# Can palliative care consultation increase integration of palliative care for patients with hematologic malignancies?

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RESEARCH LETTER

blood advances



TO THE EDITOR:

# Can palliative care consultation increase integration of palliative care for patients with hematologic malignancies?

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Patients with hematological malignancies (HMs) have less access to palliative care (PC) than other patients with cancer and benefit from it later on in the course of their disease, although symptom burden is just as heavy.[1-4] We created a specialized outpatient PC consultation in the hematology department to improve the quality of patient management and enhance cooperation with hematologists. We found that although patient characteristics and survival were extremely variable, they all had in common a need for symptom management and care coordination. As a result of the consultation, hematology teams called upon a specialized PC multidisciplinary team more often to meet patients hospitalized within their departments, and more patients with HMs were hospitalized in PC units.

Recent evidence has demonstrated the feasibility, acceptability, and efficacy of integrating PC to improve the quality of life and care of patients with HMs and their caregivers.[5-7] Despite clear recommendations to integrate PC in oncology, and in particular, hematooncology, the question of what, when, and how to integrate it has yet to be answered.[8] The constructs of integration plans are needed, adapted to national, regional, and local organizations of oncology and palliative care, as well as to the culture of the organization.

This new real-world intervention consisted of opening a specialized PC consultation one half day per week in 2018 by a doctor trained in both hematology and PC in a University Hospital that has the status of Regional Reference Center in Hematology in Northern France. Patients were referred by hematologists via direct contact between physicians, who discussed the indication before informing patients of the referral. PC consultation was directed to patients with aggressive and potentially mortal HMs and their families. The overall objective was to improve patient and family quality of life by improving symptom burden, in particular, in complex situations.

Information on the goals, criteria, and practical modalities of patient referral to PC consultation was provided to the hematologists who referred the patient. The same team also received training sessions on the benefits of early PC for patients with a malignancy, and particularly for patients with HMs. PC consultation was not advertised to general practitioners, patients, or families, as hematologists feared that the term "palliative" would trigger negative representations.

Twenty-three patients were followed up over a 1-year period (Table 1). Average age was 75 years (range: 40 to 93), and 12 patients were women (Table 1). Disease distribution was comparable to disease distribution in the hematology department: 13% myeloma, 56.5% lymphoma, 30.5% myeloid diseases. Three patients had been allogeneic-hematopoietic-stem cell transplanted, and 1 patient had been treated with chimeric antigen receptor T cells.

During this consultation, treatments for nociceptive pain relief were introduced for 13 patients (56.5%), and treatment of neuropathic pain was introduced in 1 patient. Anxiolytics were introduced or modified for 6 patients, and psychological counseling was begun for 4 patients. Of the patients, 52% described psychological symptoms that were deemed "difficult." Laxatives, treatments for oral mycosis, and digestive discomfort were prescribed. Infections were also managed and treated. A total of 87% of patients presented uncomfortable symptoms that required treatment (Table 2). This confirms the need for global palliative assessment and management of patients with advanced HMs.[2] An advanced care

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**Table 1. General characteristics of patients**

| Patients | Age, y | Sex | Disease | HSCT or CAR T cell | Previous contact with PC team | Referred by | Hematology follow-up | Survival after first consultation, d | Oncologic treatment | Number of consultations | Referrals to emergency department | Number of hospitalizations and length of stay, d | Time between consultation and hospitalization, d | Blood transfusions | Place of death |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| P1 | 78 | F | AML | No | No | Hematologist | Yes | 86 | No | 1 | 1 | 2 (7 + 13) | 43 | 1 | PC department |
| P2 | 73 | F | Diffuse B lymphoma | No | No | Hematologist | No | 112 | Yes, radiotherapy | 2 | 1 | 1 (5) | 107 | 0 | Medical department |
| P3 | 80 | M | Myeloma | No | No | Hematologist | Yes | 8 | No | 1 | 1 | 1 (7) | 1 | 0 | Medical department |
| P4 | 84 | F | AML | No | No | Hematologist | No | 33 | No | 1 | 0 | 0 | | 0 | Home |
| P5 | 82 | M | Diffuse B lymphoma | No | Yes | PC department | No | 26 | Yes, radiotherapy | 1 | 0 | 0 | | 0 | Home |
| P6 | 62 | M | Myeloma | Yes | No | Hematologist | No | 59 | No | 2 | 0 | 0 | | 3 | Home |
| P7 | 79 | F | AML | No | No | Hematologist | Yes | 97 | No | 2 | 0 | 0 | | 0 | Home |
| P8 | 40 | F | Hodgkin lymphoma | Yes | No | Hematologist | Yes | 70 | Yes, target therapy | 3 | 1 | 1 (1) | 69 | 0 | PC department |
| P9 | 83 | M | MDS | No | Yes | Hematologist | Yes | 63 | No | 3 | 1 | 2 (2 + 5) | 2 | 3 | PC department |
| P10 | 88 | M | Mantle cell lymphoma | No | No | Hematologist | No | 335 | Yes, target therapy | 5 | 0 | 0 | 0 | 0 | |
| P11 | 88 | M | Hodgkin lymphoma | No | No | Hematologist | No | 24 | No | 1 | 0 | 1 (23) | 1 | 0 | PC department |
| P12 | 88 | F | AML | No | No | Hematologist | No | 9 | No | 1 | 0 | 1 (9) | 0 | 0 | PC department |
| P13 | 81 | F | Myeloma | No | No | Hematologist | Yes | 101 | Yes, IV chemotherapy | 2 | 1 | 1 (2) | 99 | 1 | Emergency department |
| P14 | 60 | M | T lymphoma | No | No | Hematologist | Yes | 186 | Yes, oral chemotherapy | 4 | 1 | 1 (25) | 166 | 2 | |
| P15 | 80 | M | Mantle cell lymphoma | No | No | Hematologist | No | 32 | Yes, oral chemotherapy | 1 | 0 | 1 (18) | 13 | 0 | PC department |
| P16 | 82 | F | Hodgkin lymphoma | No | No | Hematologist | Yes | 159 | Yes, oral chemotherapy | 1 | 0 | 0 | | 0 | |
| P17 | 85 | M | T lymphoma | No | No | Hematologist | Yes | 123 | No | 1 | 0 | 0 | | 0 | |
| P18 | 92 | M | Burkitt lymphoma | No | No | Hematologist | No | 109 | Yes, targeted therapy | 1 | 0 | 0 | | 0 | Home |
| P19 | 63 | F | Diffuse B lymphoma | Yes | No | Hematologist | No | 122 | No | 3 | 0 | 1 (12) | 98 | 2 | Home |
| P20 | 52 | F | Diffuse B lymphoma | No | No | Hematologist | Yes | 109 | Yes, targeted therapy | 1 | 0 | 0 | | 0 | |
| P21 | 85 | F | AML | No | No | Hematologist | No | 14 | Yes, oral chemotherapy | 1 | 1 | 1 (10) | 4 | 0 | Medical department |
| P22 | 41 | M | ALL | Yes | No | Hematologist | No | 28 | No | 2 | 0 | 1 (1) | 28 | 2 | PC department |
| P23 | 93 | F | Diffuse B lymphoma | No | No | Hematologist | Yes | 18 | Yes, oral chemotherapy | 1 | 0 | 0 | | 0 | |

ALL, acute lymphoid leukemia; AML, acute myeloid leukemia; F, female; HSCT, allogeneic stem cell transplantation; M, male; MDS, myelodysplastic syndrome.

**Table 2. PC need**

| Patient | Pain | Anxiety | Other symptoms | Referrals | Home care plan | Prescription modification | Limitation of blood transfusions | Advance care planning | Multidisciplinary management |
|---|---|---|---|---|---|---|---|---|---|
| P1 | Yes | Yes | Constipation | No | Yes | Yes | No | Yes | Yes/home care support team |
| P2 | Yes | Yes | Constipation, hypercalcemia | Yes | Yes | Yes | No | Yes | Yes/home care support team |
| P3 | Yes | Yes | | No | No | Yes | No | Yes | Yes/multidisciplinary PC team |
| P4 | Yes | No | Nausea, oral mycosis | No | Yes | No | Yes | Yes | Yes/home care support team |
| P5 | Yes | No | Constipation, bleeding symptoms | Yes | No | Yes | No | Yes | Yes/PC department |
| P6 | No | Yes | Astenia | No | Yes | Yes | Yes | Yes | Yes/multidisciplinary PC team |
| P7 | No | Yes | | No | Yes | Yes | Yes | Yes | No |
| P8 | Yes | Yes | Constipation, arthralgia, myalgia fewer | Yes | Yes | No | No | Yes | Yes/home care support team |
| P9 | No | Yes | Constipation, dry mouth | No | Yes | Yes | Yes | Yes | Yes/multidisciplinary PC team |
| P10 | No | Yes | Diarrhea, dyspnea | Yes | Yes | No | No | Yes | Yes/home care support team |
| P11 | No | Yes | Diarrhea, dyspnea | No | No | No | No | No | Yes/PC department |
| P12 | Yes | No | Dyspnea | No | No | No | Yes | No | Yes/PC department |
| P13 | No | No | | No | No | Yes | No | Yes | No |
| P14 | Yes | Yes | Oral mycosis | No | Yes | Yes | No | Yes | Yes/home care support team |
| P15 | Yes | Yes | Nausea, constipation | No | Yes | No | No | Yes | Yes/home care support team and PC department |
| P16 | Yes | No | Constipation | Yes | Yes | No | No | Yes | Yes/home care support team |
| P17 | No | No | | No | No | Yes | No | Yes | Yes/home care support team |
| P18 | No | No | | No | No | Yes | No | Yes | Yes/Home hospitalization |
| P19 | Yes | No | Clostridium infection, dysphagia | Yes | No | Yes | No | Yes | Yes/PC department and home hospitalization |
| P20 | Yes | No | | No | No | No | No | No | No |
| P21 | No | No | Astenia, malaise | No | Yes | No | Yes | Yes | No |
| P22 | Yes | Yes | Bleeding, cystitis | No | Yes | Yes | Yes | Yes | Yes/PC department |
| P23 | No | No | Astenia, oral mycosis | No | Yes | Yes | No | Yes | Yes/home care support team |

plan was discussed and written with 19 patients. It was systematically sent by mail to all other health care professionals involved with the patient. In 14 cases, the home care plan was enhanced with the intervention of a nurse, a nurse's aide, or a live-in caregiver (Table 2). Treatments deemed futile or inappropriate were discussed with the general practitioner either upon initiation of PC or later in the course of evolution for 14 patients. Blood transfusions were limited or terminated in 7 patients, at their request, after a discussion with hematologists and their general practitioner (Table 2). Discussions on the matter between PC physician and hematologists occurred twice.

Between the first consultation and patient's death, only 8 patients were addressed to the emergency department, 7 of which led to hospitalization ending with death. Eight patients were hospitalized without passing through the emergency department. Mean time between the first PC consultation and hospitalization was 52 days (range, 1 to 107) (Table 1). Among the 17 patients who died during the 12-month period, one was lost to follow-up, 6 died at home as per their advanced care plan, 11 died at hospital, 7 died in a PC department, and 1 died in an emergency department short-stay unit (Table 1). As per the criteria of Earle et al of aggressive care in end-of-life cancer treatment, no patient received IV chemotherapy $<$14 days before death, nor was any patient hospitalized in intensive care, sent to the emergency department more than once, or hospitalized within the last month of life.[3,9,10]

PC-hematology collaboration was enhanced: between 2014 and 2017; inpatients with HMs represented 4.5% of patients followed by the inpatient multidisciplinary PC team, whereas after setting up PC consultation, their numbers increased to 5.7%. Moreover, 70% (10.5 vs 18 patients) (Student *t* test; $P < .05$) more hematology patients were hospitalized in a PC unit in 2018 to 2019, after PC consultation initiation. Unformal training through discussions and bedside care was also achieved by means of this collaboration.

One limiting factor was the referral of patients by hematologists alone. Although hematologists are the most legitimate to introduce PC into the privileged patient-doctor relationship, and although they acknowledge that access to specialized PC care improves quality of end of life, barriers to addressing patients to PC specialists remain.[11-14] This could explain the small number of referrals over a 12-month period, despite the fact that PC consultations were conducted by a hematologist better able to overcome cultural barriers to PC integration and trust issues that have been discussed in multiple studies as potential barriers to PC integration.[4] A Spanish study has previously demonstrated the benefits of a specialized PC consultation with a physician trained in both PC and hematology among patients with multiple myeloma. In this study, patients were recruited via the PC team: a PC nurse presented the benefits of consultation over the phone to all multiple myeloma patients that were progressing.[15] Another limitation is that there may be few hematologists trained in PC, so that this model may not easily be reproducible elsewhere. In any case, facilitating patient access to PC consultations and increasing collaboration probably require PC training to be reiterated regularly among hematologists. Informing patients, families, and general practitioners of the possibility also seems crucial on the path to providing patients with more autonomy in the management their severe disease and end of life.

Another question raised by this PC consultation is that of the allotment of responsibilities between hematologists and PC doctor: when the patient is hospitalized in hematology, the specialized PC team provides expertise to hematologists but does not prescribe, but in the outpatient setting, the PC doctor can prescribe. Although prescriptions for symptom management were not systematically discussed with the referring hematologist, he was called upon every time there was talk of discontinuing oncological treatments. This is an area that has worried hematologists historically: there is a fear that PC specialists might "talk their patients out of curative/helpful treatments."[3,16-18]

The quality of PC implementation for HM patients in the outpatient setting was improved by setting up a specialized PC consultation within the Hematology Department. Nevertheless, collaboration is still under construction to overcome cultural barriers and allow peaceful trust between the 2 teams.

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