

# **THE EXPERIENCE OF A SINGLE CENTER OF HEMATOLOGY IN THE TREATMENT WITH HYPOMETHILATING AGENTS.**

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**Introduction:** The clinical studies demonstrated that treatment with hypomethylating agents (5-azacytidine and decitabine) in intermediate/high risk MDS resulted in complete cytogenetic responses even in cases with a complex karyotype. On the other hand, for patients with AML who do not qualify for aggressive chemotherapy and allogeneic medullary transplantation, treatment with hypomethylating agents leads to transfusional independence and increase in quality of life.

**Materials and methods:** We present the evolution under treatment with hypomethylating agents in 12 patients, diagnosed with intermediate/high risk MDS and AML in our Department between 2009-2015. There were 8 men and 4 women, with ages between 56-84 years, 7 of them diagnosed with intermediate/high risk MDS, and 5 diagnosed with AML, unfit to chemotherapy. 9 patients (6 patients with MDS and 3 patients with AML) received treatment with 5-azacytidine and 3 patients, one man with AML post MDS and 2 women with AML de novo, received Decitabine. Cytogenetic exam was performed in all cases and a abnormal karyotype was obtained in 2 cases, both with MDS, one patient with a complex karyotype, including del (5)(q32;qter) and one with 12 monosomy. The selected schedules were: 5-Aza 75 mg/m<sup>2</sup>/d, for 7 days, repeated every 28 days and Decitabine 20 mg/m<sup>2</sup>/d, for 5 days, repeated every 28 days.

**Results:** All patients had a good tolerance to therapy, without significant adverse events. The overall response to 5-Aza was heterogenous, with no significant differences regarding blast percentage, with one complete response in the case with 12 monosomy. Unfortunately in the 3 patients with AML treated with Decitabine, there was a delay in the time of treatment initiation due to administrative and financial issues, and they died due to disease progression. There were no side effects.

**Conclusions:** The presented data indicate similar results to that in the literature. The most important effect of treatment was on the quality of life by the reduction in the transfusional demand. The hypomethylating agents are a less toxic alternative to classical cytotoxic/antimetabolites agents.

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