LYMPHOMA: THERAPY WITH BIOLOGIC AGENTS, EXCLUDING PRE-CLINICAL MODELS | NOVEMBER 16, 2008

Experience in Using Hypercvad Combined with Alemtuzumab in Treating Peripheral T-Cell and T/NK-Cell Neoplasms

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Abstract

Peripheral T-cell and T/NK-cell neoplasms (T/NK-cell neoplasms) are rare, representing less than 15% of non-Hodgkin lymphoma in the western hemisphere. The optimal therapy for peripheral T-cell and T/NK-cell neoplasms is an area of controversy due to rarity of the diseases, their variable clinical course, and the lack of randomized trials. Fractionated

Abstract

Peripheral T-cell and T/NK-cell neoplasms (T/NK-cell neoplasms) are rare, representing less than 15% of non-Hodgkin lymphoma in the western hemisphere. The optimal therapy for peripheral T-cell and T/NK-cell neoplasms is an area of controversy due to rarity of the diseases, their variable clinical course, and the lack of randomized trials. Fractionated cyclophosphamide, vincristine, doxorubicin and dexamethasone (hyperCVAD) alternating with high doses of methotrexate and cytarabine has proven to be an effective cytoreductive regimen in patients with aggressive histopathologic variants of mantle cell lymphoma. Alemtuzumab (Campath®) is a humanized monoclonal antibody that targets CD52, a cell surface protein present at high density on most normal and malignant B and T lymphocytes. We report our experience in using six cycles of hyperCVAD in combination with alemtuzumab D1 +/− D4 for the treatment of newly diagnosed peripheral T-cell and T/NK-cell neoplasms in our institution. Seven females and five males diagnosed with peripheral T-cell and T/NK-cell neoplasms ($N_{\text{T and T/NK-cell lymphoma}} = 5$, $N_{\text{T-cell leukemia}} = 5$, $N_{\text{NK-cell leukemia}} = 2$) from 2006 to 2008 were treated with alemtuzumab-hyperCVAD regime. Three patients completed alemtuzumab-hyperCVAD regime and achieved response within four cycles. Among the three patients who completed hyperCVAD regime with only three to five doses of alemtuzumab, two achieved complete response and one had progressive disease. There were six patients who did not complete the alemtuzumabhyperCVAD regime. Three of them stopped at fifth cycle due to cytomegalovisrus (CMV) complication. Two patients died after forth cycle due to neutropenic sepsis although they achieved