

Editorial

Autologous hematopoietic stem cell transplantation in systemic sclerosis patients

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Editorial

Systemic sclerosis (SSc) is an autoimmune disorder of unknown aetiology, characterised by fibrosis and microvascular injury of the affected organs. The hallmark of the disease is thickening and tightness of the skin and the subcutaneous tissue. SSc can affect virtually any organ systems, most importantly the skin, blood vessels, lungs, kidneys, gastrointestinal tract, and the heart [1].

From Hippocrates who was the first to describe the illness as “thickened skin” [2] and later in 1836 when Giovambattista Fantonetti coined the term “scleroderma” [3] we have made little progress in comparison with other autoimmune diseases [4,5], treating the patient’s symptoms rather than treating the disease in sine. On the other hand, the overall survival has been improved dramatically over the last years, but there is still no specific treatment.

In the last years, the autologous hematopoietic stem cell transplantation (AHSCT) has been proposed as a therapeutic modality for severe cases of SSc. The first transplantations in autoimmune disorders have been performed in 1994 and the procedure was considered experimental for a very long time until the results of several trials proved its efficacy in SSc patients [6-8]. In a recent systematic review and meta-analysis by Shouval, et al, it has been showed that AHSCT reduces the risk of all-cause mortality and has properties of a disease-modifying antirheumatic treatment in SSc patients, but an appropriate patient selection and timing of transplantation are mandatory [9]. Pawlak-Bus, et al, reported recently the clinical outcome of a 5-year follow-up of a SSc patient that underwent AHSCT. The patient showed an improvement in exertion tolerance, partial regression of skin lesions and stabilization of pulmonary and cardiovascular changes [10]. Finally, in 2018, the American Society for Blood and Marrow Transplantation (ASBMR), based on high-quality evidence, recommended that AHSCT should be considered as a “standard of care” indication for SSc patients [11].

More Information

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Submitted: 24 February 2020

Approved: 26 February 2020

Published: 27 February 2020

How to cite this article: Pelechas E, Karagianni P. Autologous hematopoietic stem cell transplantation in systemic sclerosis patients. *J Stem Cell Ther Transplant.* 2020; 4: 001-002.

DOI: 10.29328/journal.jsctt.1001019

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Keywords: Autologous hematopoietic stem cell transplantation; Systemic sclerosis; Autoimmunity; Immunosuppression



Through this editorial we would like to point out that after a careful selection of patients, AHSCT could become a reliable therapeutic option among patients with progressive SSc resistant to standard therapy. Close collaboration with a multidisciplinary team involving rheumatologists and transplant physicians is mandatory in order to ensure optimal outcomes.

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