history, physical examination, or laboratory findings that the disturbance is the direct physiological consequence of a general medical condition.
3. The disturbance is not better accounted for by another mental disorder (e.g., adjustment disorder with anxiety in which the stressor is a serious general medical condition).
4. The disturbance does not occur exclusively during the course of a delirium.
5. The disturbance causes clinical significant distress or impairment in social, occupational, or other important areas of functioning

Anxiety Disorder

DUE TO A GENERAL MEDICAL CONDITION

Specifiers:

- > **With generalized anxiety:** if excessive anxiety or worry about a number of events or activities predominates in the clinical presentation
- > **With panic attacks:** if panic attacks predominate in the clinical presentation
- > **With obsessive and compulsive symptoms:** if obsessions or compulsions predominate in the clinical presentation

Sleep Disorder

Due to a General Medical Condition

1. A prominent disturbance in sleep that is sufficiently severe to warrant independent clinical attention.
2. There is evidence from the history, physical examination, or laboratory findings that the sleep disturbance is the direct physiological consequence of a general medical condition.
3. The disturbance is not better accounted for by another mental disorder (e.g., an adjustment disorder in which the stressor is a serious medical illness).
4. The disturbance does not occur exclusively during the course of a delirium.
5. The disturbance does not meet the criteria for breathing-related sleep disorder or narcolepsy.
6. The sleep disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning.

Sleep Disorder

Due to a General Medical Condition

Specify type:

- > **Insomnia type:** if the predominant sleep disturbance is insomnia
- > **Hypersomnia type:** if the predominant sleep disturbance is hypersomnia
- > **Parasomnia type:** if the predominant sleep disturbance is a parasomnia
- > **Mixed type:** if more than one sleep disturbance is present and none predominate of comparable sexual dysfunction that was not substance-induced

Medical Conditions Commonly Associated with a Secondary Sleep Disorder

Condition	Sleep Symptoms
Parkinsonism	Frequent awakenings, disturbance of circadian rhythms
Dementia	Sundowning, frequent awakenings
Epilepsy	Difficulty initiating sleep, frequent awakenings, parasomnias
Cerebrovascular disease	Difficulty initiating sleep, frequent awakenings
Huntington's disease	Frequent awakening
Kleine-Levin syndrome	Hypersomnia
Uremia	Restless legs, nocturnal myoclonus

Diagnostic Criteria for Personality Change

DUE TO A GENERAL MEDICAL CONDITION

1. A persistent personality disturbance that represents a change from the individual's previous characteristic personality pattern. (In children, the disturbance involves a marked deviation from normal development or a significant change in the child's usual behavior patterns lasting at least 1 year.)
2. There is evidence from the history, physical examination, or laboratory findings that the disturbance is the direct physiological consequence of a general medical condition.
3. The disturbance is not better accounted for by another mental disorder (including other mental disorders due to a general medical condition).
4. The disturbance does not occur exclusively during the course of a delirium.
5. The disturbance causes clinically significant distress or impairment in social, occupational, or other important areas of functioning

Diagnostic Criteria for Personality Change

DUE TO A GENERAL MEDICAL CONDITION

Specify type:

- > **Labile type:** if the predominant feature is affective lability
- > **Disinhibited type:** if the predominant feature is poor impulse control as evidenced by sexual indiscretions, etc.
- > **Aggressive type:** if the predominant feature is aggressive behavior
- > **Apathetic type:** if the predominant feature is marked apathy and indifference
- > **Paranoid type:** if the predominant feature is suspiciousness or paranoid ideation
- > **Other type:** if the presentation is not characterized by any of the above subtypes
- > **Combined type:** if more than one feature predominates in the clinical picture
- > **Unspecified type**

- > **Coding note:** Include the name of the general medical condition on Axis I, e.g., Personality change due to temporal lobe epilepsy; also code the general medical condition on Axis III.

Sexual Dysfunction

DUE TO GENERAL MEDICAL CONDITION

1. Clinically significant sexual dysfunction that results in marked distress or interpersonal difficulty predominates in the clinical picture.
2. There is evidence from the history, physical examination, or laboratory findings that the sexual dysfunction is fully explained by the direct physiological effects of a general medical condition.
3. The disturbance is not better accounted for by another mental disorder (e.g., major depressive disorder).

Sexual Dysfunction

DUE TO A GENERAL MEDICAL CONDITION

- > Select code and term based on the predominant sexual dysfunction:
- > **Female hypoactive sexual desire disorder due to a [insert general medical condition here]:** if deficient or absent sexual desire is the predominant feature.
- > **Male hypoactive sexual desire disorder due to a [insert general medical condition here]:** if deficient or absent sexual desire is the predominant feature.
- > **Male erectile disorder due to a [insert general medical condition here]:** if male erectile dysfunction is the predominant feature.
- > **Female dyspareunia due to a [insert general medical condition here]:** if pain associated with intercourse is the predominant feature.
- > **Male dyspareunia due to a [insert general medical condition here]:** if pain associated with intercourse is the predominant feature.
- > **Other female sexual dysfunction due to a [insert general medical condition here]:** if some other feature is predominant (e.g., orgasmic disorder) or if no feature predominates.
- > **Other male sexual dysfunction due to a [insert general medical condition here]:** if some other feature is predominant (e.g., orgasmic disorder) or if no feature predominates

Causes of Secondary Sexual Dysfunctions

Medications

- > Cardiac drugs, antihypertensive
- > H₂-receptor blockers
- > Carbonic anhydrase inhibitors
- > Anticholinergic
- > Anticonvulsants (e.g., carbamazepine, phenytoin, pyrimidine)
- > Antipsychotics
- > Antidepressants (e.g., tricyclic drugs, MAO inhibitors, trazodone, SSRIs)
- > Sedative-hypnotics

Substances of abuse

- > Alcohol
- > Opioids
- > Stimulants
- > Cannabis
- > Sedative-hypnotics

Causes of Secondary Sexual Dysfunctions

Local disease processes that affect primary or secondary sexual organs

- > Congenital anomalies or malformations
- > Trauma
- > Tumor
- > Infection
- > Postsurgical or post irradiation local neurological and vascular pathology

Systemic disease processes

- > Neurological
- > Central nervous system (e.g., strokes, multiple sclerosis)
- > Peripheral nervous system (e.g., peripheral neuropathy)
- > Vascular
- > Atherosclerosis, vasculitis (as examples)
- > Endocrine
- > Diabetes mellitus, alterations in function of thyroid, adrenal cortex, gonadotropins, gonadal hormones (as examples)

Catatonic Disorder

DUE TO A GENERAL MEDICAL CONDITION

1. The presence of catatonia as manifested by motoric immobility, excessive motor activity (that is apparently purposeless and not influenced by external stimuli), extreme negativism or mutism, peculiarities of voluntary movement, or echolalia or echopraxia.
 2. There is evidence from the history, physical examination, or laboratory findings that the disturbance is the direct physiological consequence of a general medical condition.
 3. The disturbance is not better accounted for by another mental disorder (e.g., a manic episode).
 4. The disturbance does not occur exclusively during the course of a delirium.
- > **Coding note:** Include the name of the general medical condition on Axis I, e.g., Catatonic disorder due to hepatic encephalopathy; also code the general medical condition on Axis III

Diagnostic Considerations

- > Before attributing symptoms to a psychiatric disorder, all medical conditions need to be investigated and ruled out for causation.
- > A general physical examination and blood tests should be performed by a PCP prior to or in addition to a psychiatric consultation.

References

- > American Psychiatric Association. *Diagnostic and Statistical Manual of Mental Disorders*. 4th ed. Text rev. Washington, DC; American Psychiatric Association; 2000, with permission
- > Ely EW, Shintani A, Truman B. Delirium as a predictor of mortality in mechanically ventilated patients in the intensive care unit. *JAMA*. Apr 14 2004;291(14):1753-62. [\[Medline\]](#).
- > Williams ER, Shepherd SM. Medical clearance of psychiatric patients. *Emerg Med Clin North Am*. May 2000;18(2):185-98, vii. [\[Medline\]](#).