patients who received the pharmacological therapy plus Extracorporeal radiotherapy twice a week. Apoptosis induction, phenotype of dendritic cell subsets and cytokine production were evaluated in vitro. Results. 15 patients with aGVHD and 15 with cGVHD were studied. In aGVHD grade IV neither treatment affected the long-term survival. Nevertheless, in 3/4 patients (75%) who received radiotherapy, diminution of clinical symptoms (gastrointestinal bleeding and skin rash) was observed since the first week of treatment, improving the quality of life. This effect was also observed at later in patients receiving only pharmacological therapy. In cGVHD, 7 patients received radiotherapy, 5 (71.4%), improved the skin pain since the first week and the skin sclerosis after 6-12 months. In one patient, control of cGVHD progression was obtained. Some of these patients had previously received pharmacological therapy without control of the GVHD. 1/8 patients that received only pharmacological therapy, three improved (37.5%), in three (37.5%), were control of cGVHD progression and two got worse (25%). Histological skin follow-up showed that in aGVHD severity score were one grade lower on all radiophoresis cases evaluated. In patients that received pharmacological therapy only, 80% were the same grade, 20% got worse. For cGVHD skin biopsies were made after 6-12 months. Lower or same histological grade were observed in six patients who received radiophoresis and four patients with only pharmacological therapy, 87.5% and 50% respectively. Induction of apoptosis in cells that received radiophoresis was evaluated with DIOC-6/BE. No changes in the phenotype of dendritic cells differentiated from monocytes with IL-4+GM-CSF were observed. Summary: Better clinical and histological therapeutic effects were observed on patients who received Extracorporeal Radiotherapy. Multicentric studies will contribute to evaluate this therapy in a larger number of patients.

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0826 IMMUNOHISTOCHEMICAL EVALUATION OF INFILTRATING CELLS (CD4+, CD8+, AND CD56+) AND LÄNGERHANS CELLS IN SKIN OF GRAFT VERSUS HOST DISEASE PATIENTS

M. Velasquez-Lopera,1 A. Vargas,2 G. Arellano,1 L.A. Correa,1 J.C. Wolff,2 G. Sanclemente,1 J.C. Villamizar,1 A. Jaramillo,2 L.F. Garcia,1 F. Cuellar-Ambrosi1

1Universidad de Antioquia, Medellin, Colombia; 2Rush University Medical Center, Chicago, USA

Graft vs. host disease (GVHD) occurs in about 60-80% of allogeneic hematopoietic stem cell transplant recipients due to mismatching of major and minor histocompatibility antigens. Cutaneous involvement is the most frequent clinical manifestation of GVHD. In this regard, Langerhans cells (LC) have been shown to play an important role in the pathogenesis of GVHD as antigen-presenting cells through both the direct and indirect allo-recognition pathways. Thus, we carried out an immunohistochemical study to determine the characteristics of the infiltrating T cells (CD4+ and CD8+) and NK cells (CD56+) as well as LC (CD1a+) on skin biopsies of GVHD patients and their correlation with global GVHD scores. Forty-two patients were allo-transplanted between June, 1998 and December, 2002. Twenty-nine (69%) patients developed GVHD; among those, 15 (36%) developed acute GVHD, 5 (11.9%) developed chronic GVHD, and 9 (21.4%) developed acute and chronic GVHD. Immunohistochemical enumeration of CD1a+, CD4+, CD8+, and CD56+ cells were performed in paraffin-embedded punch skin biopsies taken mainly from the thorax. Among the 24 cases with acute GVHD, skin involvement was observed in 23/24 (95.8%) patients, most of them with G I-II scores. Intestinal GVHD was seen in 7/14 (50%) patients. The number of LCs/mm2 in dermis and epidermis was significantly lower in cases with major global severity scores: Normal skin donors: (mean±SD) 15.6±1.6, acute GVHD G-I-II: 7.5 ± 8 and G-III-IV: 3.6±2.7 (p<0.05). An increase in the ratio of infiltrating perivascular T cells was observed and it was inversely proportional to the number of LCs on epidermal and dermal layers of the skin. There was no increase of CD56+ NK cells in patients with acute GVHD as compared to normal controls. Figure 1. Extensive chronic GVHD was seen in 7/14 (50%) patients. The number of LC was similar in limited and extensive chronic GVHD (9.5±4.2 and 9±12.7, respectively). In de novo chronic GVHD, the number of LC was higher (15.2±4.6), than in progressive (7.3±0) or quiescent (2.7 ± 3.9) GVHD (p=0.05). Scleroderma-like presentation showed higher number of LC (9.7±6.7) as compared tolichen-like lesions (7.3±0).

No increase in the ratios of infiltrating epidermal and perivascular CD8+, CD4+ or CD56+ cells was observed. In summary, in acute severe systemic GVHD, a significantly lower number of LCs and higher number of CD8+ T cells were observed. These changes were not observed in chronic GVHD. This study indicates that skin CD8+ T cell/LCs ratios could be used as an additional tool for diagnosis and follow-up of GVHD.

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