Assessment of Mental Status

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KEYWORDS

• Behavioral neurology • Neuropsychiatry • Neuropsychology • Mental status
• Examination • Memory loss • Dementia

KEY POINTS

- Assessment of mental status is one the most important parts of a neurologic or psychiatric examination. This assessment includes the evaluation of the level of consciousness as well as the assessment of multiple neurobehavioral domains, including appearance, mood and emotional state, frontal executive functions, attention, episodic verbal and visuospatial memory, declarative knowledge such as language, as well as visuospatial and perceptual abilities.
- A comprehensive clinical interview of patients with neuropsychiatric disorders and cognitive decline focuses on presenting complaint(s), time course of development of disease process, individual characteristics such as gender, and cultural and educational background, family history of the same pathology and role of genetic factors, history of traumatic brain injury, presence of any medical conditions as well as sleep disorders and medicinal effects.
- Advanced neuroimaging of brain utilizing various MRI sequences and PET scan in combination with clinical manifestations of behavioral disorders and neuropsychological abnormalities have significantly improved our objective understanding of the underlying neuropathological processes.

INTRODUCTION

Neuropsychiatric assessment of a patient with behavioral disorder is a complex and multidimensional process which utilizes neurologic, psychological, and psychiatric approaches to determine how a neurologic or psychiatric disease can affect patient's behavior. With growth of our knowledge about dementing diseases and traumatic brain injury and with giant advances in the world of neuroimaging the borders between

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neurology and psychiatry are dissolving and the new subspecialty of "behavioral neurology and neuropsychiatry" is emerging. A deep understanding of how certain brain lesions clinically translate into fascinating neuro-behavioral abnormalities enables neurologists and psychiatrists to better formulate diagnostic and treatment approaches.

HISTORY AND PHYSICAL

As the case of almost all medical evaluations, the assessment should be consistent of three main components of history, general physical examination, and neurologic examination. The standard history initiates with recording of the "Chief complaint" and continue with obtaining information about history of present illness, past medical history, family history, social history, and review of symptoms. This part is followed by detailed general and then neurologic examination and assessment.

HISTORY

Obtaining a comprehensive history of the patient's mental, cognitive, and social capabilities and how and over what time period he or she has deteriorated is very important. It is of utmost significance to demonstrate that how the patient's cognitive abilities have evolved and deteriorated from its original status to the present time. Another significant point to bear in mind is that just like certain symptoms such as hemiplegia which point toward specific neuroanatomic pathways involvement such as corticospinal tract, certain findings such as aphasia and apraxia carry localizing values. Most patients with neuropsychiatric diseases such as Alzheimer disease (AD) are poor history givers and one should also interview the relatives and caregivers for certain details. The term dementia comes from two morphemes, "de" meaning a decrease and "mentia" meaning mentation. According the Diagnostic and Statistical Manual of Mental Disorders (3rd Edition Revised) to be considered to have dementia a person must have defects in mentation in at least two domains for example, episodic memory and naming and this patient's decline in cognitive functions must be sufficient to cause a functional disability that interferes with their daily functions. Currently, if patients have a cognitive disorder in one domain of cognition, such as episodic memory, many clinician term this disorder "mild cognitive impairment".[1]

One particular point about obtaining history of neuropsychiatric issues is that in many cases the patient may not even know why he or she is being interviewed. Patients with memory loss and no insight into the nature of their problem, as seen in patients with AD or traumatic brain injury, provide the best example. One the opposite end of this spectrum are the patients with mood disorders (particularly depression) and anxiety disorder who may be too much exaggerating about their cognitive issues. The issue of insight to the depth of one's neurocognitive issues is very significant since an individual who is clueless about his or her own deficits is more likely to be heedless to certain restrictions imposed by treating physician or being compliant with medical orders and medications.

Paying attention at the speed of onset (acute vs chronic) and pattern of evolution of the disease process and its course (static vs deteriorating) is necessary. History of hereditary factors should be obtained. For example, in a young patient with a family history of chronic headaches, young-onset dementia and recurrent strokes, who presents with recent onset memory loss, a diagnosis such as CADASIL should be entertained. A review of all medications which can affects someone's cognition adversely such as anti-cholinergic, anti-epileptic, and GABAergic medications is required and the interviewer should specifically inquire about any history of substance