Counseling on Complementary Methods in the Treatment of Side Effects of Oncological Therapies: A Project of the Breast and Bowel Center Nahe at the Hospital Sankt Marienwoerth Bad Kreuznach

Ralph Muecke, MD, PhD¹,²,³, Robert Gosenheimer, MD⁴, Christoph Schulz, MD⁵, Gabor Heim, MD⁴, Volker Schmitz, MD, PhD⁴, Christina Harvey⁴, Annette Zosel-Delturri⁴, Arnold Nissen, MD⁴, Ulrike Hemberger⁴, Verena Romeis⁴, Gabriele Lochhas, MD¹, Ute Metzmann, MD¹, Matthias Bussmann, MD⁴, and Markus Paschold, MD, PhD⁴

Abstract

Background: Increasingly, patients with cancer are asking for additional, complementary therapy options for treating the side effects of oncological therapy. Thus, the members of the Breast and Bowel Center Nahe at the Sankt Marienwörth Hospital Bad Kreuznach decided to define the content of this type of counseling for patients before treatment. Methods: In 2018, a team of internal oncologists, gynecological oncologists, radio-oncologists, nutritionists, psycho-oncologists, and study nurses met several times to define the content of counseling. To inform the team, an intensive literature review was conducted. Results: Counseling content was determined for complementary treatment options for the most frequent side effects of oncological therapies. Counseling sessions were formulated as frontal lectures (slide presentations), given at regular intervals for patients and relatives. These lectures were highly appreciated by patients. Conclusion: These counseling sessions increased patient understanding of both useful complementary measures and harmful measures they should not use.

Keywords
counseling, cancer patients, complementary methods, side effects, oncological therapies

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Introduction

According to recommendations from the American Society for Clinical Oncology (ASCO), complementary therapies are used in addition to standard cancer treatment to reduce the side effects of cancer treatments, improve physical and emotional well-being, and enhance cancer recovery.¹ In recent years, patients and relatives have increasingly expected treating oncologists to integrate complementary methods into therapies for side effects from surgery, chemotherapy, immunotherapy, and radiotherapy. In the last 12 years, an increasing number of publications from Germany have pointed to the need and described the first practical implementations of complementary approaches.²⁻¹¹

¹Mainz-Ruesselsheim-Bad Kreuznach, Bad Kreuznach, Germany
²Ruhr University Bochum, Bochum, Germany
³German Cancer Society, Berlin, Germany
⁴Hospital Sankt Marienwoerth, Bad Kreuznach, Germany
⁵Oncological Practice, Bad Kreuznach, Germany

Corresponding Author:
Ralph Muecke, Radiotherapy RheinMainNahe, Mühlenstrasse 39a, Bad Kreuznach D-55543, Germany.
Email: r.muecke@strahlentherapie-rheinmainnahe.de
In the present process paper, our working group aimed to show that activities related to complementary approaches in oncology could be successfully implemented in an interdisciplinary manner.

In 2018, the medical and non-medical staff of the Breast and Bowel Center Nahe initiated structured counseling sessions for patients with tumors and their family members regarding complementary procedures.

### Methods

In 2018, a team of internal oncologists, gynecological oncologists, radio-oncologists, nutritionists, psycho-oncologists, and study nurses met several times to define the content of counseling. An intensive literature review was conducted to inform participants. We searched reference books and PubMed for information on complementary methods in oncology.

Working groups were formed to cover the following topics: fatigue, psycho-oncology, micronutrients, dermatitis, mucositis (including esophagitis), xerostomia, dysgeusia, diarrhea and constipation, weight loss, nausea and loss of appetite, polyneuropathy, brain deficits, and support groups.

From the beginning, care was taken to select only complementary procedures that minimized side effects of basic oncological therapy. We excluded complementary procedures for tumor therapies, which are offered manifold, especially on the internet. As far as possible, we included only results from randomized trials to be included in the content of counseling sessions. Positive experiences gained over many years (eg, in the context of nutritional counseling and ergotherapy) were also incorporated into the content of counseling sessions.

### Results

In 2018, the working groups met several times and discussed the individual topics. The timeline of this process is given in Table 1. After finalizing the presentation content, we reviewed over 200 PowerPoint slides and selected slides that we deemed appropriate for patients. Table 2 summarizes the main complementary therapy approaches that were included in our presentations, based on data from randomized trials, meta-analyses, clinical trials, and reviews. In addition, in the presentations, we included recommendations from nutritional counseling, based on years of experience in managing patients with tumors. These recommendations provided specific advice, including appropriate recipes, for patients with specific conditions, such as mucositis, xerostomia, mucus, loss of appetite, and nausea.

At the end of 2018, we determined the final version of the counseling session content. In addition to the presentations, PDFs were made available on the internet.

Then, at the beginning of 2019, the participants of the counseling content planning meetings decided to establish the Network of Complementary Oncology, Rheinhessen-Nahe. Then, various members of the network performed counseling sessions for the patients and family members at regular intervals, from March 2019 to January 2020. The audience included patients with curable tumor diseases and patients treated with palliative therapy approaches. All lectures were given at 4 pm, and Sections 1 and 2 were always given on Mondays and Tuesdays, respectively.

To date, 12 counseling sessions have been held regularly in the official conference room of the Sankt Marienwörth Bad Kreuznach hospital. Due to the COVID-19 pandemic, the counseling sessions had to be stopped. Up to this point, an average of 20 patients and family members were included in each counseling session. The duration of each session depended on the questions from the auditorium, but it always lasted at least 1 hour. The patients asked many questions and showed lively interest. Feedback from the patients at the end of each event was always very good, but those data have not been systematically evaluated.

Some of the recommended complementary procedures are currently offered in our hospital for inpatients with tumors. In particular, these procedures include nutritional counseling, occupational therapy, and psycho-oncological applications.
**Table 2.** Main Complementary Therapy Approaches Included in the Presentations and Corresponding Sources.

| Side effect             | Our recommendations                                                                 | Source/study type                                      |
|-------------------------|--------------------------------------------------------------------------------------|--------------------------------------------------------|
| Fatigue                 | Regular exercise                                                                     | Cramp and Byron-Daniel 2012,15 Review                  |
|                         | Energy conservation                                                                   | Barsevick et al 2004,16 Randomized study               |
|                         | Dietary supplementation with carnitine and omega-3 fatty acids                        | Marx et al 2017,17 Meta-analysis                       |
|                         |                                                                                      | Zick et al 2017,18 Randomized study                    |
| Psycho-oncology         | Imagination exercises: Development of pictorial ideas that support the relief of symptoms (healing images) | Sloman 2002,19 Randomized study                        |
|                         | Relaxation techniques; for example progressive muscle relaxation, autogenic training  | Luebbert et al 2001,20 Meta-analysis                   |
|                         | Qi Gong                                                                              | Wayne et al 2018,21 Meta-analysis                      |
| Micronutrients          | Increase attention to folic acid, selenium, and vitamin D intakes                     | Muecke et al 2017,22 Review                            |
|                         | Laboratory diagnostics should be performed before substitutions; intakes should be designed to compensate for deficiencies |                                                       |
|                         | Avoid non-critical mega-doses                                                        |                                                       |
|                         | Avoid interactions of different substances with chemotherapies                       |                                                       |
| Dermatitis              | Local calendula ointment, tested against trolamine (non-steroidal wound ointment)—reduces the incidence of dermatitis grade 2 or higher | Pommier et al 2004,23 Randomized study                 |
|                         | Local aloe cream, tested against baby oil—reduces the frequency of grade 1 to 3 dermatitis | Rao et al 2017,24 Clinical study                       |
| Hand foot syndrome      | Silymarin gel                                                                         | Elyasi et al 2017,25 Randomized study                  |
| Mucositis               | Zinc—antioxidant, anti-inflammatory                                                  | Hoppe et al 2021,26 Systematic review                  |
|                         | Honey—antioxidant, anti-inflammatory                                                 | Muenstedt et al 2019,27 Systematic review              |
|                         | Glutamine suspension—anti-inflammatory                                              | Peng et al 2021,28 Meta-analysis                      |
|                         | Arnica montana—anti-inflammatory                                                     | Oberbaum et al 2001,29 Randomized study               |
|                         | Selenium intake to achieve serum levels of 100 to 130 µg/l                           | Buentzel et al 2010,30 Randomized study                |
| Xerostomia              | Thyme honey                                                                           | Charalambous et al 2017,31 Randomized study           |
| Diarrhea                | Nutritional counseling:                                                               | Thomas et al 2010,32 Systematic review                 |
|                         | Selenium intake to achieve serum levels of 100 to 130 µg/l                           | Muecke et al 2010,33 Randomized study                  |
|                         | Probiotics                                                                           | Liu et al 2017,34 Meta-analysis                        |
|                         | Ginger                                                                               | Ryan et al 2012,35 Kommun et al 2017,36 Randomized studies |
|                         | Acupuncture                                                                          | Widgren and Enblom, 2017,37 Randomized study          |
|                         | Oral B-group vitamins                                                                 | Schloss et al 2017,38 Randomized study                 |
|                         | Capsaicin patch                                                                       | Filipczak-Bryniaska et al 2017,39 Clinical study       |

**Discussion**

In 2021, the interest of oncologists in complementary procedures has continued to expand, but it could be even better.40 From our point of view, the described counseling planning process is unique, because professionals from several oncological disciplines actively participated in its development, and they continue to participate actively in the counseling planning process.

We collectively decided to conduct the counseling sessions through regular lectures to reach multiple patients and family members simultaneously. Individual counseling sessions cannot be implemented currently, due to lack of time, among other reasons. In our view, the complementary methods described here for managing the side effects of conventional medical oncological therapies, with the help of regular lectures, have not been established in a routine procedure. Certainly, in some centers, some physicians might
advise patients individually. More often, there are so-called telephone hotlines for providing advice and information to patients with tumors. Moreover, some information is freely available on the Internet; however, that information can result in incorrect advice. Furthermore, there are training programs for physicians regarding complementary procedures in oncology.

We assume that this planning process will inspire great confidence in patients with tumors, because they realize that all active disciplines related to oncology in the Breast and Bowel Center Nahe stand behind the project and identify with the content included in consultations on complementary measures. Unfortunately, to date, we have not conducted structured surveys of patients. We had planned to perform surveys after 1 year, in 2020, but the Coronavirus pandemic intervened. The planned survey was to be conducted by distributing questionnaires after each session. We plan to initiate the survey after the coronavirus pandemic restrictions are lifted to obtain realistic feedback.

A major advantage of this work is that the counseling session content can be accessed on the Internet at any time. Through the counseling sessions, we hope to empower patients with knowledge of how to shape therapy outcomes actively, in a positive way. In particular, suggestions provided in nutritional counseling teach patients to participate actively, with recommendations for different types of meals and methods for preparing meals and beverages, which can strengthen their sense of self-empowerment.

In future, we plan to update the counseling session content regularly. We also aim to make the recommended complementary procedures available to outpatients with tumors. This endeavor is currently hampered by logistical and billing problems.

Conclusions
The planned counseling sessions aim to increase patients’ understanding of both complementary measures they should use and harmful measures they should not use. The counseling session content will be revised on a regular basis. We hope that counseling activities can be reinitiated after the COVID-19 pandemic restrictions are lifted. A future evaluation on the effects of this intervention is planned.

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ORCID iD
Ralph Muecke https://orcid.org/0000-0002-8986-6884

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