



Modeling cancer pain: “the times they are a-changin’”

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Editorial

The last few years have been marked by the emergence of supportive care, and it has been clearly substantiated by evidence. Many authors have highlighted different models for early integration of supportive care [1], from as early as the cancer diagnosis. These integrative models in cancer have demonstrated their positive impact in terms of patient quality of life, symptoms management, health costs, and optimization of care pathways, regardless of the management method (out-patient, in hospital, home care) [2]. In addition to these validated results, the relevance of the models also lies in the fact that they put the spotlight on other means of looking at cancer medicine: interdisciplinarity, development of paramedical skills, decompartmentalization of hospital and community medicine, personalized approach to the patient’s care pathway, anticipation and prevention of disruptions to care [3], and a continuum that abolishes the palliative/curative dichotomy in favor of adaptation to patients, their issues, and their environment. These changes—which, for now, remain the fruit of initiatives or research work—are nevertheless not yet the norm when it comes to structuring care in oncology at a larger scale. They are taking place in parallel to an impressive change in cancer management—with most cancers now considered a chronic condition—and respond in a satisfactory manner to the hyperspecialization of cancer medicine.

Cancer pain medicine can fit into this dynamic perfectly, as one of the major dimensions of supportive care, if essential conditions are respected. It is an exhaustive and demanding type of medicine which in recent years has also undergone its own series of determining changes, both in

terms of pathophysiological knowledge, diagnosis, or treatment options (be they drug-based, interventional, or non-drug-based [4, 5]). Managing cancer pain implies all these prerequisites and cannot be based solely on a simplistic equation that goes from pain as a symptom to a single, drug-based response. However, some improvements still need to be done as dedicated access to cancer pain specialists support remains heterogeneous despite international guidelines [4]. In particular, tailored cancer pain training programs must be implemented within the pain community, and this true interdisciplinary approach has to be accepted and integrated in daily practices by oncology teams [4, 5].

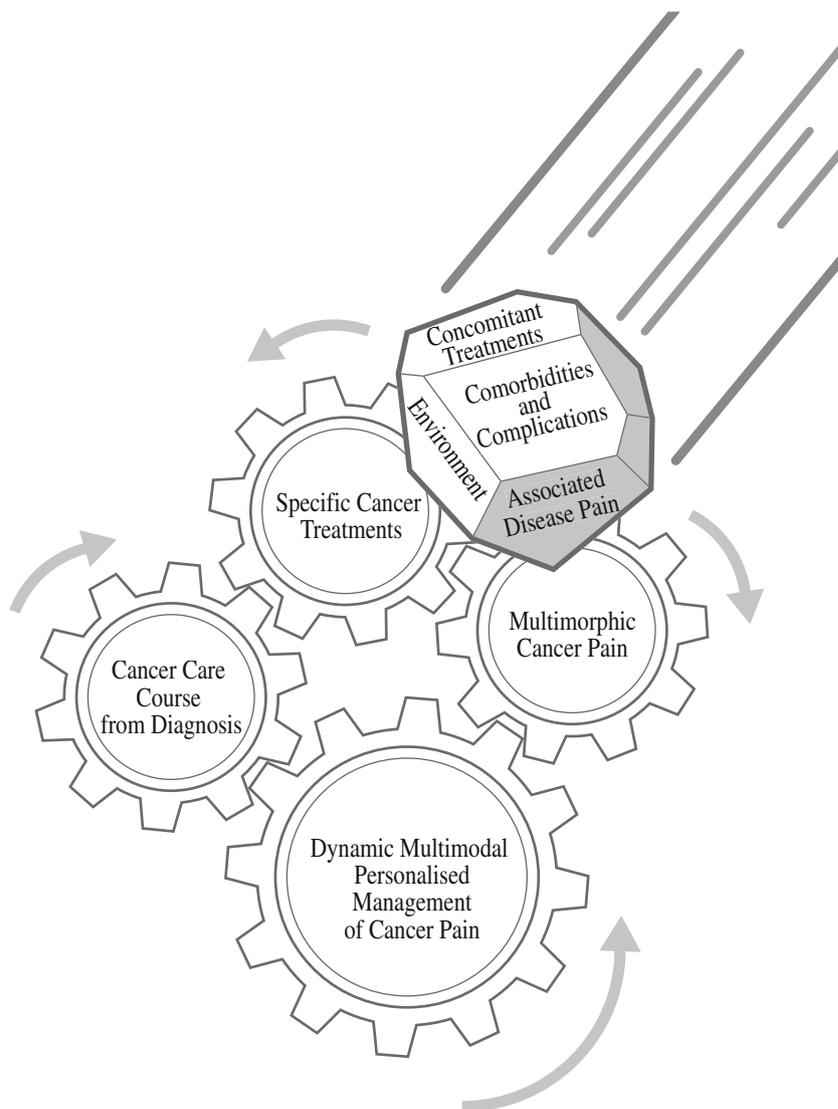
As witnesses to these changes, we have created a group of clinical doctors with different, complementary initial specializations and means of operating. Through a series of articles, this group has tried to put forward its vision of cancer pain management by cross-referencing views, clinical experience, and the international literature including the latest recommendations [4, 5].

It is thus through the innovating concept of “multimorphic pain” (Fig. 1) that we will approach in our articles the particular aspects of cancer pain management, both in terms of assessment and treatment, as cancer pain is constantly subject to changes due to disruptive elements leading to an unbalanced pain control. The multimorphism refers to the ability of having several forms simultaneously, which is the case for cancer pain, and beyond, these multiple forms can occur in variety of ways and at different moments through the entire care pathway. This modeling highlights the specificities of cancer pain, as a nosological entity in its own right that requires an interdisciplinary, multimodal, and dynamic approach, as well as personalized management. The fundamental dimensions that support this multimorphic pain model are the pain in itself, the care pathway in its entirety with different specificities (diagnosis, cure, relapse, palliative care), as well as the cancer treatments that have

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Fig. 1 Disruption key elements in the dynamic, multimodal, targeted, personalized management of multimorphic cancer pain



an impact on pain (chemotherapy in the broadest sense, hormone therapy, surgery, radiotherapy), and all the disruptions to this dynamic model. Understanding cancer pain through this approach is a major key to provide an optimal management for our patients with cancer pain. Rather than a step-wise approach, this exhaustive pain medicine leads to multimodal and personalized responses, by associating interventional and integrated complementary approaches to current therapeutics strategies [4–9], and beyond, opening the way to supportive medicine in a simple, integrative, dynamic patients' management model. Integrating supportive medicine to cancer and serious chronic diseases pathway can be a key operational response, in parallel to the constant hyperspecialization of medicine. The large benefits of such an approach will

positively impact patients outcomes and satisfaction, caregivers, and beyond, healthcare systems.

The times they are a-changin', and so are we [10]!

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Compliance with ethical standards

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References

- Zhi WI, Smith TJ (2015) Early integration of palliative care into oncology: evidence, challenges and barriers. *Ann Palliat Med* 4: 122–131. <https://doi.org/10.3978/j.issn.2224-5820.2015.07.03>
- Hui D, Bruera E (2015) Models of integration of oncology and palliative care. *Ann Palliat Med* 4:89–98. <https://doi.org/10.3978/j.issn.2224-5820.2015.04.01>
- Temel JS, Greer JA, El-Jawahri A et al (2017) Effects of early integrated palliative care in patients with lung and GI cancer: a randomized clinical trial. *J Clin Oncol* 35:834–841. <https://doi.org/10.1200/JCO.2016.70.5046>
- Bennett MI, Eisenberg E, Ahmedzai SH, Bhaskar A, O'Brien T, Mercadante S, Krčevski Škvarč N, Vissers K, Wirz S, Wells C, Morlion B (2018) Standards for the management of cancer-related pain across Europe. A position paper from the EFIC Task Force on Cancer Pain. *Eur J Pain* 23:660–668. <https://doi.org/10.1002/ejp.1346>
- Fallon M, Giusti R, Aielli F, Hoskin P, Rolke R, Sharma M, Ripamonti CI, ESMO Guidelines Committee (2018) Management of cancer pain in adult patients: ESMO Clinical Practice Guidelines†. *Ann Oncol* 29: iv166–iv191. <https://doi.org/10.1093/annonc/mdy152>
- Wilson J, Stack C, Hester J (2014) Recent advances in cancer pain management. *F1000Prime Rep* 6(10). <https://doi.org/10.12703/P6-10>
- Hochberg U, Elgueta MF, Perez J (2017) Interventional analgesic management of lung cancer pain. *Front Oncol* 7(17). <https://doi.org/10.3389/fonc.2017.00017>
- Chwistek M (2017) Recent advances in understanding and managing cancer pain. *F1000Research* 6:945. <https://doi.org/10.12688/f1000research.10817.1>
- Candido KD, Kuser TM, Knezevic NN (2017) New cancer pain treatment options. *Curr Pain Headache Rep* 21(12):12. <https://doi.org/10.1007/s11916-017-0613-0>
- Dylan B (1963) The times they are a-changin'. <https://bobdylan.com/songs/times-they-are-changin/>. Accessed 30 Aug 2017

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