

PSEUDODEMENCE AS THE MAIN CONSEQUENCE OF NEUROSYPHILIS – LITERATURE REVIEW

Alicia Viviana Mendez

Doctor by: Universidad Tecnica Privada
Cosmos, Puerto Quijarro, Bolivia

Vinicius Rodrigues Fróis

Student of medicine course- Universidade
Nove de Julho, Mauá, SP, Brasil

Angélica Cintra de Lima

Student of medicine course- Faculdade de
Medicina de Itumbiara, Itumbiara, GO, Brazil

Samantha Cristina da Silva Chaves

Student of medicine course- Universidade
Federal de Catalão, Catalão, GO, Brazil

Adrian Emanuel Rosales Mendez

Clinical neuroscientist at: Universidade de
Roehampton, London, United Kingdom

Rebecca Mascarenhas Santos

Doctor by: Centro Universitário de Maringá,
Maringá, PR, Brazil

Maria Vitória Lima Camilo

Student of medicine course- Universidade
Maurício de Nassau, Recife, PE, Brazil

Debora Fernanda Souto

PhD student in Education - Universidade
Federal de Santa Maria, Santa Maria, RS,
Brazil

Stephânia Taveira Maximiano Cerqueira

Student of medicine course- Faculdade Ages
de Medicina, Icerê, BA, Brazil

All content in this magazine is
licensed under a Creative Com-
mons Attribution License. Attri-
bution-Non-Commercial-Non-
Derivatives 4.0 International (CC
BY-NC-ND 4.0).



Carlos Wagner Leal Cordeiro Júnior
Student of medicine course- Universidade
Nove de Julho, Mauá, SP, Brazil

Joan Lucas Oliveira Silva
Student of medicine course- Universidade
Federal de Mato Grosso do Sul, Campo
Grande, MS, Brazil

Kauã Lemes Cavalcante da Silva
Student of medicine course- Universidade
Nove de Julho, Mauá, SP, Brazil

Caíque de Oliveira Portugal Couto
Student of medicine course- Universidade
Nove de Julho, Mauá, SP, Brazil

Marcos Aurélio Ferreira Mato
Student of medicine course- Faculdade de
Medicina de Itumbiara, Itumbiara, GO, Brasil

Abstract: Introduction: Dementia is a syndrome with several causes, characterized by the acquired deterioration of cognitive abilities that impair daily activities, and neurosyphilis may be one of these causes (LEIVAS EFL, 2021). **Objective:** To review the relationship between neurosyphilis and pseudodementia. **Result:** Dementia was the most common manifestation of neurosyphilis in all articles analyzed by this review, followed by meningovascular syphilis and meningitis. This demonstrates that neurological syphilis causes several complications in different groups, as evidenced in several studies carried out. **Conclusion:** Dementia is possibly the most common manifestation of neurosyphilis. **Keywords:** Pseudodementia; Cognitive impairment; Vitamin B12 deficiency.

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-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).

Dementia was the most common manifestation of neurosyphilis according to Ramachandran, affecting 58.3% of patients, followed by epilepsy (16.7%), psychosis (12.5%), tabes dorsalis (12.5%) and meningovascular syphilis (8.3%), in a number of 194,992 patients (Ramachandran PS, et al., 2020).

The study conducted by Sethi and collaborators (2005) observed dementia, meningovascular syphilis, meningitis and other changes, corroborating the findings of the researchers mentioned above. This demonstrates that neurological syphilis causes several complications in different groups, as evidenced in several studies carried out in this population.

Bousend et al. (2012), in their research,

identified the most common implications in the studied population. They highlighted that the main changes in these patients were behavioral, disorientation and mesialtemporal changes. These complications corroborate the results obtained by Ahbeddou et al. (2018).

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.

Six 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

Dementia was the most common manifestation of neurosyphilis in all articles analyzed in this review, followed by meningovascular syphilis and meningitis. This demonstrates that neurological syphilis causes several complications in different groups, as evidenced in several studies carried out.

REFERENCES

1. AHBEDDOU, N. et al. Stroke and syphilis: A retrospective study of 53 patients. *Revue Neurologique*. v. 174, n. 5, p. 313-318, 2018.
2. BATES, J., J. Boote e C. Beverley. Intervenções psicossociais para pessoas com doença demencial mais branda: uma revisão sistemática. *Revista de Enfermagem Avançada*. 2004.
3. BOUSENDE, M. et al. Mesial-temporal lesions in patients with neurosyphilis. *Acta Médica Portuguesa*. v. 25, n. 1, p. 64-68, 2012.
4. CARONI, Danielly; RODRIGUES, Júlia Stuchi; SANTOS, Aliny Lima. Influência da alimentação na prevenção e tratamento do Alzheimer: uma revisão integrativa. **Research, Society and Development**, v. 12, n. 5, p. e14812541677-e14812541677, 2023.
5. LEIVAS, ELIZABETE DE FIGUEIREDO. A DEFICIÊNCIA DA VITAMINA B12 NO SURGIMENTO DE DEMÊNCIA EM IDOSOS: UMA REVISÃO DA LITERATURA.
6. Ramachandran PS, Baird RW, Markey P, Singleton S, Lowe M, Currie BJ, Burrow JN, Price RN. Neurosyphilis: Still prevalent and overlooked in an at risk population. *PLoS One*. 2020.
7. SETHI, S. et. al. Neurosyphilis in a tertiary care hospital in north India. *Indian Journal of Medical Research*. v. 122, n. 3, p. 249-253, 2005.