P28. **ACUTE BASOPHILIC LEUKEMIA- CASE REPORT.**

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Acute basophilic leukemia is a type of acute myeloid leukemia in which the differentiation is to basophils. This is a very rare disease, with a small number of reported cases, comprising <1% of all cases of AML. The patients may have cutaneous involvement, organomegaly, lytic lesions and symptoms related to hyperhistaminemia. Since this is a rare type of acute leukemia, there is little information on therapy and overall survival and the cases reported had poor prognosis.

We report the case of 61 year old male who in July 2013 was admitted for pallor, progressive asthenia and fatigability. The clinical exam showed good general status, afebril, medium pallor, general oedema, pruritic and erythematous plaques on the calves, no organomegaly. Lab tests showed Hb=10.6g/dL, MCV= 96.6fL, WBC=66240/mmc, Plt= 9000/mmc (Blasts= 42,Promylocyte=1,Myelocyte=4,Metamyelocute=2,B ands=1,Segmented=5,Basophyls=40,Lymphocytes=5) The cytochemical tests: POX positive 40% in peripheral blood, positive Auer rods.

The peripheral blood cyto-flow exam showed a population representing 70% cells, with small-medium internal complexity, fully expressing CD117, CD34, cyMPO, CD33, CD38, CD13 low, CD123, CD71low, CD16 + / - and which is divided into two subpopulations: one subpopulation (50%) that co-express HLA-DR, CD19, and a subpopulation (25-30%) with SSC, CD45 more positive, which coexpress CD203c, CD22, CD2, CD25 (markers of patological mast cell).

The bone marrow aspirate was dry tap and a trephine biopsy was obtained. The bone marrow immunohistochemestry tests revealed CD25 negative, CD34 positive (40%) and CD68 positive in histiocytes but also in frequent mononuclear groups.The bone marrow tryptase was positive. Molecular biology tests revealed AML1-ETO positivity, the other tested transcrips (including bcr-abl and JAK2) were negative.
Serum protein electrophoresis shows compact peak in the beta2 globulins area. serum levels of Igs were normal(especially IgE) except IgG who was increased. Serum protein immunofixation: compact band identified with antibodies against gamma heavy chain and kappa light chain.

The patient received cytoreductive therapy with Hydroxycarbamide, and after reducing the riks of tumour lysis syndrome, 1 cycle of "3 +7"regimen was administered.

Bone marrow aspirate from day 7 shows low cellularity and the one from day 14 shows blasts 6-7% (myeloblasts), basophils <1%.
At present, the pacient is receiving consolidation treatment.

Our case report represents the challenge of accurate diagnosis and treatment of this rare disease. This rare form of AML requires differential diagnosis with chronic mieloproliferative disease, acute mast cell leukemia, systemic mastocytosis, myeloid mast cell leukemia or systemic mastocytosis accompanied by acute myeloid leukemia.