

Unlatching the brain: the essential role of medical services to shape differential neuropsychiatric diagnoses.

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Introduction

Increased awareness of differential diagnosis between neurological and psychiatric diseases has made this diagnostic process more accurate in the last ten years. We aim to assess diagnostic exams and pathways for neurological diagnoses in Padova's cohort of neuropsychiatric patients, identifying how many diagnostic resources are dedicated to these patients.

Materials and methods

We considered patients with cognitive impairment, seen in our neuropsychiatric dedicated ambulatory for a suspected neurodegenerative disease, and with a first visit between 2014 and 2024. Each patient presented with BPSD or psychiatric comorbidities.

Demographic, clinical and social data from 147 patients with neuropsychiatric symptoms of the University Hospital of Padova were respectively collected.

Results

Among these patients, 37/147 were referred by a neurologist, 110/147 were referred by a psychiatrist. 44/147 patients had cognitive impairments, 103/147 had movement disorders. 29/147 patients received a diagnosis of neurological disease, 118/147 received a psychiatric diagnosis. 3 neurological patients didn't manage a follow up. In detail, 22 patients received a diagnosis in our memory clinic, and 9 in our movement disorders clinic. About imaging exams: 20 cerebral RM, 8 PET-FDG and 1 AMY-PET were carried out and 3 CSF were made. 21 patients underwent a first-level neuropsychological assessment (MMSE, MoCA) and 18 of them were subjected to a second-level neuropsychological evaluation. The most frequent diagnostic path was neuropsychiatric visit, followed by neurological visit, execution of imaging exams and a final diagnostic visit.



Figure 1: 44 out of 147 had cognitive impairments, and 103 had movement disorders. A total of 29 out of 147 patients received a diagnosis of neurological disease. In detail, 22 of them were diagnosed in the memory clinic, and 9 in the movement disorders clinic.

Discussion and conclusions

Highly specialized diagnostic pathway is requested to manage a neuro-psychiatric differential diagnosis, and a dedicated care pathway and ambulatory is recommended. The existence of this type of clinic is valuable not only for the differential diagnosis of dementia, but also for identifying movement disorders. The goal is to establish a clear diagnosis and ensure appropriate referral to either neurological or psychiatric services. There is a need for a more defined and standardized diagnostic pathway tailored to the clinical presentation of each patient.

Improved knowledge of neurological and especially neurodegenerative diseases is essential to organize health public services, preserving this essential source for our County and inspiring for an encourage to embrace collaboration between neurologists and psychiatrists. **This is the first study in Italy expressing the need for a neuropsychiatric dedicated ambulatory for recognition and management of psychiatric comorbidities in patients with neurocognitive impairment.** Proper differential diagnosis is also recommended to recognize early-stage neurodegenerative diseases for possible timely initiation of disease-modifying therapies.

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References:

1. Wittebrood C, Boban M, Cagnin A, Capellari S, De Winter FL, Djamshidian A, González MM, Hjerminnd LE, Krajcovicova L, Krüger J, Levin J, Reetz K, Rodriguez ER, Rohrer J, Van Langenhove T, Reinhard C, Graessner H, Rusina R, Saracino D, Houot M, Sealar H, Vandenberghe R. Pharmacotherapy for behavioural manifestations in frontotemporal dementia: An expert consensus from the European Reference Network for Rare Neurological Diseases (ERN-RND). Eur J Neurol. 2024 Dec;31(12):e16446.
2. Filippi M, Cecchetti G, Cagnin A, Marra C, Nobili F, Parnetti L, Agosta F. Redefinition of dementia care in Italy in the era of amyloid-lowering agents for the treatment of Alzheimer's disease: an expert opinion and practical guideline. J Neurol. 2023 Jun;270(6):3159-3170.
3. D'Antonio F, Tremolizzo L, Zulfli M, Pomati S, Farina E; Sindem BPSD Study Group. Clinical Perception and Treatment Options for Behavioral and Psychological Symptoms of Dementia (BPSD) in Italy. Front Psychiatry. 2022 Apr 1;13:843088.



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