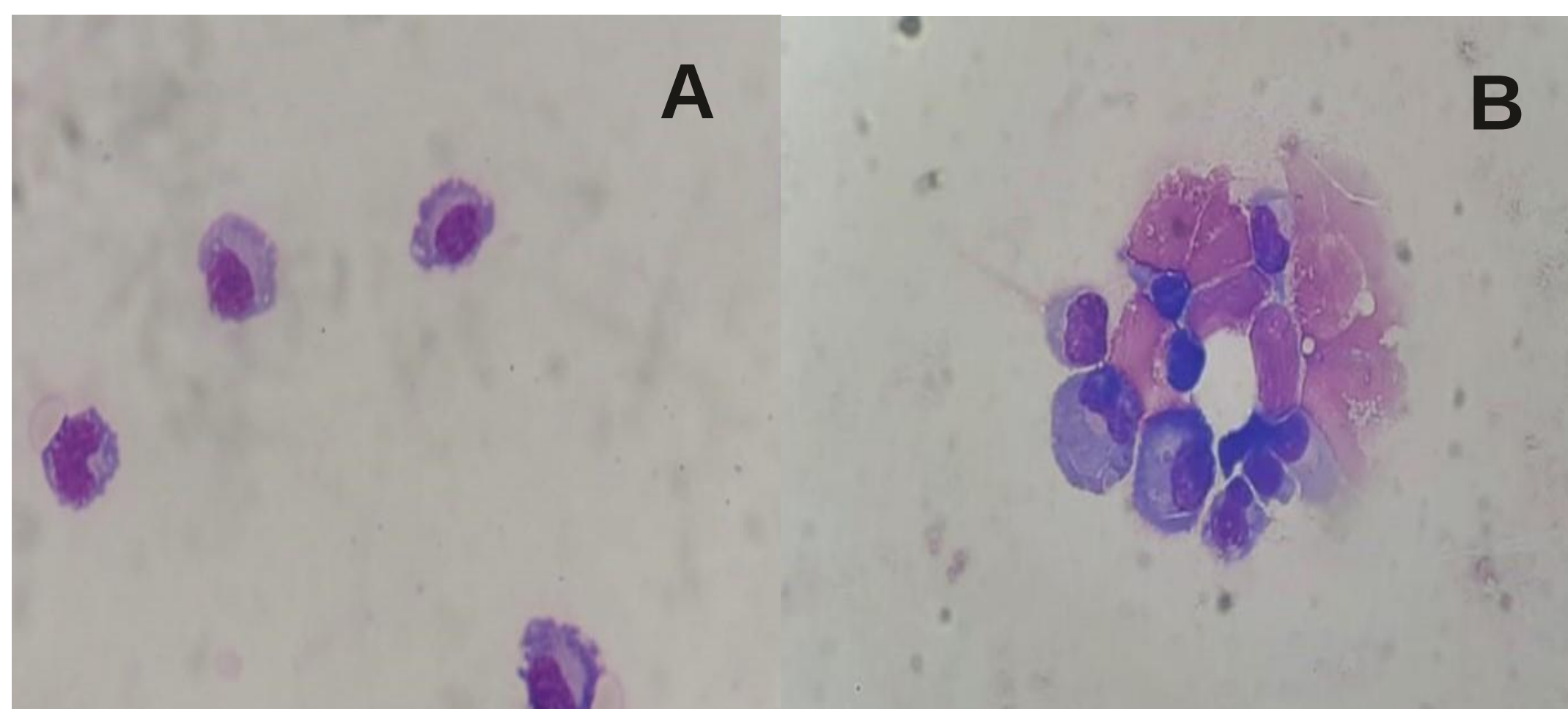


Background

Plasma Cell Neoplasms are a heterogeneous group of diseases involving clonal plasma cell production, secreting monoclonal proteins. Usually, these are conditions that occur in the bone marrow, and involvement in the central nervous system (CNS) is a rare event, affecting about 1% of patients and with unfavorable prognosis. Early diagnosis is indispensable for the initiation of appropriate therapy.

Objective

The present work aims to describe two cases of patients with Plasma Cell Neoplasms with infiltration in the CNS.



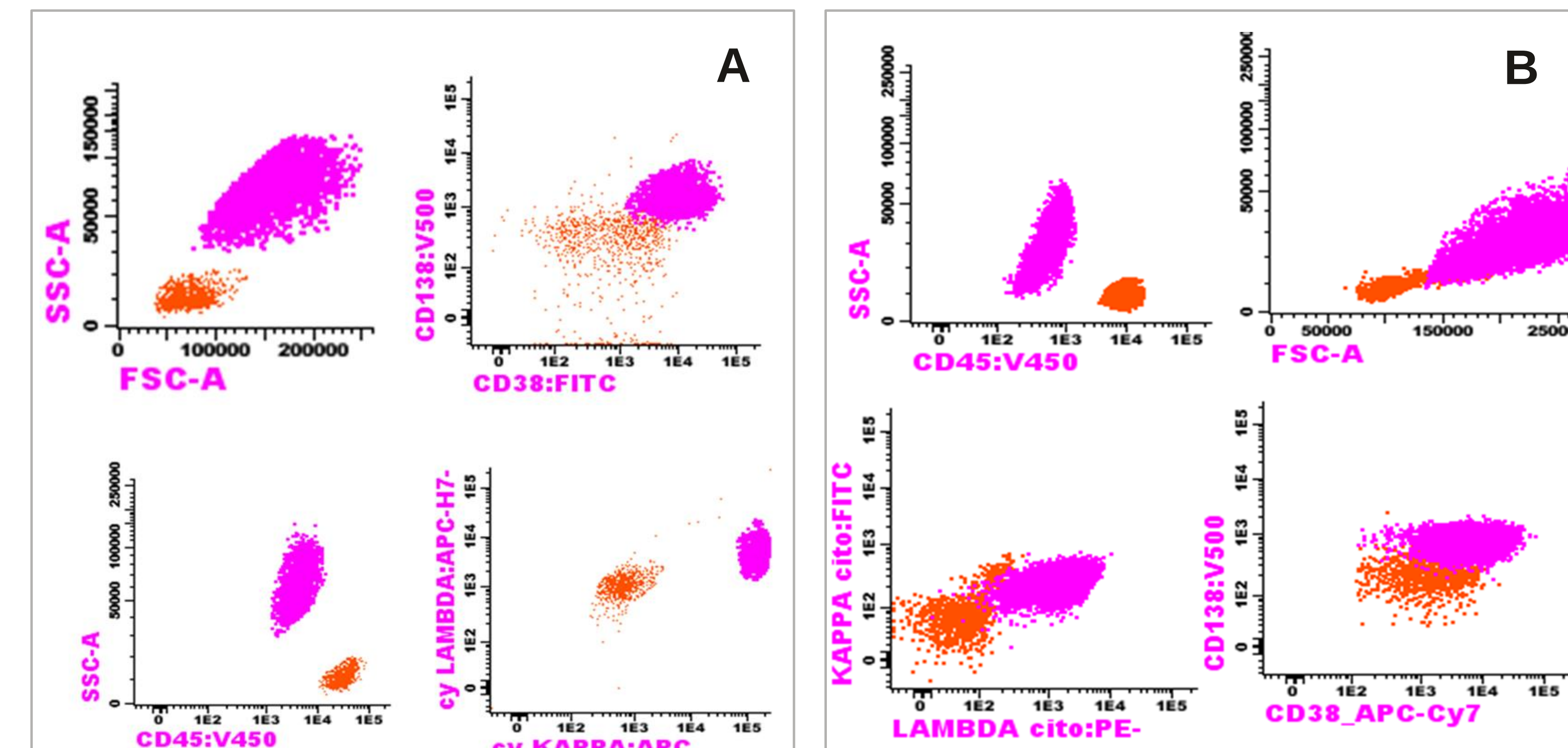
Plasma cells in CSF. Cytological analysis with Giemsa stain. (A):Case 1; (B):Case 2

Patient Case Report

Case 1: Male patient, 58 years old, previous diagnosis of Monoclonal Gammopathy IgA, previous plasmocytoma in the sternal region, recurrence with orbital and sacral plasmocytoma treated with cyclophosphamide, thalidomide, and dhimhasone, and refused autologous bone marrow transplantation. The CSF sample was collected for cytological analysis, which showed 65% of cells with aberrant plasma cells. Immunophenotypic analysis demonstrated the expression of CD38++ CD138+ plasma markers, slg-kappa+ cytoplasmic light chain.

He was hospitalized for seizure investigation. The patient underwent intrathecal treatment; however, there was progressive worsening and death.

Case 2: A 51-year-old male patient with a previous diagnosis of MM; after autologous bone marrow transplantation, he sought medical service with a febrile peak 10 months after transplantation. Clinical evaluation and imaging tests showed multiple sparse lytic lesions in the vertebrae and other permeative bodies distributed throughout the skull cap. Presented with headache and visual turbidity. Cytologic analysis detected 95% of aberrant plasmocytes and CFS immunophenotyping, presenting 94.4% of lambda monoclonal plasmocytes. Polychemotherapy was performed, and the patient had a satisfactory clinical response.



Immunophenotyping. (A):case 1; (B):case 2 .Pink population (pathological plasma cell); Red population (normal mature lymphocytes)

Discussion

Clinical symptoms related to the involvement of the CNS in Plasma Cell Neoplasms can be confused with symptoms due to hypercalcemia, hyperuremia, and paraproteinemia, making the laboratory analysis of CSF of paramount importance for proper diagnosis. Pathological cells have aberrant cytological characteristics; therefore, confirmation through immunophenotyping is essential, being a sensitive and quick-to-perform test for diagnostic confirmation.

References

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