中文題目：案例報告：瀰漫性巨大 B 細胞淋巴瘤病患經自體周邊骨髓幹細胞移植後產生致命自發性移植物對抗宿主疾病

英文題目：Fatal spontaneous graft versus host disease after autologous peripheral blood hematopoietic stem cell transplantation in a patient with diffuse large B cell lymphoma: A case report

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Abstract:

Graft versus host disease (GvHD) is usually seen in patients with allogeneic hematopoietic stem cell transplantation (HSCT). However, GvHD after autologous HSCT (autologous GvHD) has been reported to occur spontaneously in patients with multiple myeloma, or induced by cyclosporin A in patients with other hematological malignancies including non-Hodgkin lymphoma (NHL). Spontaneous autologous GVHD is rare in NHL patients. We hereby present a 64-year-old male with advanced-stage diffuse large B cell lymphoma (DLBCL) who spontaneously developed autologous GvHD after autologous HSCT.

Case report: The 64-year-old man initially presented with progressive shortness of breath for 6 months in December 2017. Left massive chylothorax was noted, and subsequent work-up revealed multiple retroperitoneal lymphadenopathies causing bilateral hydronephrosis with acute kidney injury. Retroperitoneoscopic biopsy was performed in January 2018, and pathology showed DLBCL, germinal center type. The PET/CT scan showed multiple focal increased uptake in the neck, retroperitoneum, mesentery, presacral region, bilateral pelvis, and bilateral inguinal regions. Bone marrow study showed lymphoma involvement. The diagnosis of DLBCL, germinal center type, Ann-Arbor stage IVB, International Prognostic Index scores at 4 was made. The patient then received 6 cycles of induction immuno-chemotherapy with the regimen R-DA-EPOCH, and a partial response with free from lymphoma in the bone marrow was achieved. To better control the disease, the patient received high-dose chemotherapy with BEAM regimen followed by autologous peripheral blood HSCT in July 2018. The course was smooth and he was discharged on day 16 after HSCT. However, fever with chills developed on day 34 after HSCT, accompanied by confluent scaling brownish patches and plaques over the face, trunk, and limbs. Multiple oral ulcers extending to the upper and lower limbs were also noted. Drug allergy was considered at first and potentially culpable drugs were withheld. In addition, the replacement of intravenous immunoglobulin for panhypogammaglobulinemia (noted after HSCT) and ganciclovir for cytomegalovirus (CMV) viremia were done, but the condition did not improve. Skin biopsy was finally performed on day 72

at the dermatologist's suggestion and the pathology showed interface change with blister formation, degenerated keratinocytes, melanophages and some lymphocytic infiltration in the dermis all of which is compatible with grade III cutaneous GvHD. The erythroderma and skin scaling initially showed significant improvements to steroid treatment (Figure 1, Figure 2). However, GvHD frequently flared once the steroid was tapered in the subsequent months, and moreover, the patient's condition was also complicated with CMV viremia, pancytopenia and pneumonia with respiratory failure. The patient eventually died on day 157 after HSCT.

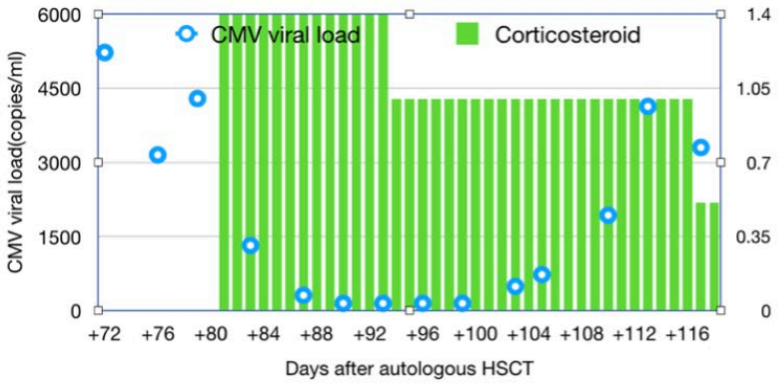

Figure 1

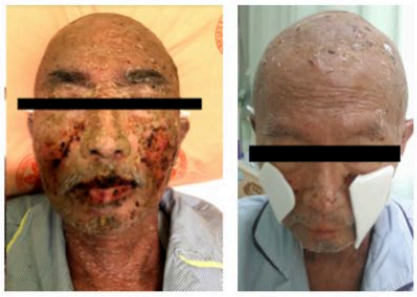

Figure 2

Conclusion: Compared to patients with multiple myeloma (MM), spontaneous acute GvHD after autologous HSCT is rarely reported in NHL patients. For the former, the altered immune function that led to self-intolerance causing autologous GvHD is thought to be related to MM itself and/or anti-MM treatments with immunomodulators and proteasome inhibitors. In our patient, there were two possible factors thought to contribute to the development of autologous GvHD. First, the new-onset panhypogammaglobulinemia following HSCT was similar to MM patients, indicating a suppressed cell-mediated immunity, and might have primed the patient for the development of autologous GvHD after autologous HSCT. Second, CMV viremia in our patient might further contribute to it, as seen in allogeneic HSCT. With an increasing application of autologous HSCT in lymphoma patients, we highlighted the importance in early recognition and prompt management of autologous GvHD as it could potentially be intractable and life-threatening.