

DISABILITY DUE TO BINSWANGER DISEASE – LITERATURE REVIEW

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Abstract: Cognitive impairment in individuals with cerebrovascular disease results in difficulties in exercising one or more advanced mental functions, which may progress to dementia, in which a long-lasting deficiency in mental functions considerably impacts performance and functioning (CAMPUZANO SC, et al., 2022). **Introduction:** Cognitive impairment in individuals with cerebrovascular disease results in difficulties in exercising one or more advanced mental functions, which may progress to dementia, in which a long-lasting deficiency in mental functions considerably impacts performance and functioning (CAMPUZANO SC, et al., 2022). **Goal:** To review the relationship between disabilities and binswanger's disease. **Result:** Binswanger-type microangiopathic vascular disease was identified more frequently due to advances in diagnostic imaging, which allows the detection of white matter damage and small brain strokes. The disease progresses slowly and is one of the most common forms of vascular disease affecting the brain. There are still many discussions about its etiology, pathophysiology and how it is classified (Ramos-Estébanez C, 2000). **Conclusion:** Binswanger's disease can be seen on imaging tests as leukoaraiosis. Symptoms include memory problems, lack of interest, disorientation, changes in behavior (euphoria, aggression), difficulties in speaking and swallowing, as well as difficulty walking (Ramos-Estébanez C, 2000).

Keywords: Cognitive impairment; Binswanger's disease; Vascular dementia.

INTRODUCTION

There are a series of dementias caused by lack or excess of bodily substances, be they hormones, vitamins, infections, tumors or 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-HIV, 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 (HIV) or syphilis; and Parkinson's disease (BATES et al., 2004).

About 30% to 40% of people with cerebrovascular disease have some degree of cognitive impairment. Three months after the onset of cerebrovascular disease, approximately 20% to 30% of patients are diagnosed with dementia and between 10% and 35% with cognitive impairment. Both vascular cognitive impairment and vascular dementia share common factors with cerebrovascular disease and Alzheimer's disease. Vascular dementia is subdivided into types: multi-infarct dementia, characterized by multiple cerebral infarctions over time; dementia due to strategic infarction, with

infarcts located in highly connected cortico-subcortical areas; and dementia due to ischemic disease of the small arteries, caused by lacunar infarcts or lesions in the white matter (CAMPUZANO SC, et al., 2022).

Cognitive impairment in individuals with cerebrovascular disease results in difficulties in exercising one or more advanced mental functions, which may progress to dementia, in which a long-lasting deficiency in mental functions considerably impacts performance and functioning (CAMPUZANO SC, et al., 2022).

The continued and increasing global aging of the population, combined with diverse cardiovascular, environmental and lifestyle risk factors, has led to a series of medical and public health challenges. This covers cerebrovascular diseases (CVD) and dementias, including Alzheimer's disease (AD). These issues are interconnected, not only due to risk factors such as high blood pressure (SAH) and diabetes mellitus (DM), but also in terms of causes, pathophysiology and situations such as cognitive impairment and dementia with vascular origin (JUNIOR AAL, et al., 2023).

Binswanger's disease, or Binswanger's type microangiopathic vascular disease, has been identified more frequently due to advances in diagnostic imaging technology, which make it possible to detect white matter damage and small strokes. This disease progresses slowly and is one of the most common forms of vascular disease that affects the brain. However, there are still many discussions about what causes the disease, how it develops and how it is classified (Ramos-Estébanez C, 2000).

This condition is characterized by diffuse damage to the inner part of the brain due to lack of oxygen (ischemic injury), which can be seen on imaging studies as an enlarged white area (leukoaraiosis). Symptoms

include memory problems, lack of interest, disorientation, changes in behavior (euphoria, aggression), difficulties with speech and swallowing, as well as difficulty walking. The main cause is the blockage of small blood vessels in the brain due to atherosclerosis (Ramos-Estébanez C, 2000).

MATERIAL AND METHODS

The search was carried out in the PubMed database and was limited to articles between 2000 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.

A total of 7 articles were selected for full reading.

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DISCUSSION

This disease progresses slowly and is one of the most common forms of vascular disease affecting the brain, however, there are still many discussions about what causes the disease, how it develops and how it is classified (Ramos-Estébanez C, 2000). Therefore, more studies are needed.

CONCLUSION

Binswanger's disease can be seen on imaging tests as leukoaraiosis. Symptoms include memory problems, lack of interest, disorientation, changes in behavior (euphoria, aggression), difficulties in speaking and swallowing, as well as difficulty walking (Ramos-Estébanez C, 2000).