P23. ALLOTRANSPLANTATION OF HEMATOPOIETIC STEM CELLS IN A CASE OF CHRONIC MYELOMONOCYTIC LEUKEMIA (CMML) MYELODYSPLASIA STAGE IN TRANSFORMATION TO ACUTE LEUKEMIA.

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Chronic myelomonocytic leukemia (CMML) is a clonal disorder of hematopoietic stem cell characterized by the presence of an absolute monocytosis (> 1000 / mmc) in peripheral blood and the presence of myelodysplastic aspects and myeloproliferative in the bone marrow. Framed by WHO in the category of myelodysplastic syndrome / myeloproliferative neoplasm is the most aggressive myeloid cancer with survival between 14-24 months and 30% transformation in acute leukemia.

Treatment strategy is determined by the phenotype of the disease together with the number of blasts in MO. The only curative option for CMML there is the hematopoietic stem allotransplantation. HSCT should be recommended as soon as possible for young patients with aggressive disease and increased number of blasts in MO.

We present you the case of a patient aged 46 years who was admitted to the Center of Hematology and Bone Marrow Transplantation IC Fundeni in May 2013 having asthenia.

Laboratory examinations revealed: Hb = 7.g / dl, Ht = 23%, MCV 100 fl, Plt 241,000/µl WBC = 7,790 /µl N 1% S 35% E 1% L 52% M 10%.

Bone marrow examination: aspiration - Mbl 10-11%; presence of dysplastic features (hypogranular granulocyte, megaloblastoid forms to the erythroid series).

Bone marrow biopsy - moderate granulocytic hyperplasia, rare groups of erythroblasts, small Mk with hipolobulated nucleus.

Immunohistochemistry stains of CD 34 + cells 12-14%. Karyotype - 6 metaphases 3 cells with chromosome 1 inversion; hyperdiploid with 84 and 99 chromosomes.

Between March and June 2013 requiring repeated hospitalizations for anemia related and requires repeated transfusions of packed red blood cells. Repeated full blood count shows a decrease in neutrophils and an increase in the monocytes (1400 / mmc), which was maintained > 3 months. Bone marrow aspirate from May 2013: 6-7% myeloblasts + 5-6% monocytic cells atypical (promonocytic).

Bone marrow biopsy - 12-14%. CD34. The patient was initially framed as RA with excess blasts in transformation.

The appearance and maintenance of monocytosis in peripheral blood and later on in MO led to a change of framing in LMMC-myelodysplasia form (FAB classification) and CMML-2 (myeloblasts + monoblasti + promonocytes) in the blood and MO <20% (WHO classification).

Treatment performed: chemotherapy (two courses' 3 + 7 " and 2 courses EMA). Each course was followed by long periods (30 days) of severe cytopenia feverish. Restoration of cytopenia occurred after each treatment with increased numbers of monocytes followed by their decrease and the recovery of the neutrophil amount. Immunophenotyping MO- July 2013: a population of CD45 positive cells, mean internal complexity (40%) expressing monocytic cell markers in various stages pathological maturation follows: CD117 positive (15%) of these CD177 + and CD34 + (10%), CD64 + and CD14- (8%), CD64 + and CD14 + (18%) the most likely co-expressed CD36, CD11b, CD300, CD4, CD56.

Conclusion: The proliferation of monocytic cell line with high percentage of immature cells. Cytogenetic analysis- review highlights t (1, 3). Molecular biology tests: FLT3, NPM1, E2A-PBX1, PML-RAR alpha, MLL-AF4, CBFb- MYH 11, BCR-ABL1, SIS-TAL, MLL- AF9 negative. Allotransplantation of hematopoietic stem cells from unrelated donor in April 2014. The last control with CSH 100 % chimerism donor cells.