Original Article

A Phase II Trial of Reiki for the Management of Pain in Advanced Cancer Patients

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Abstract
*This trial compared pain, quality of life, and analgesic use in a sample of patients with cancer pain (*n = *24) who received either standard opioid management plus rest (Arm A) or standard opioid management plus Reiki (Arm B). Participants either rested for 1.5 hr on Days 1 and 4 or received two Reiki treatments (Days 1 and 4) one hour after their first afternoon analgesic dose. Visual analogue scale (VAS) pain ratings, blood pressure, heart rate, and respirations were obtained before and after each treatment/rest period. Analgesic use and VAS pain scores were reported for 7 days. Quality of life was assessed on Days 1 and 7. Participants in Arm B experienced improved pain control on Days 1 and 4 following treatment, compared to Arm A, and improved quality of life, but no overall reduction in opioid use. Future research will determine the extent to which the benefits attributed to Reiki in this study may have been due to touch.* J Pain Symptom Manage 2003;26:990–997. *© 2003 U.S. Cancer Pain Relief Committee. Published by Elsevier Inc. All rights reserved.*

Key Words
Quality of life, Reiki, pain control, neoplasms/therapy

Introduction

The effective management of cancer pain is a common problem in palliative care.

High doses of opioids are often associated with multiple side effects, which are themselves difficult to manage. Our research group has initiated a series of studies designed to explore non-pharmacologic adjuvants to opioid therapy, with the objective of minimizing opioid requirements while improving pain control. Because no published trials of Reiki existed, a single-arm trial was conducted.[1] Twenty volunteers experiencing pain for a variety of reasons (e.g., cancer, arthritis, chronic back problems) were provided with a Reiki treatment by a certified second-degree Reiki therapist. Pain was measured using both a visual analogue scale (VAS) and a Likert scale. Measures of pain were obtained immediately before and after the Reiki treatment. Both measures (VAS and Likert scale) showed a highly significant improvement in pain control (reduction of 2.25 on the VAS and 1.25 on the Likert Scale) following the Reiki treatment ($P < 0.0001$ for both scales).

Given those findings, the study described below was designed to compare standard

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Accepted for publication: March 14, 2003.

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0885-3924/03/$–see front matter
doi:10.1016/S0885-3924(03)00334-8

opioid management plus rest to standard opioid management plus Reiki. Rest was added to the comparison group because Reiki treatment requires participants to sit or lie quietly for the duration of the treatment, a period of about 1.5 hours. It was thus important to determine whether the improvement in pain scores seen in the single arm trial described above may have been attributable to rest rather than Reiki. The purpose of the study was to determine whether Reiki, when provided as an adjuvant to standard opioid management of cancer pain, resulted in better pain control, less analgesic use, and an improved quality of life, compared to standard opioid therapy plus rest.

Methods

Sample

Following ethical clearance by university and hospital ethics review committees, staff on three nursing units (an inpatient palliative unit, a hospice, and an outpatient symptom management clinic) obtained permission from eligible patients (fluent in written and spoken English, Folstein mini-mental status exam (MMSE) of at least 23, never had a Reiki treatment before, had not received chemotherapy or radiotherapy for the past month, rated their pain at 3 or greater on a 10-point visual analogue scale (VAS), required 2–5 breakthrough doses of analgesic in the day prior to recruitment, and currently receiving palliative care due to advanced cancer) for the investigators to approach them regarding participation in this trial. Over a two-year period, 24 adults (9 men, mean age 59.5 years; 15 women, mean age 56 years) provided written consent for participation in this study.

Initial sample size calculations showed that 100 participants (50 per group) were required to detect a 20% reduction in VAS pain score. The trial was stopped after 24 evaluable patients were accrued, however, because of increasing unwillingness to accept assignment to the group receiving standard opioid management plus rest and persistent requests for Reiki, despite lack of documented benefit in this population. Reiki is now offered by volunteers, free of charge, on the inpatient palliative unit that was the primary recruitment site for this study.

Data Collection and Analysis

After receiving written consent, participants were allocated to either standard opioid management plus rest (Arm A) or standard opioid management plus Reiki (Arm B), using a computer-generated random number assignment system. Given the explicit nature of Reiki, it was not possible to blind either the recipients or the research nurse who assessed all outcomes regarding treatment allocation. Nevertheless, neither the research nurse nor the participants knew the group to which participants would be assigned until after consent was obtained. The principal investigator and the research nurse regularly discussed the importance of ensuring that all study participants remained in the treatment group to which they were allocated for the duration of the study; a review of study records indicated that group assignment was strictly maintained.

In order to describe the sample more fully and to provide a mechanism for verifying whether confounding variables were indeed equally distributed between both groups, a pain assessment of each patient was completed on Day 1 using the Edmonton Staging System.[2] The Edmonton Staging System (ESS) is a staging tool that was developed to provide a clinical staging system for cancer pain. This system includes known prognostic factors for the response to treatment. The ESS is an accurate predictor of the outcome of pain interventions in patients with cancer pain. It facilitates collection of information about mechanism of pain, nature of pain, previous narcotic exposure, cognitive function, psychological distress, opioid tolerance, and history of alcohol and drug dependence.

A quality-of-life assessment (QOL) was also completed on Day 1. The quality-of-life measure was a multidimensional tool with physical, social, and psychological subscales.[3] The construct validity of this tool was established through factor analysis and all alpha coefficients were at least 0.65 in studies with cancer patients.[4] The QOL assessment was completed again on Day 7.

Additional data collected included daily diaries in which participants recorded their VAS pain score at breakfast, lunch, supper, and bedtime, all analgesic use, and any other activities undertaken for the purpose of obtaining pain relief. All analgesics were converted into morphine-equivalent units (MEDD) to facilitate analysis.

Participants in Arm A rested for 1.5 hr on Days 1 and 4 one hour after their first afternoon analgesic dose. Participants in Arm B received a Reiki treatment on Days 1 and 4, 1 hour after their first afternoon analgesic dose. The timing of the Reiki/rest interventions were chosen to coincide roughly with the point in time when participants would be expected to begin experiencing some reduction in their pain due to their recently administered opioid. The research nurse remained with all participants in both arms of the study for the duration of their rest period or Reiki treatment. She did not touch the participants in either group, except as necessary to obtain their blood pressure and heart rate. The Reiki Master was only present during the Reiki treatments; she only touched participants as outlined below, during the provision of Reiki treatments.

Proponents of Reiki hypothesize that Reiki re-establishes the energy balance in areas of the body experiencing disease and discomfort, thus promoting healing, reducing pain, and increasing quality of life. Although Reiki may be provided with or without physical contact with the body of a recipient, all participants in this study received Reiki through physical contact provided by a Reiki Master trained in the traditional Usui method. The treatment, delivered to 18 specific areas of the body, began with the participant lying on his or her back. Ten hand positions were performed on the head and torso. The participant was then asked to lie on his or her stomach (or on their side if more comfortable), where eight additional hand positions, covering the back, hip area, and feet, were carried out. A full treatment took approximately 1.5 hours to complete.

Data collected by the research nurse immediately before and after each Reiki treatment or rest period included a VAS pain score ("How much pain do you have now?" rated from no pain [0] to worst possible pain [10]), blood pressure (lying position using a standard portable blood pressure cuff), respirations (number of breaths in 10 seconds multiplied by 6), and heart rate (radial pulse in 10 seconds multiplied by 6).

All analyses were conducted using the SAS statistical program[5] by the project biostatistician (J.H.), who was blinded with respect to group assignment. Changes in "before" and "after" scores in Arms A and B for pain, blood pressure, heart rate, and respirations on both Days 1 and 4 were compared using the Kruskal–Wallis test, to allow for the lack of normality. Changes from Day 1 to Day 7 in Arms A and B on the QOL subscales and in analgesic use were also compared using the Kruskal–Wallis test.

Results

Seventy-three patients met eligibility criteria. Of these, twenty patients refused participation, stating they were only interested in participating if they could receive the Reiki treatments. The remaining 53 patients were initially accrued, but data files were incomplete in 29 cases (5 deaths, 14 withdrawals by research nurse due to drop in MMSE below 23, 3 withdrawals by patient due to deterioration in health status, no reason stated for 7 remaining withdrawals), leaving 24 evaluable participants. A comparison of diagnoses, source of pain, nature of pain, previous opioid exposure, cognitive function, psychological distress, opioid tolerance (opioid dose increase per day), and drug or alcohol dependence across groups using Fisher's exact test showed no significant differences between Arms A and B (Table 1).

As can be seen in Table 2, participants who received standard opioid therapy plus Reiki on Day 1 reported a significant improvement in pain, ($P = 0.035$) and a significant drop in diastolic blood pressure ($P = 0.005$) and pulse ($P = 0.019$), compared to participants who received standard opioid therapy plus rest.

On Day 4, participants who received standard opioid therapy plus Reiki again experienced a significant drop in pain ($P = 0.002$) and their drop in diastolic blood pressure approached significance ($P = 0.082$), compared to participants who received standard opioid therapy plus rest (Table 3).

Participants who received standard opioid therapy plus Reiki also reported a significant improvement ($P = 0.002$) in the psychological component of quality of life from Day 1 to Day 7, compared to standard opioid therapy plus rest (Table 4).

A review of daily pain diaries' data comparing changes in pain and median morphine equivalent dose from Day 1 to Day 7 showed no significant differences between participants who received standard opioid therapy plus rest and those who received standard opioid therapy plus

Table 1
Description of Sample

	Arm A (Opioid plus rest), $n = 13$	Arm B (Opioid plus Reiki), $n = 11$
Primary diagnosis		
Solid tumors	11	8
Hematologic	1	2
Unknown	1	1
Source of pain		
Bone metastasis	5	4
Neuropathic pain	2	0
Lymphadenopathy	2	0
Ascites	1	0
Visceral	0	1
Unknown	3	6
Nature of pain		
Non-incidental	9	9
Incidental	4	2
Previous narcotics		
<60 mg oral morphine/day	8	3
60 but <300 mg oral morphine/day	2	6
300 mg oral morphine/day	3	2
Cognitive function, MMSE 23	13	11
Psychological distress		
No major psychological distress	10	7
Major psychological distress	3	4
Opioid tolerance, dose increase <5%/day	13	11
History of alcohol or drug dependence		
Negative history	10	7
Positive history	3	4

No significant differences were found between groups on any variables.

Reiki (Table 5). The analysis of daily morphine-equivalent analgesic use was conducted using the median since analgesic use was not normally distributed.

Only one participant reported using a non-analgesic medication, a benzodiazepine, to assist with pain management. Two participants reported using non-pharmacologic strategies (rest, walking) for managing their pain. Because the use of non-opioid medications and other non-pharmacologic strategies for pain management were rarely used, no further analysis was conducted on these variables.

Discussion

When exploring possible explanations for the results of this study, one must consider several factors. In this study, the research assistant was present for the full length of both the Reiki and the rest interventions, but the Reiki therapist was only present during the Reiki intervention. While both team members were warm, empathic individuals, it is possible that the absence of the Reiki therapist in the control setting influenced the results of the study. In addition, one cannot rule out the possibility of a placebo effect. Other investigators studying energy therapies addressed this problem by developing placebo Reiki interventions, which were then administered to a control group. Mansour et al. were successful in developing a placebo Reiki intervention, intended for use in the management of anxiety during the administration of chemotherapy, that was indistinguishable from the perspective of recipients, but the subsequent outcomes of the treatments were not reported.[6] Critics of placebo-controlled trials suggested that when the placebo is in the form of a human-to-human interaction, one must always contend with the possibility that even when the experimental and placebo interventions are indistinguishable, one may still argue that the results may be confounded by the intention of the provider. For example, the placebo provider may not "try" as hard as the person delivering the experimental intervention, or may transmit a sense of sympathy for the placebo recipients (because they are not receiving the experimental intervention).

The purpose of including the blood pressure, pulse, and respiration measures in this trial was

Table 2
Pain, Blood Pressure, Heart Rate, and Pulse for Arm A and Arm B on Day 1

	Arm A (Opioid plus rest)		Arm B (Opioid plus Reiki)		Kruskal–Wallis Comparing Change in Arm A and Change in Arm B
Variable	Before	After	Before	After	
Pain (10 cm VAS)	4.5	4.2	4.5	3.3	$P = 0.035$
Systolic blood pressure (mm of mercury)	109	108	121	117	*ns*
Diastolic blood pressure (mm of mercury)	64	65	72	68	$P = 0.005$
Heart rate (beats/minute)	80	80	78	71	$P = 0.019$
Respirations (breaths/minute)	18	18	17	17	*ns*

Table 3
Pain, Blood Pressure, Heart Rate, and Pulse for Arm A and Arm B on Day 4

Variable	Arm A (Opioid plus rest)		Arm B (Opioid plus Reiki)		Kruskal–Wallis Comparing Change in Arm A and Change in Arm B	
	Before	After	Before	After		
Pain (10 cm VAS)	3.8	3.7	3.9	2.4	*P*	0.002
Systolic blood pressure (mm of mercury)	113	112	119	116		*ns*
Diastolic blood pressure (mm of mercury)	65	65	71	67		*ns*
Heart rate (beats/minute)	78	77	78	76		*ns*
Respirations (breaths/minute)	18	17	17	16		*ns*

to provide some additional evidence, over and above a placebo effect, for the benefit of Reiki. We reasoned that if pain perception truly declined following the Reiki treatment, we should also see drops in respiration, heart rate, and blood pressure. On Day 1, the drop in diastolic blood pressure and heart rate was significant and a non-significant decline in the systolic blood pressure was noted. We were surprised to find that on Day 4, despite an even greater improvement in the pain score, none of the additional measures were significantly improved although the drop in the diastolic blood pressure was nearly significant (0.082). We have no explanation for this finding except, perhaps, the small sample size. The improvement in the psychological dimension of the quality-of-life tool supports clinical experience and is likely, at least partly due to an improvement in pain control.

The lack of a significant difference in analgesic use between participants who received standard opioid therapy plus Reiki and those who received standard opioid therapy plus rest was, in retrospect, not surprising given the short study period. A short study period was chosen to increase the chance that study participants would remain cognitively able to provide the level of information required in this project, but it was probably not long enough to see a change in analgesic use, particularly because patients are advised to maintain their prescribed analgesic dose, even if they are feeling better, until it is changed by their physician. Many of the participants in this study were very close to the end of life. In subsequent studies we intend to recruit participants with longer life expectancies (up to 5–6 months if possible) since these individuals are often cognitively stable over longer periods of time. In addition, we agree with others who have recommended the collection of data on other psychological factors such as depression and anxiety because these factors may interact with perceptions of pain.[7–9] We were somewhat surprised, however, to find no significant differences in pain scores from Day 1 to Day 7 between those who received standard opioid therapy plus Reiki and those who received standard opioid therapy plus rest. The interpretation of these findings is compounded by the instability of this patient population. Nevertheless, based on our limited experience, patients report that the effect of a Reiki treatment lasts approximately 2–3 days. This being the case, any benefit of Reiki received on Day 4 would be nearly exhausted by Day 7, and give rise to the finding of no significant improvement in pain control.

This study raises the importance of studying the influence of touch in pain management. Many authors have described the use of touch as a source of comfort for ill individuals. Because the research assistant deliberately did not

Table 4
Quality of Life Data for Day 1 and Day 7

Subscale	Arm A (Opioid plus rest)		Arm B (Opioid plus Reiki)		Kruskal–Wallis Comparing Change in Arm A and Change in Arm B	
	Day 1	Day 7	Day 1	Day 7		
Psychological (10 cm VAS)	5.1	5.1	5.4	6.2	*P*	0.002
Social (10 cm VAS)	2.8	2.9	3.0	3.0		*ns*
Physical (10 cm VAS)	6.7	6.7	7.0	7.5		*ns*

Table 5
Pain Diary Reports of Mean and Median Morphine Equivalent Opioid Doses

	Arm A (Opioid plus rest)		Arm B (Opioid plus Reiki)	
Day	Daily Pain Diary VAS Scores	Mean/Median Morphine Equivalent Opioid Dose	Daily Pain Diary VAS Scores	Mean/Median Morphine Equivalent Opioid Dose
Day 1	Mean = 4.00 Standard error = 0.39 CI = 3.15–4.85	Mean = 101.10 Median = 35.00 Standard error = 19.34 CI = 62.47–139.73	Mean = 4.58 Standard error = 0.52 CI = 3.43–5.74	Mean = 168.30 Median = 20.00 Standard error = 44.81 CI = 77.94–258.66
Breakfast	Mean = 4.02 Standard error = 0.50 CI = 2.94–5.10		Mean = 5.01 Standard error = 0.65 CI = 3.56–6.46	
Lunch	Mean = 3.88 Standard error = 0.29 CI = 3.24–4.51		Mean = 5.30 Standard error = 0.35 CI = 4.51–6.09	
Supper	Mean = 4.36 Standard error = 0.52 CI = 3.22–5.50		Mean = 4.14 Standard error = 0.67 CI = 2.64–5.64	
Bedtime	Mean = 3.74 Standard error = 0.54 CI = 2.57–4.91		Mean = 3.88 Standard error = 0.63 CI = 2.47–5.30	
Day 2	Mean = 4.11 Standard error = 0.52 CI = 2.98–5.24	Mean = 109.20 Median = 30.00 Standard error = 20.46 CI = 68.41–149.99	Mean = 4.16 Standard error = 0.53 CI = 2.96–5.37	Mean = 125.21 Median = 20.00 Standard error = 39.30 CI = 46.15–204.26
Breakfast	Mean = 4.00 Standard error = 0.54 CI = 2.81–5.19		Mean = 3.82 Standard error = 0.70 CI = 2.22–5.43	
Lunch	Mean = 3.98 Standard error = 0.58 CI = 2.71–5.24		Mean = 4.29 Standard error = 0.62 CI = 2.88–5.70	
Supper	Mean = 4.40 Standard error = 0.57 CI = 3.16–5.64		Mean = 3.96 Standard error = 0.62 CI = 2.56–5.36	
Bedtime	Mean = 4.06 Standard error = 0.68 CI = 2.57–4.91		Mean = 4.50 Standard error = 0.61 CI = 3.12–5.88	
Day 3	Mean = 4.42 Standard error = 0.61 CI = 3.09–5.75	Mean = 109.69 Median = 30.00 Standard error = 20.43 CI = 68.96–150.42	Mean = 3.96 Standard error = 0.55 CI = 2.72–5.21	Mean = 136.37 Median = 20.00 Standard error = 38.29 CI = 59.46–213.29
Breakfast	Mean = 4.05 Standard error = 0.61 CI = 2.71–5.37		Mean = 3.76 Standard error = 0.70 CI = 2.17–5.35	
Lunch	Mean = 4.38 Standard error = 0.63 CI = 3.01–5.75		Mean = 4.02 Standard error = 0.61 CI = 2.65–5.39	
Supper	Mean = 4.55 Standard error = 0.69 CI = 3.06–6.05		Mean = 3.79 Standard error = 0.55 CI = 2.54–5.04	
Bedtime	Mean = 4.70 Standard error = 0.67 CI = 3.24–6.16		Mean = 4.28 Standard error = 0.56 CI = 3.01–5.55	
Day 4	Mean = 4.00 Standard error = 0.52 CI = 2.87–5.13	Mean = 89.23 Median = 30.00 Standard error = 17.38 CI = 54.53–123.93	Mean = 3.37 Standard error = 0.55 CI = 2.14–4.59	Mean = 151.67 Median = 30.00 Standard error = 41.34 CI = 68.49–234.84
Breakfast	Mean = 3.37 Standard error = 0.49 CI = 2.30–4.44		Mean = 3.79 Standard error = 0.63 CI = 2.39–5.20	
Lunch	Mean = 4.18 Standard error = 0.65 CI = 2.77–5.60		Mean = 3.34 Standard error = 0.54 CI = 2.13–4.54	
Supper	Mean = 4.45 Standard error = 0.55 CI = 3.25–5.60		Mean = 3.03 Standard error = 0.59 CI = 1.71–4.34	
Bedtime	Mean = 4.00 Standard error = 0.55 CI = 2.80–5.20		Mean = 3.31 Standard error = 0.61 CI = 1.94–4.68	

(continued)

Table 5
Continued

Day	Arm A (Opioid plus rest)		Arm B (Opioid plus Reiki)	
	Daily Pain Diary VAS Scores	Mean/Median Morphine Equivalent Opioid Dose	Daily Pain Diary VAS Scores	Mean/Median Morphine Equivalent Opioid Dose
Day 5	Mean = 3.61 Standard error = 0.48 CI = 2.55–4.67	Mean = 91.01 Median = 30.00 Standard error = 17.57 CI = 55.93–126.08	Mean = 3.88 Standard error = 0.52 CI = 2.72–5.04	Mean = 160.29 Median = 30.00 Standard error = 40.10 CI = 79.76–240.83
Breakfast	Mean = 3.08 Standard error = 0.41 CI = 2.18–3.97		Mean = 3.51 Standard error = 0.54 CI = 2.31–4.71	
Lunch	Mean = 3.69 Standard error = 0.62 CI = 2.33–5.05		Mean = 3.72 Standard error = 0.54 CI = 2.52–4.92	
Supper	Mean = 4.00 Standard error = 0.59 CI = 2.69–5.31		Mean = 4.18 Standard error = 0.56 CI = 2.92–5.44	
Bedtime	Mean = 3.68 Standard error = 0.55 CI = 2.47–4.88		Mean = 4.16 Standard error = 0.62 CI = 2.76–5.56	
Day 6	Mean = 3.57 Standard error = 0.46 CI = 2.55–4.59	Mean = 83.66 Median = 30.00 Standard error = 15.31 CI = 53.11–114.21	Mean = 3.37 Standard error = 0.53 CI = 2.15–4.58	Mean = 147.66 Median = 20.00 Standard error = 43.10 CI = 60.81–234.51
Breakfast	Mean = 3.23 Standard error = 0.38 CI = 2.39–4.06		Mean = 3.17 Standard error = 0.52 CI = 2.00–4.34	
Lunch	Mean = 3.63 Standard error = 0.40 CI = 2.74–4.52		Mean = 3.47 Standard error = 0.58 CI = 2.16–4.78	
Supper	Mean = 3.68 Standard error = 0.71 CI = 2.11–5.26		Mean = 3.43 Standard error = 0.56 CI = 2.16–4.70	
Bedtime	Mean = 3.85 Standard error = 0.70 CI = 2.30–5.40		Mean = 3.39 Standard error = 0.54 CI = 2.16–4.62	
Day 7	Mean = 3.98 Standard error = 0.56 CI = 2.76–5.19	Mean = 89.13 Median = 35.00 Standard error = 16.39 CI = 56.46–121.80	Mean = 3.57 Standard error = 0.54 CI = 2.54–4.96	Mean = 155.20 Median = 20.00 Standard error = 42.41 CI = 69.93–240.48
Breakfast	Mean = 3.58 Standard error = 0.60 CI = 2.26–4.89		Mean = 3.23 Standard error = 0.59 CI = 1.92–4.53	
Lunch	Mean = 4.18 Standard error = 0.65 CI = 2.78–5.59		Mean = 3.67 Standard error = 0.63 CI = 2.27–5.08	
Supper	Mean = 3.94 Standard error = 0.65 CI = 2.51–5.36		Mean = 4.12 Standard error = 0.59 CI = 2.81–5.43	
Bedtime	Mean = 4.20 Standard error = 0.62 CI = 2.86–5.54		Mean = 3.76 Standard error = 57 CI = 2.48–5.04	

touch patients during the rest intervention, some of the benefit seen in the experimental arm may have been due to the touch associated with the Reiki treatment. Would any kind of gentle soothing touch have yielded similar results? The crossover trial we are planning will help us address this point since the placebo touch intervention is identical to the touch provided during a Reiki treatment, with the only difference being that the provider of the placebo touch has not received Reiki training.

No potential biological mechanisms by which interventions such as Reiki might work have been reported in the scientific literature. Pain is a complex phenomenon that extends far beyond its physiologic and sensory components. As Zimmerman et al. note, nociception, perception, and expression of pain are also influenced by cognition, behavior, affect, and culture.[8] Similarly but in a more detailed fashion, Price systematically reviewed the interrelations between 3 key dimensions of pain—"sensations whose

qualities are uniquely like those which occur during nociceptive stimulation, meanings of intrusion or threat to the body or self, and unpleasant emotional feelings associated with these meanings" (p. 215).[10] It is too early in our work to offer hypotheses about the process by which Reiki may have an impact on the experience of pain.

As this project drew to a close, the research team considered the possibility of developing a placebo Reiki intervention as outlined by others[5] for the next project. The final decision in this regard was influenced heavily by the fact that future study participants will have advanced cancer and be receiving palliative care. As reported by others,[11] these participants want to "try" anything that might provide relief from their distress. Recruitment in this study was difficult owing to patients' reluctance to be in the group receiving standard opioid management plus rest, given their significant pain control problems and the approach of the end of their life. For these reasons, the study team is currently designing a 4-arm crossover trial of standard care alone, standard care plus Reiki, standard care plus placebo touch, and standard care plus rest. This trial will help us distinguish benefits of Reiki from those of touch, controlling for any benefits associated with rest.

The findings of this study should be generalized cautiously, given the small sample size, and limitations described above. Regardless of whether the addition of non-pharmacologic adjuvants reduce opioid use or not, this small study lends support to the hypothesis that Reiki, when used in conjunction with standard opioid pain management strategies, relieves pain and improves quality of life. Future studies will show whether this improvement is attributable to touch alone or to touch as a part of a Reiki treatment.

Acknowledgments

The authors acknowledge Reiki Master Lisa Fontanella, who provided all the Reiki treatments in this study, and Dawn Stuckless, who collected the data. This study was funded by the Alternative Cancer Research Foundation in Calgary, Alberta.

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