

Neurocognitive Disorder Due to Alzheimer's disease

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Minor or Major Neurocognitive Disorder due to Alzheimer's Disease (AD) refers to the DSM-5 or the diagnosis allotted to patients with mental deficits linked to the onset and progression of the AD. The Alzheimer's disease is a neurological condition that results in continuous cognitive dysfunction because of the incursion of neurofibrillary tangles and beta-amyloid plaques in cholinergic neurons. The disorder leads to a reduction in the production of acetylcholine of the affected neurons usually evidenced by progressive loss of memory, and other behavioural signs and symptoms. The paper comprehensively describes the diagnostic criteria for neurocognitive disorder due to AD, including the treatment and its associated risks.

The Diagnostic Criteria

The DSM-5 unfolds various elements of the diagnostic criteria for neurocognitive disorder due to AD:

- Ø The patient fulfils the diagnostic criteria for minor or major neurocognitive disease
- Ø There are gradual or insidious onset and progression of cognitive decline
- Ø The family history or genetic testing rules the presence of causative Alzheimer's genetic mutation
- Ø Evidence shows a decline in memory and a reduction in the learning capacity
- Ø The presence of a progressive and steady decline in cognitive function, without extended plateaus of stability.
- Ø No indicators of the existence of other medical, neurological, and psychological problems responsible for causing cognitive decline (American Psychiatric Association, 2013).

Evidence-Based Psychotherapy and Psychopharmacological Treatment

There are numerous psychotherapy interventions for people living with neurocognitive disorders due to the AD. Some of these strategies include cognitive stimulation, cognitive rehabilitation, and cognitive training (Choi & Twamley, 2013). Cognitive training involves engaging patients in discussions concerning regular everyday tasks purposely to stimulate mental activity. One example of a cognitive stimulation technique is the “reality orientation” which entails a discussion of various topics such as money utilization, present-day information, word games, and famous faces. Cognitive training (CT) targets neurocognitive disorder patients with adequate cognitive resources which helps a computer software or therapist to facilitate them in practice tasks assisting the patient to exercise particular cerebral functions with the aim of improving more impaired cognitive skills. Cognitive rehabilitation (CR) involves offering multiple training methods in a rehabilitation milieu setting (Choi & Twamley, 2013).

For neurocognitive disorder (NCD) patients with severe depression and anxiety, the recommended first-line psychopharmacological therapies include the use of serotonin-norepinephrine inhibitors (SNRIs; e.g. venlafaxine), bupropion, mirtazapine selective and serotonin reuptake inhibitors (SSRIs; e.g. citalopram) (Stinton et al., 2015). Furthermore, the second generation antipsychotic risperidone, olanzapine, and aripiprazole have proved useful in eliminating the adverse symptoms for NCD (Elie & Rej, 2018).

Risks of the Different Types of Therapy and How the Benefits of the Therapy might be achieved to reduce the Risks

The implementation of psychotherapy techniques such as CR is associated with numerous psychological and neuropsychological obstacles such as increasing the risk of cognitive deficits, denial/anosognosia, depression/hopelessness, and defeatist beliefs. The progressive loss of mental capacity may render the client with inadequate resources to achieve any benefits from

CR. Depression is a substantial factor in CR programs due to exacerbations of cognitive impairments. Research shows that AD patients may have less inclination to active engagement in CR interventions due to defeatist beliefs that failure is inevitable (Choi & Twamley, 2013).

There are various strategies which can be employed to enhance the treatment adherence in these psychotherapy interventions. Some of these include cognitive vitality training (CVT), compensatory cognitive training (CCT), motivational interviewing (MI), and errorless learning (EL). CVT focuses on enhancing the patient's self-efficacy and self-competence which increases understanding and motivation with the treatment regimen (Regier et al., 2017). CCT focuses on training in compensatory cognitive strategies that improve cognitive functioning. MI has significantly assisted in addressing a number of behavioral targets including risky behaviors, medication adherence, diet, chronic medical conditions, and parenting practices (McClam et al., 2015)

The available evidence shows that SSRIs increase the risk of falls, hyponatremia, and fractures and thus clinicians are advised to prescribe them with caution. The second-generation antipsychotics risperidone, olanzapine, and aripiprazole have produced positive outcomes in the treatment of NCDs, but there are concerns on the adverse effects of these medications in metabolic, cardio- and cerebrovascular functions. These drugs have also been associated with modest efficacy and limitations in their use. They cause a small yet significant increase in mortality rates (2-3.7%) which is extremely worrying for patients and the healthcare providers. However, this risk can be curbed by engaging in an open discussion addressing the potential risks and advantages of antipsychotic medications before their use (Elie & Rej, 2018). Besides, strategies such as re-evaluating the clinical relevance of anti-psychotics and maintaining the lowest effective dose also useful in eliminating adverse effects.

Conclusion

AD is a neurological disorder that causes progressive cognitive dysfunction. There are numerous psychotherapy strategies for alleviating the adverse effects of the disorder including cognitive stimulation, cognitive rehabilitation, and cognitive training. The recommended first-line psychopharmacological therapies for neurocognitive disorders due to AD include SNRIs, SSRIs, bupropion, and mirtazapine. Some of these drugs result in adverse clinical outcomes such as risk of falls, hyponatremia, and fractures and thus should be used with caution.

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