



ROLE OF NEUROPSYCHOLOGICAL TESTS IN DIAGNOSIS

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Conflict of Interest Disclosure

None

Introduction

- In the era of biomarkers, diagnosis of dementia is still based on history, examination and objective measurements
- Neuropsychological testing (NPT) remains a cornerstone of dementia diagnosis
- It needs first the use of brief cognitive screening tools i.e NPTs requiring short administration duration, easy to administer and interpret
- Then a comprehensive neuropsychological assessment (NPA) when possible

Learning objectives

- To use brief cognitive screening tools in efficient and effective way (MMSE, MoCA, Clock Drawing Test...)
- To manage the test administration in all its aspects
- To integrate other factors such as the testee's behavior during test administration
- To interpret not only a total score, but also the pattern of impairments in distinct domains of cognition → information for etiological and differential diagnosis
- To know major measurement limitations i.e either floor or ceiling effects, respectively in severe dementia or highly educated individuals with mild cognitive impairment

Learning objectives

- To decide when to refer to a specialist for a comprehensive neuropsychological assessment (NPA)
- To know that NPA should test for different cognitive functions and should be guided by the cognitive profile on brief cognitive screening
- To learn about some of the most important specific NPTs assessing : verbal and visual episodic memory, attention, executive functions, language, praxis,...

Learning objectives

- To include NPA as part of the comprehensive investigation to improve diagnostic accuracy and appropriately communicate the implications of outcomes
- To deal with difficulties in testing low-educated or illiterate individuals
- To understand the necessity of using NPTs adapted to the socio-cultural context
- To learn about the contribution of NPTs at early stages : for example preclinical and prodromal Alzheimer's disease

Key messages

- NPT is part of the comprehensive investigation for diagnosis of dementia
- It involves first a short global cognitive screening, then referral to a specialist for specific neuropsychological assessment if necessary
- Brief cognitive screening tools should be used in an efficient way, not only as a total score, but in giving information on distinct cognitive domains
- The different patterns should help etiological / differential diagnosis and guide a more in-depth NPA
- NPT should be adapted to educational level and socio-cultural context