

## AIDS-RELATED DEMENTIA COMPLEX – LITERATURE REVIEW

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**Abstract: Introduction:** The AIDS epidemic reached its peak in the 1990s, causing the deaths of millions before treatments emerged. **Objective:** Review the relationship between AIDS and dementia complex. **Result:** More than 50% of people with AIDS may develop AIDS-linked neurocognitive decline, resulting in subcortical dementia. This manifests as loss of attention, depressive symptoms and changes in motor skills and task accuracy (BERNARDES L, et al., 2023). **Conclusion:** Although AIDS is known to affect the immune system through the reduction of CD4 T lymphocytes, it is also linked to impacts on the nervous system, including the brain, spinal cord and peripheral nerves. **Keywords:** Pseudodementia; Cognitive impairment; AIDS.

## INTRODUCTION

There are a series of dementias caused by lack or excess of bodily substances, be they hormones, vitamins, infections, tumors and pathological conditions (LEIVAS EFL, 2021).

Examples of treatable dementias include hypothyroidism, vitamin B12 deficiency, neurosyphilis, AIDS, brain tumors, normobaric communicating hydrocephalus, etc. (LEIVAS EFL, 2021).

Every patient with dementia must undergo investigation of all these causes; An exception is made for anti-AIDS, which requires the patient's consent. Therefore, we have to request, at the first consultation, free T4, TSH, serum B12 measurement, VDRL and head CT with and without contrast. Other causes of reversible dementia are alcoholism and excessive use of Central Nervous System medications, such as benzodiazepines (LEIVAS EFL, 2021).

Dementia is a syndrome with multiple causes, characterized by the acquired deterioration of cognitive abilities that impair daily activities. In addition to memory,

other mental functions are affected, such as language, visio-spatial skills, calculations and problem solving. Neuropsychiatric and social problems also arise, leading to symptoms such as depression, withdrawal, hallucinations, delusions, agitation, insomnia and disinhibition (CARONI, et al., 2023).

The most common causes of dementia in individuals over 65 years of age are: Alzheimer's disease (AD) (which accounts for approximately 60 percent), vascular dementia (15 percent), and mixed vascular and Alzheimer's dementia (15 percent). Other diseases accounting for approximately 10% include dementia with Lewy bodies; Picks disease; fronto-temporal dementias; normal pressure hydrocephalus (NPH); alcoholic dementia; infectious dementia, such as human immunodeficiency virus (AIDS) or syphilis; and Parkinson's disease (BATES et al., 2004).

The AIDS epidemic reached its peak in the 1990s, causing the deaths of millions before treatments emerged. Cases among people aged 60 and over increased from 855 in 2007 to 1649 in 2020. Although 60 years is the usual age for elderly people, for AIDS studies, it is considered from 50 years of age due to the impact of the disease ( Martinelli A, et al., 2021).

The high prevalence of AIDS in the elderly is due to unprotected sexual relations at an advanced age and the greater longevity of those who contracted the virus before the age of 60 (Martinelli A, et al., 2021).

More than 50% of people with AIDS may develop neurocognitive decline linked to AIDS, resulting in subcortical dementia. This manifests as loss of attention, depressive

symptoms and changes in motor skills and task accuracy (BERNARDES L, et al., 2023).

This syndrome is linked to pathological changes in the brain, including generalized atrophy, changes in the white matter (leukoencephalopathy), the presence of microglial nodules (indicative of viral encephalitis) and multinucleated giant cells, possibly infected by AIDS (BERNARDES L, et al., 2023).

## **MATERIAL AND METHODS**

The search was carried out in the PubMed database and was limited to articles between 2004 and 2023 that met the criteria of being literature reviews and case reports.

Next, the keywords in the article titles were analyzed and those whose themes best fit our objective were selected.

Five articles were selected for full reading.

## **DISCUSSION**

A very controversial issue, but at the same time of great clinical significance, is the possibility of recovery from disorders. From a clinical point of view, the key question is to determine whether the therapeutic intervention, based on treatment, results in the resolution of already evident cognitive disorders (CARONI, et al., 2023).

## **CONCLUSION**

Although AIDS is known to affect the immune system through the reduction of CD4 T lymphocytes, it is also linked to impacts on the nervous system, including the brain, spinal cord and peripheral nerves.

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