

# Primary Central Nervous System Natural Killer/T-cell Lymphoma, a Brain Presentation. Case Report.

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## Introduction

Primary central nervous system lymphoma accounts for 1%-3% of all central nervous system (CNS)(1). Natural Killer/T cell lymphomas (NK/TCL) generally occurs in the adult male (2) and are commonly extranodal and usually present at midline facial structures, where they can reach the central nervous system. (3)

Previously reported treatments include radiation, intrathecal chemotherapy and systemic chemotherapy. The overall success of treatment is poor with a median overall survival of 5 months (1)

#### **Methods**

We describe the clinical course and treatment of a patient with a NK/T cell lymphoma and a literature review of this lymphoma presentation.

### Results

A 79-year-old female who started with a decreased visual acuity in the right eye, then progresses with confusion and decreased strength in the left side of the body. The examination showed hemiparesia, hypoesthesia and hyperreflexia on the upper and lower left limbs and a markedly confusion syndrome. The Magnetic Resonance Image showed a right occipital lesion with 37cm3 of volume, with areas of hemorrhage; the spectroscopy presented a peak N-acetylaspartate with a retaining choline peak.

The patient was taken to surgery, the histopathological report demonstrated a NK lymphoma cells with CD56-positive. Radiotherapy with 35 Gy was administered; chemotherapy could not be administered because the patient presented a quickly deterioration of her basal state, she died 108 after diagnostic.

### **Conclusions**

Clinical information regarding the NK/TCL is not abundant. It is important that within the spectrum of intracranial lesions, lymphomas are considered as a differential diagnosis. A midline presentation and insidious clinical course, like our case, we must search of NK/TCL, so we can start the management and

# **Learning Objectives**

- 1. To know the clinical characteristics of patients with primary central nervous system Natural killer/T-cell lymphoma
- 2. Identify the key points in neuroimaging to suspect this type of injury.
- 3. Achieve de adecuate differentiation of NK cells vs B lymphomas by inmunohistochemestry.

#### References

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