FATAL ACUTE GRAFT-VERSUS-HOST DISEASE IN SEZARY SYNDROME TREATED WITH MOGAMULIZUMAB AND HEMATOPOIETIC CELL TRANSPLANTATION

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Sézary syndrome (SS) is a rare and aggressive T-cell lymphoma with a poor prognosis in advanced stages. Allogeneic hematopoietic cell transplantation (allo-HCT) offers a potential cure, but complications such as graft-versus-host disease (GvHD) remain a clinical challenge.
Mogamulizumab, a humanized anti-CC chemokine receptor 4 (CCR4) antibody, is sometimes used as a bridge to transplantation, but its potential interactions with allo-HCT are unclear. This report describes the case of a 37-year-old man with advanced SS who received mogamulizumab therapy followed by allo-HSCT from an HLA-identical sibling donor. The patient developed severe gastrointestinal acute GvHD, which was treated with steroids and infliximab. However, the condition
rapidly progressed to severe intestinal symptoms and life-threatening haemorrhagic shock, ultimately resulting in the patient's death. This case highlights a potential link between mogamulizumab and severe acute GvHD promoted by drug-induced suppression of regulatory T cells. Further research is required to fully understand the interaction between mogamulizumab and allo-HCT and to determine whether it is an optimal approach as a bridge to transplant therapy.
This paradigmatic case suggests the need of personalizing transplant strategies by selecting appropriate conditioning therapy and GvHD prophylaxis to minimize potential toxicity.