

Successful outcome of standard treatment in a patient with non-secretory plasma cell leukemia

서울성모병원 내과

김서린, 박성수

Plasma cell leukemia is a rare form of multiple myeloma (MM) with more than 20% plasma cells in peripheral smear. Non-secretory MM is also a rare disease entity among MM, and that harbors no monoclonal protein in either the serum or the urine by immunofixation. In that, non-secretory plasma cell leukemia (NS-PCL) has been extremely scanty, and their clinical course is not known at all. We hereby report a case of NS-PCL treated with autologous stem cell transplantation (ASCT) following induction treatment (IC). A 62-year-old female presented with easy bruise. Hemogram revealed leukocytosis ($61.3 \times 10^9/L$) with 83% of peripheral plasmacytosis and thrombocytopenia ($49 \times 10^9/L$). Although serum Kappa light chain (48 mg/L) was relatively predominant compared to serum Lambda chain (6 mg/L), neither M band on serum nor 24-urine by electrophoresis was detected. Bone marrow (BM) exam presented 67% of plasma cells among total hematopoietic elements. These cells presented CD43+CD45DIMCD38+CD138+ on flowcytometry analysis. Complex karyotype of 46,XX,+del(1)(p13),add(8)(p23),der(11)t(11;14)(q13;q32),-14 was observed: t(11;14) and 1q21 was founded by fluorescence in situ hybridization (FISH) analysis whereas del(13q), del(17p), t(4;14), or t(14;20) was not. There was no evidence of extramedullary plasmacytoma. Under diagnosis of NS-PCL with stage I revised International Staging System, she received IC consisted of six 28-day cycles of bortezomib-thalidomide-dexamethasone, followed by ASCT and maintenance therapy using thalidomide. Peripheral plasmacytosis was fully regressed at day+2 since initiation of IC. Complete remission (CR) was observed at day+90 on the first follow-up BM evaluation. Up to date (18 months from initiation of IC), the patient has maintained CR without reappearing peripheral plasmacytosis. We suggest that standard treatment for classic MM could be effective for even NS-PCL if its staging is favorable

Plasma cell(%)
in bone marrow biopsy

