

# Plasma cell leukemia

## Leucemia de células plasmocitárias

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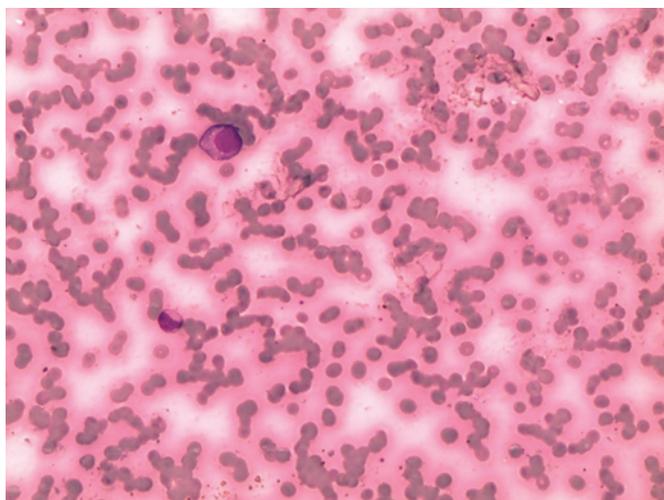


Figure 1. Plasma cell in peripheral blood

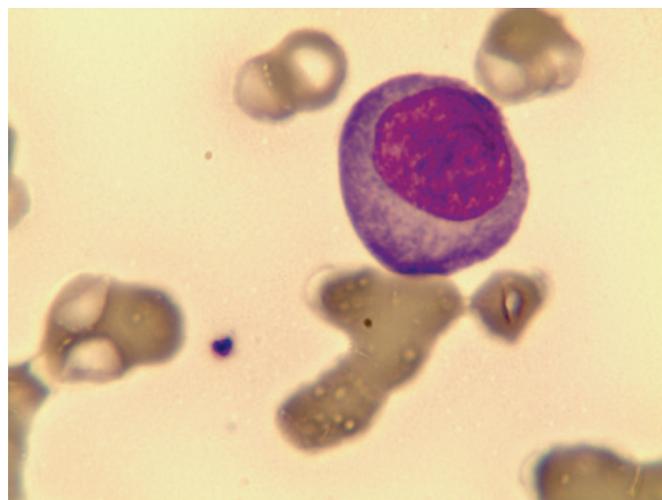


Figure 2. Plasma cell

A 74-year-old woman with renal failure and lytic lesions in the spine was admitted in our hospital. She was diagnosed with IgG kappa multiple myeloma. In addition, monosomy of chromosome 13 and IgH infusion by FISH were seen.

The patient underwent five cycles of VMP (bortezomib, melphalan and prednisone) that achieved complete response, followed by maintenance with bortezomib. However, 18 months later, the patient was readmitted with asthenia and leucocytosis. Atypical cells with plasmacytoid characteristics were detected in peripheral blood smears, consistent with plasma cell leukemia (PCL) (Figures 1 and 2).

PCL is a rare lymphoproliferative disorder featured by the presence of more than 20% of plasma cells in peripheral blood<sup>(1)</sup>. This disease can be primary, but in 40% of cases there is the diagnosis of multiple myeloma. Morphologically, plasma cells are oval-shaped with large basophilic cytoplasm, round eccentric nucleus

and spoke wheel appearance of chromatin without nucleolus. More immature forms can present dispersed chromatin, prominent nucleoli and high nucleocytoplasmic relationship.

Prognosis of PCL patients is poor, and the mean survival is 18-20 months mainly in secondary disease cases in which cytogenetic changes of poor prognosis with del (17p) and p53 loss are often found<sup>(2)</sup>.

The patient underwent rescue chemotherapy, without response. After that, her family opted for palliative treatment.

### REFERENCES

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Received on: Dec 6, 2011 – Accepted on: Dec 5, 2012