



Need for integrating early palliative care with standard hematology care long before the allogeneic hemopoietic stem cells transplantation

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Dear Editor,

We would like to extend the review by Simon et al. [1], by focusing on the importance of structured interventional early palliative care (EPC) programs along the whole hematologic disease trajectory, which might end with an allogeneic hemopoietic stem cell transplantation (HSCT) procedure. Among the four categories into which the European Bone Marrow Transplantation (EBMT) indications are classified [2], the clinical option (CO) category includes indications based on the data from small patient series, in the absence of confirmatory randomized studies. Relapsed/refractory acute leukemias are examples of CO indications to allogeneic HSCT [2]. Based on current interpretation of existing data for indications placed in this category, HSCT is considered a valuable option, after careful discussions of risks and benefits with the individual patient, by taking patient factors such as age and comorbidity into consideration [2]. We believe that the CO category may offer an ideal ward to integrate EPC programs with standard care. The palliative care intervention was defined early if it occurred within 8 weeks from cancer diagnosis, as first recommended by the American Society of Clinical Oncology (ASCO) guidelines and then by other European and National Scientific Societies [3–5]. Some indicators of quality of end-of-life care have recently been accepted by most of the hematologists, including neither chemotherapy within 14 days before death nor

intensive care unit admission within 30 days before death, fewer than two emergency department visits or hospitalizations within 30 days before death, neither intubation nor cardiopulmonary resuscitation within 30 days before death, neither red cell nor platelet transfusions within 7 days before death, and hospice length of stay > 7 days before death [6]. Efforts should be made to implement this list, by including indicators more specifically related to transplantation procedures and post-transplant complications. Discussing goals of care and values, prognosis, treatment choices, and life-sustaining treatment preferences should be offered before proposing HSCT and, especially, when HSCT is indicated as a CO for either a relapsed or a refractory malignant disease. Relevant to this, in a US survey, most hematologists equally considered acute myeloid leukemia (AML) either at first relapse (in the absence of previous HSCT) or at relapse after HSCT both indicative of an end-of-life disease phase (with life expectation less than 6 months) [6], reinforcing the need for a prompt EPC intervention, to discuss the goals and values of a HSCT procedure, by balancing its potential benefits and burden. Consistent with this, following integration of palliative with hematologic care, AML patients, undergoing intensive chemotherapy, showed significant improvements in quality of life and psychological distress, higher chances to discuss end-of-life care preferences, and reduced chemotherapy aggressiveness near end of life, compared with patients receiving usual care [7]. Communication skills are a pillar of an effective EPC intervention [8], and the training of dual board-certified medical hematologist/palliative care physicians as well as other measures (Table 1) is essential to allow HSCT patients and caregivers to have a more realistic understanding of their disease trajectory and needs [8–10].

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Table 1 Concrete suggested interventions to overcome obstacles to inpatient and outpatient early palliative care for HSCT patients

Educational interventions directed to hematologists (type)	-Specialty school in (early) palliative care [9, 10] -Training pathway as dual board-certified medical hematologist/oncologist and (early) palliative care physician [9, 10] -Periodic mandatory palliative care rotation for hemato-oncology fellows [5] -Joint clinical rounds and patient care workshops [5]
Educational interventions directed to hematologists (contents)	-Communication skills [5, 8] -Identification of triggers for goals of care discussion [8] -Identification of triggers for early specialty palliative care consultation [8] -Primary and secondary referral criteria for inpatient palliative care consultation for patients with a life-threatening condition, including the surprise question (you would not be surprised if the patient died within 12 months) [5, 8]
Clinical research activities to measure both clinical and patient reported outcomes	
Development of specific guidelines covering patients' and caregivers' needs and early palliative care interventions in different hematologic diseases and disease phases	

Declarations

Ethics approval This article does not contain any studies with human participants performed by any of the authors. This article does not contain any studies with animals performed by any of the authors.

Conflict of interest The authors declare no competing interests.

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