Primary or secondary? What came first and how to treat?

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Most of the literature regarding the importance of accurately and efficiently differentiating neuropsychiatric symptoms as secondary to medical conditions or as a primary psychiatric illnesses is found in the emergency department setting. It has been reported that 6 to 12% of patients presenting to the emergency department have psychiatric complaints or behavioral disturbances. Patients with psychiatric or behavioral disturbances are generally “medically cleared” prior to transfer to psychiatric care. Assessing if a patient is “medically cleared” helps to identify medical illnesses that could cause or contribute to psychiatric or behavioral symptoms which may make treatment at a psychiatric facility inappropriate or even dangerous. Appropriate treatment in the emergency department setting, therefore, may prevent morbidity and mortality associated with misdiagnosing of a medical illness as a psychiatric illness and from improper treatment of psychiatric illnesses. When psychiatric, neurologic, or behavioral manifestations are secondary to medical conditions, the focus of treatment should be on the underlying condition. This can be said for any kind of signs or symptoms – rarely is a single or set of signs or symptoms addressed without an evaluation for the underlying root cause. Symptomatic treatment of the neuropsychiatric manifestations, however, should not be overlooked and should run parallel to the primary condition.

To help identify a primary psychiatric illness compared to symptoms secondary to a medical illness, several factors that may assist in clarifying psychiatric diagnosis include a focus on cognitive versus somatic symptoms, identification of personal or family history of psychiatric illness and response to treatment, careful neurologic exam emphasizing cognitive and mental status exam as part of the physical exam, and an understanding that a psychiatric diagnosis is not purely a diagnosis of exclusion of medical illnesses. Features suggesting that psychiatric symptoms are secondary to a medical illness include an abrupt onset with no known or readily recognizable precipitants, a temporal association with onset, worsening, or remission of the psychiatric symptoms concurrent with the medical illness, and the presence of atypical features. Additionally, the absence of a personal or family history of psychiatric diagnosis, late onset of new behavioral symptoms, obvious systemic disease, evidence of increased intracranial pressure, nonauditory hallucinations, use of psychoactive or centrally-acting medications, the occurrence of autonomic dysfunction with good premorbid function, and treatment resistance further suggest a medical origin. Though routine laboratory testing of all psychiatric patients presenting to the emergency department has not been supported in the literature, it is suggested that a complete history (including a detailed medication history) and physical exam with a full set of vital signs may be sufficient to exclude medical reasons for symptom presentation. Further laboratory and ancillary testing may be guided by the obtained information. Obtaining information directly from the patient may be, at times, difficult to obtain, therefore, collateral history from bystanders, family, friends, caregivers, health care professionals, law enforcement, paramedics, etc. is important.

Illnesses that may be commonly known to be associated with psychiatric symptoms are presented in Table 1. Increasing awareness and understanding of neuropsychiatric symptoms and adverse effects (and subsequently, management) may lead to more appropriate therapy choices and management and improved patient care. Additionally, comorbid medical illnesses may have implications on psychotropic medication selection. This issue of the Mental Health Clinician highlights psychiatric and neurologic manifestations of medical illnesses or those adverse effects secondary to medications.

REFERENCES


Table 1. Medical illness considerations in psychiatric diagnoses

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<th>Psychiatric diagnosis</th>
<th>Possible medical illnesses</th>
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| Schizophrenia               | Delirium  
  Seizure disorder  
  CNS lesions (e.g., tumors, congenital malformations, trauma)  
  Metabolic disorders (e.g., Wilson disease)  
  Thyroid disease  
  Developmental disorders  
  Toxic encephalopathies  
  Infectious diseases  
  Prescribed medications  
  Substances of abuse |
| Bipolar disorders           | Neurologic disorders (e.g., brain tumors, multiple sclerosis, seizures)  
  System conditions (e.g., porphyria, hyperthyroidism, uremia)  
  Infectious diseases (e.g., encephalitis)  
  Prescribed medications  
  Substances of abuse |
| Depressive disorders        | Concomitant medical illnesses (e.g., diabetes, cancer, hypothyroidism)  
  Chronic fatigue syndrome  
  Prescribed medications  
  Substances of abuse  
  Substance use withdrawal |
| Anxiety disorders           | Hypoglycemia  
  Hyperthyroidism  
  Arrhythmias  
  Excessive caffeine  
  Pheochromocytoma  
  Seizure disorders  
  Migraine  
  CNS disorders  
  Prescribed medications  
  Substances of abuse  
  Substance use withdrawal |
| Obsessive-compulsive disorder | Carbon monoxide disorder  
  Tumors  
  Traumatic brain injury  
  Prader-Willi syndrome  
  Postviral encephalitis  
  Syndeham chorea  
  Allergic reactions to wasp stings |
| Attention deficit hyperactivity disorder | Impaired vision or hearing  
  Seizures  
  Traumatic brain injury  
  Poor nutrition  
  Insufficient sleep  
  Prescribed medications  
  Substances of abuse  
  Substance use withdrawal |
| Substance use disorders     | Accidents and trauma  
  High-risk sexual behavior  
  Neurotoxicity  
  Arrhythmias |

Adapted from References 3, 4.