

properties. The aim of this study was to evaluate prospectively the efficacy of a FBM protocol for the prevention of OM in patients undergoing a HSCT.

Methods: All patients consecutively who underwent a HSCT at our Center from 201X onwards received five weekly FBM sessions with a bidiodic laser (Lumix 2®, Prodent, Italy), which simultaneously emitted at 650nm and 910nm with a power of 89mW and energy of 4J per point. The procedure started the day before the beginning of the conditioning regimen up to the tenth day post-transplant. The laser was applied in a defocused mode on each of the mucosal surfaces (12 areas). At each session, the morphine dose, the OM level (according to the WHO scale) and pain through a Numerical Rating Scale (NRS) were recorded.

Results: 27 consecutive patients (19 male/8 female) submitted to a HSCT were analyzed. The median age was 44 years (range 4-66). Eighteen patients had acute leukemia, 3 myelodysplastic syndromes, 6 lymphoproliferative diseases. The median number of treatment lines before HSCT was 2 (range 1-5). At transplant, 13 patients had advanced disease. The myeloablative conditioning regimen MAC (Thyotepa, Busulphan, Fludarabine) was employed in 17 patients; the same conditioning, with a reduced dose of Busulphan (RIC), was infused in 10 patients. Seven patients (26%) had no evidence of OM. The incidence of grade II-IV OM was 65% in the group of patients receiving MAC and the median duration 12 days (range 3-28); grade 4 OM was observed, for 1 day, in 1 patient. In the RIC group the incidence of OM was 50%, the median duration 11 days (range 7-16); no patient had evidence of grade IV OM. In the whole population, the maximum NRS value was 4. Morphine administration was required in 23 patients, due to the occurrence of non-oral complications.

Conclusions: In our experience, prophylaxis with FBM to prevent or reduce OM was safe and effective, compared to results of previous experiences reported in the literature, which used no prevention against this complication that negatively affects the quality of life of transplanted patients. Further studies on a large series of are necessary to confirm our results.

Disclosure: Nothing to declare

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The impact of genetic risk stratification in AML and MDS patients on overall survival after allogeneic hematopoietic stem cells transplantation: A single-center study

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Background: Cytogenetic abnormalities are an essential part of prognostic systems in myeloid malignancies before hematopoietic stem cell transplantation (HSCT), however, their role in posttransplantation prognosis is unknown. The aim of this study was to assess the prognostic impact of genetic risk stratification of AML and MDS patients on posttransplantation course, which could be an additional tool in making decisions regarding preemptive therapy.

Methods: A retrospective analysis covering patients treated with allo-HSCT between 2012 and 2018.

Cytogenetic studies included karyotyping (C- and G-banding) and fluorescence in situ hybridization (FISH). The number of analyzed cells exceeded European Cytogenetics Association guidelines (for each FISH at least 600 interphase nuclei were analyzed). Cytogenetic risk group in AML was assessed based on the ELN 2017 criteria.

Patients with MDS were stratified into three groups; favorable (good and very good prognostic score), intermediate, and adverse (poor and very poor) prognostic score according to IPSS-R 2012.

Results: 99 patients (82-AML, 17- MDS) were enrolled. 71 patients received myeloablative and 28- reduced intensity conditioning. The donors were unrelated for 71 patients and related for 28.

6 patients (7%) belonged to the favorable, 55 (67%)-intermediate and 21 (26%- adverse category in AML group and respectively: 7 (41%), 3(18%) and 7(41%)- in MDS group.

The estimated 1y overall survival (OS) reached 91.7% (95%CI: 53.9-98.8) in good, 82.8% (95%CI: 69.4-90.7)-intermediate and 71.1% (95%CI: 50.4-84.4) in poor category and 3-y OS: 74.6% (95%CI: 40-91), 73.3% (95%CI: 58.1-83.7) and 56% (95%CI: 35.6-72.2)(p = 0,14597), respectively.

Interestingly, the poorest survival was in patients with monosomy of chromosome 7, which was present in 6 patients of whom 5 succumbed to refractory disease, while all patients who had deletion of long arm of chromosome 7 (del 7q)- are alive at the time of writing of this report after a median follow-up of 34 months (21-73).

Relapse was diagnosed in 31 patients (31%), including; 13 (42%) with adverse, 15 (48%) with intermediate and 3 (10%) with favorable cytogenetic risk.

Among 12 patients with a complex karyotype and/or cytogenetic evolution prior HCT: 8 patients (67%)-relapsed, including 6 (50%)- who died.

Follow-up cytogenetic studies in relapse after transplantation were performed for 24 patients; 4 of them (17%) had clonal evolutions of the original karyotype with additional