#### Complementary Therapies in Medicine 41 (2018) 267-270

FISEVIER

Contents lists available at ScienceDirect

# Complementary Therapies in Medicine

journal homepage: www.elsevier.com/locate/ctim



# Complementary individual homeopathy in paediatric cancer care: A case series from a University Hospital, Switzerland



Katharina Gaertner<sup>a,\*</sup>, Sonja C. Lüer<sup>b</sup>, Martin Frei-Erb<sup>a</sup>, Klaus von Ammon<sup>a</sup>

- <sup>a</sup> Institute of Complementary Medicine IKOM, University of Bern, Freiburgstrasse 46, CH-3010, Bern, Switzerland
- b Department of Paediatrics, Division of Paediatric Haematology/Oncology, University Children's Hospital, Inselspital, Freiburgstrasse 31, CH-3010, Bern, Switzerland

#### ARTICLE INFO

Keywords:
Integrative medicine
Cancer care
Complementary medicine
Paediatric oncology
Homeopathy

#### ABSTRACT

The Department of Haematology/Oncology at the University Children's Hospital Bern (HONK), has adopted an integrative approach in addition to state of the art oncological care and implemented a collaboration with the Institute of Complementary Medicine IKOM, University of Bern, over the past 10 years. Stakeholder satisfaction with this service was high. We present descriptive data and report on 4 exemplary patients treated with additional individualized homeopathy (iHOM). Data concerning frequency of consultations, pathologies, follow-ups and clinical results were reviewed and summarized using descriptive statistics.

94 paediatric oncologic patients consulted for iHOM. Indications for the complementary treatment was wideranging. No interactions with conventional treatment and no adverse side-effects of iHOM were detected. We present four characteristic patient histories, in which iHOM was used in addition to standard treatment for mucositis, permissive tissue infection, insomnia and affective dysfunctions. All four patients clinically improved in an immediate temporal relationship to the additional treatment.

Conclusion: The collaboration between HONK and IKOM established iHOM in paediatric oncology in Bern. In this setting, iHOM was a safe and supportive additional treatment for various indications during the conventional cancer care. However, no generalizable results can be deducted from these data. We emphasize future research on this topic.

#### 1. Introduction

Complementary and alternative therapies (CAM) <sup>1</sup> are frequently used in the treatment of acute and chronic diseases and the acceptance is high <sup>1,2,3</sup> especially in paediatric <sup>4,5</sup> and cancer patients. <sup>6</sup> CAM usage seems to be higher during the palliative phase of the conventional treatment with homeopathy as the most often used CAM method (32%). <sup>7</sup> A pilot survey among 1063 families, registered in the paediatric cancer statistics, stated that 35% of them used CAM during the course of their child's disease. <sup>8</sup> Again, the most frequent method used was homeopathy with 45.2%. These results coincide with our observations at HONK with use of individualized homeopathy or homeopathic remedies by 43% of CAM users. <sup>4</sup> It seems therefore justified to take a closer look at the spectrum of specific homeopathic interventions in this field. In this article, the scope of the collaboration between the Institute

of Complementary Medicine IKOM (department for homeopathy) at the University of Bern and the department for haematology and oncology at the Paediatric University Hospital in Bern (HONK), is outlined as an exemplary concept of integrative medicine (IM) by definition of the Consortium of Academic Health Centers for Integrative Oncology. Thus, the aim of the study was to present descriptive data of this collaboration along with four detailed case histories.

### 2. Methods

The specialist doctors from the department for homeopathy at IKOM practice individualised homeopathy (iHOM), a term which refers to individually administered homeopathic prescriptions of a single remedy, selected after a process of matching the present symptoms of the patient with those described in the homeopathic medicines' textbook

Abbreviations: ALL, acute lymphoblastic leukaemia; CAM, complementary and alternative medicine or therapies; CML, chronic myeloid leukaemia; CTX, chemotherapy; HONK, Department of Haematology/Oncology at the University Children's Hospital Bern; iHOM, individualized homeopathy; IKOM, Institute of Complementary Medicine at the University of Bern; IM, integrative medicine

E-mail addresses: katharina.gaertner@ikom.unibe.ch (K. Gaertner), Sonja.Lueer@insel.ch (S.C. Lüer), martin.frei@ikom.unibe.ch (M. Frei-Erb), klaus.vonammon@ikom.unibe.ch (K. von Ammon).

<sup>\*</sup> Corresponding author.

"Materia Medica" following the "Law of Similars". From June 2007 until present IKOM provides consultations at HONK on request of patients. For the treatment, only highly diluted and succussed, i.e. so-called potentized homeopathic remedies, where we suspect no molecular interaction with conventional therapies, were used. In particular, 'C-Potencies', in which the original substance is diluted 1:100, followed by 10 succussions and 'Q-Potencies', in which the original substance is diluted 1:50'000, followed by 2–10 succussions are prescribed. The number of the potency (e.g. 30, 200 or 3, 5 respectively) indicates the number of repetitions of this process. Two pharmacies, either Spagyros\* <sup>11</sup> or Schmidt-Nagel\*, <sup>12</sup> approved by the Swiss Agency for Therapeutic Products (Swissmedic), provided the homeopathic remedies. They were prepared following the instruction of the European Pharmacopoeia, Monograph 1038 <sup>12</sup> and 2045 <sup>11</sup> and the Homeopathic Pharmacopoeia (HAB 5.2.2–5.2.6).

Jurisdiction of the Ethics Committee of the Canton Bern was obtained. Thereafter, documentation of case histories at IKOM were reviewed and diagnoses, dates of diagnoses and treatments were extracted to Excel-files. Descriptive statistics were used to describe the frequency of consultations and pathologies. Medians and ranges as well as means and standard deviation (SD) are shown. Exemplary patients were chosen and informed consent of the respective patients and their families was obtained by postal contact. The case histories consist of characteristic indications for iHOM-consultations, a description of the homeopathic approach and the subjectively reported results.

#### 3. Results

From June 2007 until December 2017, ninety-four paediatric on-cologic patients at HONK had at least 1 homeopathic consultation. The diagnoses of the complementarily treated patients comprised mostly hematologic neoplasia (n = 40; 42.6%) and brain tumours (n = 28; 29.8%). Average time from diagnosis to homeopathic consultation was 2.4 months (SD 4.9), with a range from 1 to 38 months. The first consultation of the patients and their families with the IKOM-doctors mostly consisted of an informative meeting with or without a homeopathic anamnesis and concerned various indications for complementary homeopathic therapy. All patients except three received supportive homeopathic care. Homeopathic treatment started during conventional in-patient treatment and was continued in the iHOM ambulatory if necessary.

The frequency of consultations per patient was 9.6 at the mean, ranging from 1 to 67 iHOM sessions. The median was 8 consultations. Core areas of the iHOM-interventions were the treatment of side-effects from chemo- or radiotherapy and other acute events during the course of the disease. This comprised mucositis, habitual infections, neuropsychologic and psycho-vegetative changes in the child. These events were treated considering the observed signs and symptoms of the acute episode for the prescription of the homeopathic remedy. C-Potencies in the 30th up to the 10'000th dilution, with repeated dosing if needed, were used. If no acute problems were evident or the patient complaint about a general aggravation of chronic symptoms, the patients received a remedy, which corresponded to their chronic condition, i.e. a socalled constitutional remedy, either as C-potencies or O-Potencies. The evolution of the patients after iHOM treatment varied for each individual subject and condition, for which iHOM was used. Therefore, no overall results can be presented. Instead, 4 case-summaries are designated to illustrate the variety and possibilities of iHOM at HONK.

#### 4. Case summaries

#### 4.1. Case 1 - mucositis

This female patient was diagnosed with Acute Lymphoblastic Leukaemia (ALL) at nearly 5 years of age (4 10/12). Two weeks after diagnosis, the family asked for complementary homeopathic treatment.

In the anamnesis digestive problems appeared to be the most troublesome complaint for the patient. She suffered from constipation and abdominal cramps. Silicea C30  $^{11}$  (size 2), 1  $\times$  5 globules per day, was prescribed upon basis of totality of symptoms. On the follow-up consultation two weeks later, her mother reported that the abdominal cramps had stopped and her appetite had improved. The therapy was paused. Two weeks later, during the next cycle of chemotherapy (CTX) the girl developed mucositis and for pain-control she needed opiates intravenously. She had been on anti-mycotic therapy for four days, before she was seen by an iHOM-doctor again. The mucosa of the mouth was thickly coated with thrush; the patient received sedative drugs but presented restless extremities and salivation. Mercurius solubilis C200. 11  $1 \times 5$  globules (size 2) per day was given. On iHOMward round the next day, the girl was sitting at the table playing puzzles. The mother reported, that after the intake of the globules last evening, there had been an episode of diarrhoea with a large amount of stool and the patient was sleeping afterwards. Opiates had been reduced already and this morning she asked for food for the first time since the start of mucositis. The family was told to continue the homeopathic treatment until complete disappearance of mucositis symptoms. In the next homeopathic control five days later, she had no present complaints and the remedy was stopped.

# 4.2. Case 2 - tissue infection during neutropenia

A 22-month old girl, diagnosed with Early T-cell Precursor ALL, high-risk group, 13 was presented to IKOM for general advice. She was presenting no acute symptoms but the parents of the child stated the wish to support their child's immune system. Based on her general symptoms, she was given Phosphorus C200 11 without any noticeable effect. Moreover, she has been admitted to hospital with fever and an acute tissue infection of the left cheek two weeks later. Swelling and reddening were discrete, but there was complete loss of appetite and demonstration of pain, whenever touched or moved. In order to withstand pain during examinations she needed opiates. Corresponding homeopathic evaluation, Bryonia C200,  $^{12}$  up to 3  $\times$  5 globules (size 10) per day, was prescribed. The treatment started in the evening and until noon the other day, the girl seemed to have no pains and tried some food in the morning. The homeopathic remedy was repeated in the afternoon, as the pains returned. Within the next days, the time after which Bryonia needed to be repeated became shorter and on the fourth day the potency was risen to Bryonia C1000 12 in the same dosing. While the infection persisted despite the administration of antibiotic and anti-mycotic therapy, it was neither spreading nor did the girl seemed to have pain. Every time she expressed discomfort, Bryonia seemed to help her. Eventually the effect of Bryonia C1000 subsided as well and the potency was risen to Bryonia C10'000, 12 again in the same dosing. On day six, the antibiotic treatment was adapted. Within the following two days, the infection reduced further. Nonetheless, a few days later control imaging revealed remains of the infections needed and the area to be drained surgically.

# 4.3. Case 3- sleeping disorder

A nearly 16-years (15 10/12) old female patient with Chronic Myeloid Leukaemia (CML) was referred to IKOM with sleeping problems. The CML was diagnosed 7 weeks prior to the consultation and the patient reported, that she wasn't able to sleep without benzodiazepines due to too many thoughts. This condition had started with the CTX. Beforehand, she had already noted nervous anxiety along with attacks of vertigo and diarrhoea in the morning before presentations at school or other important events. Further, she suffered from frequent headaches. Those symptoms had also aggravated since CTX. She said, apart from the bad sleep, there weren't any new symptoms, only her general condition had deteriorated. The homeopathic analysis lead to the prescription of Natrum muriaticum, which she was given in the

potency Q3  $^{11}$  (10 ml flasks), 3 drops in 10 ml tap water per day. After two month she contacted the doctors at IKOM again and reported that she had been sleeping very well and had less headaches. When the flask had been empty after six weeks, however, the sleeping problems returned. She was prescribed Natrum muriaticum Q6  $^{11}$  in the same dosing and the sleep became sound again. She was told to consult the homeopathic doctor if needed. Up to today there was no further contact.

# 4.4. Case 4 - affect spasm

iHOM doctors were contacted concerning a 16-month old boy, who had been diagnosed with Acute Myeloid Leukaemia, Fab type M7, 4 days prior to the first homeopathic consultation, because his mother wanted to support the course of disease with iHOM. The anamnesis revealed that the boy, apart from being weak since the start of CTX, was stubborn, dissatisfied and crying a lot. He was not compliant during examinations and therapeutic interventions, such as injections or mouth hygiene, screaming and presenting a spastic arrest of breathing. Thus, the interventions took a lot of time and sometimes even needed to be postponed. The boy would only calm himself, when carried and rocked by his mother. The treatment in this case was Chamomilla C200  $^{11}$  (size 2), 1  $\times$  3 globules sublingual once. In the control visit a week later, the mother reported that there haven't been any affect spasms since the intake of the remedy and the boy was more content and amenable. She was told, that the homeopathic Chamomilla could be repeated, whenever the spasm returned. If a repetition had not the desired result, iHOM should be contacted again. No more contact was needed.

#### 5. Discussion

IHOM at HONK is used for a broad spectrum of indications during the course of cancer treatment and the offer is taken by around a quarter of the concerned families.4 This article presents some of the different indications in which the complementary homeopathic treatment was used over ten years and 4 cases in particular. This insight might create awareness for the scope of such treatment, as patients and their families reported an additional benefit to conventional care consistently. The four cases represent iHOM as a regulatory therapy: in case 1, the turning point for the physiological functioning of the mucous membranes seems to have occurred after the intake of the homeopathic medicine. In case 2 the homeopathic remedy seemed to work as a palliative for pain. Cases 3 and 4 represent an aggravation of chronic symptoms during hospitalisation and chemotherapy respectively. Here, the administered iHOM seemed to have helped the psycho-vegetative regulation. This suggested regulatory effect of iHOM in cancer care is also supported by two controlled pilot studies on iHOM in cancer patients: Rostock et al. found in a prospective observational study with two independent cohorts an improvement of quality of life in patients treated complementary with homeopathy. 14 Further, the homeopathic cohort showed a tendency in decreasing fatigue. In a pragmatic randomized controlled trial Frass et al. found a significant stronger improvement of global health status and subjective wellbeing in patients treated additionally with homeopathy than in the control group with only conventional therapy. 15 Laboratory experiments evaluating the effect of potentised substances show an immune-modulatory response of cancer cells to homeopathic remedies. 16,17

An additional advantage of the complementary treatment with iHOM, especially in paediatrics, was the safety of this therapy: during the 10 years of collaboration at our institution no severe side-effects or drug-interactions with conventional therapy were observed. We share this experience with another centre, which integrated homeopathy in the care of critically ill paediatric patients. <sup>18</sup> Positive effects of homeopathic treatment in pediatric out-patient care were found for different diseases e.g. acute diarrhoea, <sup>19</sup> acute otitis media <sup>20,21</sup> and

attention deficit (hyperactivity) syndrome (ADHS). These aspects were also confirmed by data from a multicentric cohort study on long-term results of iHOM in chronic diseases with 3709 patients including 819 children. Severity of complaints improved significantly between baseline and two years follow up. This improvement persisted until the follow-up after eight years. The biggest limitation of our study, however, is the lack of a control group or long-term results. That way, no generalizable results can be deducted from these data. With regard to patients' needs for integrative methods, their high acceptance  $^{4,6,7}$  and the above mentioned empiric literature, upcoming large-scale clinical studies, including controls, quantitative evaluations and mixed methods approaches, are warranted.

#### 6. Conclusion

The collaboration between HONK and IKOM established iHOM as a part of their IM-concept in paediatric oncology in Bern. In this setting, iHOM seems to be a safe supportive method in cancer treatment of children and may have contributed to symptom control. Yet, no generalizable results can be deducted from these data. Future research on this topic using a mixed methods approach is warranted therefore.

#### Declaration of interest and funding

None.

#### Acknowledgement

To all participating patients, parents, nurses and doctors.

#### References

- Eardley S, Bishop FL, Prescott P, et al. A systematic literature review of complementary and alternative medicine prevalence in EU. Forsch Komplementmed. 2012;19(suppl 2):18–28. https://doi.org/10.1159/000342708.
- Klein S, Torchetti L, Frei-Erb M, Wolf U. Usage of Complementary Medicine in Switzerland: Results of the Swiss Health Survey 2012 and Development Since 2007. PLoS One. 2015;10(October 27) https://doi.org/10.1371/journal.pone.0141985 e0141985.
- Frass M, Strassl RP, Friehs H, Müllner M, Kundi M, Kaye A. Use and acceptance of complementary and alternative medicine among the general population and medical personnel: A systematic review. *Ochsner J.* 2012;12:45–56.
- Magi T, Kuehni CE, Torchetti L, Wengenroth L, Lüer S, Frei-Erb M. Use of Complementary and Alternative Medicine in Children with Cancer: A Study at a Swiss University Hospital. PLoS One. 2015;22;10(December 12) https://doi.org/10. 1371/journal.pone.0145787 eCollection e0145787.
- Fletcher PC, Clarke J. The use of complementary and alternative medicine among pediatric patients. Cancer Nurs. 2004;27(2):93–99.
- Molassiotis A, Fernandez-Ortega P, Pud D, Ozden G, Scott JA, Panteli V. Use of complementary and alternative medicine in cancer patients: A European 16 survey. *Ann Oncol.* 2005;16:663.
- Schütze T, Längler A, Zuzak TJ, Schmidt P, Zernikow B. Use of complementary and alternative medicine by pediatric oncology patients during palliative care. Support Care Cancer. 2016;24(July 7):2869–2875. https://doi.org/10.1007/s00520-016-3097-2.
- Längler A, Spix C, Edelhäuser F, Kameda G, Kaatsch P, Seifert G. Use of homeopathy in pediatric oncology in Germany. Evid Based Complement Altern Med. 2011;2011:867151https://doi.org/10.1155/2011/867151.
- Deng GE, Frenkel M, Cohen L, et al. Evidence-based clinical practice guidelines for integrative oncology: Complementary therapies and botanicals. J Soc Integr Oncol. 2009;7(3):85–120.
- Hahnemann S. Organon der Heilkunst. [Hahnemann's Organon of Medicine].
   Standard edition of 6th ed. Schmidt JM, editor. Heidelberg: Haug, 1996/1999. 388 p.
- 11. Spagyros AG, Neufeldstrasse 1, CH-3076 Worb, Switzerland.
- 12. Laboratoire homéopathique Schmidt-Nagel SA. Rue du Pré-Bouvier 27, CH-1217 Meyrin, Switzerland.
- Haydu JE, Ferrando AA. Early T-cell precursor acute lymphoblastic leukaemia. Curr Opin Hematol. 2013;20(4) https://doi.org/10.1097/MOH.0b013e3283623c61.
- Rostock M, Naumann J, Guethlin C, Guenther L, Bartsch HH, Walach H. Classical homeopathy in the treatment of cancer patients — a prospective observational study of two independent cohorts. *BMC Cancer*. 2011;11(19) Available at: http://www.biomedcentral.com/1471-2407/11/19.
- 15. Frass M, Friehs H, Thallinger C, et al. Influence of adjunctive classical homeopathy on global health status and subjective wellbeing in cancer patients -a pragmatic randomized controlled trial. Complement Ther Med. 2015;23(3):309–317.
- 16. Phatak S, Multani AS, Banerji P, Banerji P. Ruta 6 selectively induces cell death in

- brain cancer cells but proliferation in nor- mal peripheral blood lymphocytes: a novel treatment for human brain cancer. *Int J Oncol.* 2003;23:975–982.
- Şeker S, Güven C, Akçakaya H, Bahtiyar N, Akbaş F, Onaran İ. Evidence that Extreme Dilutions of Paclitaxel and Docetaxel Alter Gene Expression of In Vitro Breast Cancer Cells. Homeopathy. 2018;107(Febraury1):32–39. https://doi.org/10.1055/s-0037-1618585.
- Homöopathie-TV. Homöopathie in der Kinderklinik [Homeopathy at the Children's Hospital]. [Internet]; 2011. Podcast. Available from: http://homoeopathie-tv.com/homoopathie-der-kinderklinik/.
- Jacobs J, Jonas WB, Jimenez-Perez M, Crothers D. Homeopathy for childhood diarrhea: combined results and metaanalysis from three randomized, controlled clinical trials. *Pediatr Infect Dis J.* 2003;22(3):229–234.
- Sinha MN, Siddiqui VA, Nayak C, et al. Randomized controlled pilot study to compare Homeopathy and Conventional therapy in Acute Otitis Media. Homeopathy.

- $2012; 101 (January 1): 5-12.\ https://doi.org/10.1016/j.homp. 2011.08.003.$
- Frei H, Thurneysen A. Homeopathy in acute otitis media in children: treatment effect or spontaneous resolution? Br Homeopath J. 2001;90(4):180–182.
- Frei H, Everts R, von Ammon K, et al. Homeopathic treatment of children with attention deficit hyperactivity disorder: A randomized, double blind, placebo controlled crossover trial. Eur J Pediatr. 2005;164:758–767.
- Witt CM, Lüdtke R, Mengler N, Willich SN. How healthy are chronically ill patients after eight years of homeopathic treatment? Results from a long term observational study. BMC Public Health. 2008;17(December 8):413. https://doi.org/10.1186/1471-2458.8-413
- Witt CM, Ludtke R, Willich SN. Homeopathic treatment of patients with chronic sinusitis: A prospective observational study with 8 years follow-up. BMC Ear Nose Throat Disord. 2009;9:7.