



Supportive cancer care: is integrative oncology the future?

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Purpose of review

Nearly half of cancer patients use complementary therapies alongside the conventional cancer treatment. This clinical reality is a challenge for the medical team mainly to guarantee patient's safety. The evolution from Supportive Care to Integrative oncology is taking shape.

Recent findings

Integrative oncology, a new field in cancer care, combines conventional supportive care and validated complementary approaches. The first part of this review is to highlight the process of validation of one of the most popular complementary medicines among European cancer patients: homeopathy. It seems to be a well tolerated and useful complementary approach in integrative cancer care. The second part shows through the example of stage IV lung cancer the transition from conventional supportive care to integrative oncology with a benefit for their quality of life and survival.

Summary

The future of supportive cancer care seems to lead towards a move from coexistence of conventional care and complementary approaches to a combination of both in integrative oncology. This would require new skills among caregivers, specific academic training and adapted studies. Further research is needed to highlight the benefits in the specific field of integrative cancer care.

Keywords

complementary approaches, evaluation, homeopathy, integrative oncology, supportive cancer care

INTRODUCTION

With the development of new cancer treatments, cancer patients live longer, even with advanced disease. According to the latest figures (2022), there were 18 million people living with a history of cancer in the United States and about 67% of cancer survivors have survived 5 or more years after diagnosis [1].

In this medical context, optimizing quality of life (QoL) during and after cancer treatment becomes as relevant as treating the cancer itself. The positive correlation between the QoL and the life expectancy of cancer patients has been found in numerous studies [2].

Supportive cancer care is defined as the prevention and management of the adverse effects of cancer and of its treatment. This includes management of physical and psychological symptoms and side effects across the continuum of the cancer journey from diagnosis to treatment and posttreatment care. Supportive care aims to improve the quality of rehabilitation, secondary cancer prevention, survivorship, and end-of-life care [3].

Supportive cancer care benefits from stakeholders, health authorities and academic support. The Multinational Association of Supportive Care in Cancer (MASCC) was founded in 1990. Despite the implementation of supportive cancer care in the conventional setting, a high number of cancer patients often use complementary and alternative medicines (CAM) alongside their conventional care [4]. A systematic review, published in 2019, showed that an average of 51% of cancer patients used CAM. The main reasons for use are to influence their cancer and general health and to treat complications of the cancer therapy [4]. This clinical reality is a challenge for the oncologist and highlights the

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KEY POINTS

- Supportive cancer care is part of cancer treatment.
- Integrative oncology is supportive cancer care that includes validated complementary approaches.
- Validation of complementary approaches is an ongoing process which translates complementary into conventional.

need for an open and caring dialogue with the patient while guaranteeing its safety and QoL [5,6[■]].

In response to the clinical reality of the widespread use of complementary approaches by cancer patients, the Society for Integrative Oncology (SIO) was created in 2003. Integrative oncology is defined as *a patient-centered, evidence-informed field of cancer care that utilizes Mind and Body practices, natural products, and lifestyle modifications from different traditions alongside conventional cancer treatments. Integrative oncology aims to optimize health, QoL, and clinical outcomes across the cancer care continuum, and to empower people to prevent cancer and become active participants before, during and beyond cancer treatment* [7].

After defining the scope of complementary medicine as well as guidelines in supportive cancer care, this article will focus on the validation process of a complementary approach. The aim is to optimize the cure and the care of cancer patients through the value of an open dialogue and the relevance of further research in integrative oncology.

COMPLEMENTARY THERAPIES

The prevalence and use of complementary therapies vary according to culture and country, as well as the legislation governing the practice of complementary medicine and the social security coverage [8]. This disparity complicates scientific evaluation and slows down the validation of complementary medicines. The first difficulty is the definition of complementary medicine. The NHI through the National Center for Complementary and Integrative Health (NCCIH) classifies the complementary approaches into four groups by their primary therapeutic input (how the therapy is taken in or delivered) [9]:

1. Nutritional (e.g. special diets, dietary supplements, herbs, probiotics, and microbial-based therapies)
2. Mind & Body practices (e.g. meditation, hypnosis, music therapies, relaxation therapies)
3. Physical (e.g. acupuncture, massage, spinal manipulation)

4. Traditional medical systems (e.g. Traditional Chinese Medicine, homeopathy)

Nutritional approaches include what NCCIH previously categorized as natural products, whereas psychological and/or physical approaches include what was referred to as Mind and Body practices [9]. As mentioned by NCCIH, another specificity of complementary medicine is the change of naming and definition over time. This other characteristic is the consequence of scientific evaluation and evolution of medicine which leads to the integration of the complementary approach into conventional care. The best example in cancer care is psychological support, which is now listed as best practice for cancer care [10].

GUIDELINES IN SUPPORTIVE CANCER CARE

Current medical practice is guided by international guidelines based on the latest scientific research, both clinical and fundamental, and validated by the specific scientific societies. Supportive cancer care guidelines are published and updated by MASCC. These guidelines are symptom-centred: antiemetics, cancer pain, mucositis, onco-dermatology, oral care and so on.

When it comes to integrate complementary approaches into guidelines, the main objective is to build evidence about safety in the context of cancer care. SIO guidelines have thus the specificity to be based on the evaluation of complementary approaches rather than specific symptom control. The first guidelines, published in 2009, describe the methodology to build evidence informed on complementary approaches [11]. The following published guidelines are more specific to alleviate the burden of breast cancer treatment by complementary therapies [12]. Over time, some of the complementary approaches like nutritional advice and physical activity, left the scope of the SIO guidelines because these interventions are nowadays part of conventional care.

The later SIO Clinical Practice Guidelines on breast cancer [13] were endorsed by the American Society of Clinical Oncology (ASCO) in 2018 with a few added discussion points [14]. This is a major step in the recognition of the benefit of complementary approaches to cancer care.

COMPLEMENTARY APPROACH: THE EXAMPLE OF HOMEOPATHY

Homeopathy is a recognized complementary approach, mainly in the European Union, Switzerland, Brazil and India. Homeopathic medicine as a

distinct system of medicine is recognized by law in United Kingdom (1950), Latvia (1997), Hungary (1997), Germany (1998), France (1998), Belgium (1999), Bulgaria (2005), Portugal (2003), Romania (1981), Slovenia (2007), and homeopathic remedies are considered as medicines in Europe since 2001 [15].

A systematic review on randomized placebo-controlled trials of individualized homeopathic treatments shows a specific treatment effect, which needs confirmation by further research [16]. Over time, clinical evaluation of homeopathic intervention was shown to be safe and effective in the field of supportive cancer care [17,18]. Combined with conventional care, homeopathic treatment improves QoL, reduces symptom burden, and may improve survival [19]. The author concludes that given the low cost, minimal risks and the potential magnitude of the effects of homeopathy, this use might be considered in certain situations as another tool to add to cancer care.

In a similar setting, global health status and subjective wellbeing of cancer patients improve significantly when classical homeopathic treatment is administered in addition to conventional therapy [20].

Another study suggested that homeopathy can be successfully incorporated within a supportive care integrative oncology service. Patients' satisfaction was high: nearly three-quarters reporting a beneficial effect. This study also identified the symptoms more likely to benefit from homeopathic treatment: for example, chemotherapy-induced peripheral neuropathy and hot flushes. No significant adverse effects were attributed to the homeopathic treatment [21].

An Italian clinical study combining homeopathy with acupuncture, dietary and lifestyle advice showed a statistical improvement in various clinical symptoms in breast cancer patients [22].

With a prevalence of 30.7%, homeopathy is the most used complementary medicine chosen by cancer patients in France, with an increased patients' satisfaction [23]. Another French study based on the Nationwide Healthcare Database targeted all patients who underwent mastectomy for newly diagnosed breast cancer between 2012 and 2013 (98 009 patients). The study showed an increased use of homeopathic medication after diagnosis, with concomitant decrease in conventional medication specific to cancer's side effects. This suggests that QoL is improved in patients with breast cancer who use homeopathy [24*].

We conducted a study regarding the perception of homeopathy in supportive cancer care among oncologists and general practitioners (GPs) in

France [25]. Ten percent of oncologists indicated they prescribed homeopathy, while 36% recommended it. Among GPs, two-thirds occasionally prescribe homeopathy as part of supportive care, and 58% routinely refer their patients to homeopathic doctors. The majority of French physicians involved in the care of cancer patients, including both oncologists and GPs, view homeopathy favourably as an integrated supportive therapy. Homeopathic treatment was considered as a reliable therapeutic option in clinical symptoms where responses to conventional therapies may be unsatisfactory.

The International Homeopathic Society of Supportive Care in Oncology (SHISSO) was founded in 2016. Guidelines for the major validated indications of homeopathic supportive cancer care were published [26] and benefit from ongoing clinical evaluation. An interest group on homeopathy was recently constituted at SIO.

As shown by this specific example, validating a complementary approach as well tolerated and effective for supportive cancer care takes time. It also needs trust and communication amongst the scientific community and between care givers. No significant adverse effects were ever recorded in any study involving homeopathic intervention. The safety of homeopathic intervention supports the interest of research to confirm the efficacy in specific supportive cancer care indications.

COMMON FUTURE FOR SUPPORTIVE CANCER CARE AND INTEGRATIVE ONCOLOGY: THE EXAMPLE OF STAGE IV LUNG CANCER

Quality of life is a significant and independent prognostic factor for survival in patients with lung cancer [27]. The founding study on the benefit of supportive care was published in 2010 in the *New England Journal of Medicine* by J. Temel [28]. The study showed an improved QoL and increased mean survival in Stage IV lung cancer patients receiving early palliative care (11.6 vs. 8.9 months, $P = 0.02$).

A prospective randomized, placebo-controlled, double-blind, three-arm, multicentre study on Stage IV lung cancer patients, compared three groups: one with usual care and two with homeopathic consultation (placebo or verum). This study shows an improvement in QoL ($P < 0.001$) in the homeopathic treated group. It also leads to a prolongation of a life expectancy of 6 months compared to the placebo group ($P < 0.020$), and of 7 months compared to the usual group ($P < 0.001$) [29]. However, an Expression of Concern has been issued by the journal awaiting additional information [30].

Ten years apart, the results of these two studies, regarding the same type of cancer patients, highlight the evolution of supportive cancer care into integrative oncology. The first study outlines the value on prognosis and QoL of early supportive care. The second and later study shows the potential of a well tolerated and validated complementary approach to improve even further the benefit on survival.

Cancer treatment is constantly progressing with the use of novel treatments. For lung cancer patients, it means facing new and different challenges, including dealing with new side effect profiles and coping with greater uncertainty regarding their prognosis [31].

The challenges of future cancer care concern all cancer patients who will certainly benefit from integrative oncology. This new field of cancer care needs, beyond clinical evaluation, the development of specific medical knowledge. The integrative oncology skills combine both fundamental oncology literacy and integrative medicine competencies that are necessary to provide effective and safe integrative oncology care for cancer patients [32]. Fundamental research will also contribute to the development of a synergistic effect between combining conventional and complementary approaches [33].

CONCLUSION

The shared objective for cancer patients, their care givers and the scientific community is to improve survival rate without major compromise of QoL. Alongside huge advances in cancer treatment, demonstration of the value of supportive cancer care is increasing over time. As an answer to the patients search and use of complementary practices, the future seems to lead towards the transition from coexistence of conventional care and complementary approaches to a combination of both into integrative oncology. This would require new skills among caregivers and specific academic training.

Further research is needed to highlight the benefits in the specific field of integrative cancer care.

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Conflicts of interest

Theunissen I. declares participating in ad hoc interventions (expert reports, advisory activities, conferences) for Boiron and B-Life Laboratories.

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