

Fitzgerald M, Culbert T, RichtsmeierCyr L, Sencer S, Finkelstein M.

Complementary and alternative services for symptom management in children with cancer.

Maura Fitzgerald, Childrens Hospitals and Clinics of Minnesota, 5152 30th Ave South, Minneapolis, MN 55417.

maurafitz@usfamily.net

**Study Objective:** The objective of this study was to document the types of complementary and alternative medicine (CAM) therapies utilized by newly diagnosed pediatric oncology patients and to evaluate the parent/child perception of effectiveness of these therapies for relief of symptoms of pain, nausea, fatigue, insomnia, and anxiety.

**Methods:** Investigators approached children and their families who were newly diagnosed with cancer to determine their interest in using CAM. Enrollment data included gender, diagnosis, age, and ethnicity/race. CAM options for cancer care were discussed with the child/family and a plan was developed. The plan was based on the child's age and diagnosis, expected symptoms and side effects, and the child/family's interest in specific CAM therapies. Options presented included: massage therapy, clinical aromatherapy, biofeedback, healing touch, and acupuncture/acupressure. Written information was provided. The child and parent completed a survey of previous use of CAM therapies and expectations about CAM effectiveness, childhood cancer symptom scale, and an age- and diagnosis-appropriate pediatric quality-of-life survey. Children were asked to keep a diary of CAM therapy use and to evaluate each with a pre- and post- measurement of change in symptom. Child/family met with a program investigator periodically, and therapies used by each patient were tracked. After approximately 3 months the child/parent completed a satisfaction survey, childhood cancer symptom scale, and an age-/diagnosis-appropriate pediatric quality-of-life scale. **Analysis:** Descriptive methods of analysis included mean, median, and range for continuous data and frequency distributions for categorical data. The Wilcoxon Signed Rank test was used to compare pre-post symptom measures.

**Results:** A total of 46 patient-families were recruited, of which 9 did not complete any of the surveys or diaries. The median age of the patients was 5 years (range 1 month to 19 years) with an equal number of males and females. More than 76% were Caucasian. Common diagnoses were acute lymphoblastic leukemia (ALL) (35.6%), lymphoma (17.8%) and brain/CNS tumor (15.6%). Most families knew about CAM, and more than 50% of families had positive expectations for the effectiveness of CAM. Therapies chosen the most frequently were: massage (82%), aromatherapy (63%), breathing techniques (37%), and healing touch energy work (36%). Median symptom scores post-CAM use were significantly less than pre-CAM therapy for pain, nausea, and anxiety. With the exception of nausea, more than 60% of responders who used massage therapy felt that it helped a lot for the symptom for which it was used. Aromatherapy was most frequently used to treat nausea, and all reported it as helping a little or helping a lot. Eighty-two percent of families reported being very satisfied/satisfied with using CAM therapies as part of the care for their child. No family reported being unsatisfied.

Conclusions: Pediatric oncology patients and their families find benefit in the inclusion of CAM therapies for the treatment of cancer symptoms.