DOI: 10.46765/2675-374X.2023V4N1P179

CONSENSUS UPDATE

HEMATOPOIETIC STEM CELL TRANSPLANTATION FOR MONOCLONAL GAMMOPATHIES: MULTIPLE MYELOMA AND AMYLOIDOSIS

Angelo Maiolino[1], Abrahao Elias Hallack Neto[2], Edvan Crusoe[3], Roberto Magalhães[1], Renata Ferreira Marques Nunes[4], Vania Hungria[5].

1 Universidade Federal do Estado do Rio de Janeiro
2 Faculdade de Medicina da Universidade Federal de Juiz de Fora
3 Hospital Universitario Professor Edgar Santos
4 Hospital de Transplantes Euryclides de J. Zerbini
5 Santa Casa de São Paulo

Corresponding author: Abrahao Elias Hallack Neto (abrahallack@uol.com.br)

Received: 20 Oct 2022 • Revised: 21 Nov 2022 • Accepted: 13 Jan 2023.

INTRODUCTION

The treatment of multiple myeloma (MM) has improved gratly in recent years. Given these advances, many question the need to use autologous HSCT in the first line. Still, despite the remarkable evolution of drug treatment, autologous HSCT remains essential in the approach of first-line therapy for patients with symptomatic MM eligible for this therapeutic modality, regardless of risk stratification or assessment of minimal residual disease after induction therapy.

UPDATE

Although the recommendations made in the last HSCT consensus document for MM remain unchanged[1], new studies have been published and below, we highlight the findings of the two most important ones, concerning patients eligible for transplantation.

The first under consideration is the DETERMINATION[2], which was initially created as a parallel study to the IFM 2009, but has been changed to include the use of maintenance therapy with lenalidomide until disease progression in both the RVD alone group and the RVD followed by autologous HSCT. In this study, patients were randomized to receive, after three cycles of RVD, autologous HSCT followed by two more cycles of RVD or three more cycles of RVD. Although there was no difference in overall survival, patients undergoing autologous HSCT had more remarkable progression-free survival, confirming a finding from the 2009 IFM and responding to a criticism of this study that maintained lenalidomide for only one year.

Another relevant study was the FORTE[3], which randomly evaluated the use of carfilzomib in association with cyclophosphamide and dexamethasone (KCd), followed by autologous HSCT or in association with lenalidomide and dexamethasone (KRd), followed or not by autologous HSCT. This study was critical because, one of the reasons that would justify not using autologous HSCT in the first line would be the more significant number of severe side effects related to this therapy, which was not verified, when comparing the KRd group with or without autologous HSCT. Patients who received KRd with autologous HSCT showed clinically significant benefit, compared with KRd without HSCT or KCd plus HSCT.

A piece of data that may lead to a need for a future change in the document generated in 2020[1], but which still needs more studies for its incorporation, was the benefit of the association of carfilzomib with the maintenance of lenalidomide[3], evaluated in the second randomization after the end of the three lines of treatments, because, in addition to demonstrating more adverse events than the isolated use of lenalidomide, it can impact the quality of life because it is used parenterally and may not present many benefits to patients undergoing transplantation.

Thus, we maintain the recommendations and evidence levels of the document generated in 2020, including those for allogeneic HSCT, whether for MM, as well as for amyloidosis, highlighting the need to incorporate more therapies for these patients, mainly in the public health system and the importance of improving access to autologous HSCT for patients with MM, who are the most submitted to transplantation in Brazil[4], but which is still not offered to most patients treated outside the supplementary health system.

REFERENCES:

1. Maiolino A, Hallack AE Neto, Magalhães R, et al. HSCT for monoclonal gammopathies: multiple myeloma and amyloidosis. JBMTCT. 2021;2(1):54-60.

2. Richardson PG, Jacobus SJ, Weller EA, et al. Triplet Therapy, Transplantation, and Maintenance until Progression in Myeloma. N Engl J Med. 2022;387:132-47.

3. Gay F, Musto P, Rota-Scalabrini D, et al. Carfilzomib with cyclophosphamide and dexamethasone or lenalidomide and dexamethasone plus autologous transplantation or carfilzomib plus lenalidomide and dexamethasone, followed by maintenance with carfilzomib plus lenalidomide or lenalidomide alone for patients with newly diagnosed multiple myeloma (FORTE): a randomised, open-label, phase 2 trial. Lancet Oncol. 2021;22(12):1705-20.

4. SBTMO. Registro multicêntrico de TCTH Brasileiro [Internet]. Rio de Janeiro; 2022 [cited 15 Dez 2021]. Availble from: https://sbtmo.org.br/registro-multicentrico-tcth/