PROJECT INFORMATION

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Comparing the Effects of Acupressure on Cancer Treatment Side Effects in Children and Youth -- The ACT-CC Study

Principal investigator

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Organization

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What was the research about?

Children and youth who receive cancer treatment, such as chemotherapy, often have side effects such as nausea and vomiting. Medicines can reduce these side effects, but they can cause others.

In this study, the research team wanted to learn if acupressure reduced treatment side effects in children and youth with cancer. In acupressure, a trained therapist applies pressure to points on the body. The team also wanted to know if teaching caregivers how to use acupressure on their children reduced caregivers' distress.

What were the results?

Patients who had cancer treatment with and without acupressure didn't differ in their reports of

- Nausea and vomiting
- Pain intensity
- Fatigue
- Overall physical and emotional symptoms
- Depression, anxiety, or positive emotions

Compared with patients who didn't have acupressure, those who did had

- A higher amount of pain noted in their health record

- More patient-reported effects from pain on their lives

Patients didn't differ in how likely they were to take pain or nausea medicine. Among those who took pain medicine, patients who had acupressure took more medicine than those who didn't have acupressure.

Caregivers who did and didn't learn to give acupressure had similar depression, anxiety, and positive emotions. They also had similar confidence in their ability to be a caregiver.

Who was in the study?

The study included 95 patients, ages 5–24, receiving cancer treatment and 90 caregivers. All patients received chemotherapy as part or all of their cancer treatment. Patients received care from a Northern California hospital system. Among patients, 36 percent were White, 13 percent were Asian, 5 percent were Black, 3 percent were American Indian or Alaska Native, and 43 percent reported *other* or more than one race; 34 percent were Latinx. The average age was 12, and 61 percent were boys or young men. Among caregivers, 80 percent were mothers, and the average age was 41.

What did the research team do?

The research team assigned patients by chance to one of two groups, acupressure plus usual care or usual care alone. For patients who received acupressure, a trained therapist offered sessions at the hospital each weekday for 30 days. The therapist also taught

caregivers how to use acupressure on the patients when needed. All patients received usual care, which included medicines to reduce cancer treatment side effects.

Patients and caregivers filled out surveys before starting treatment, daily during treatment, and a month after treatment ended. The research team also looked at health records.

Cancer survivors, a specialist in treating nausea and vomiting, and a hospital director gave input on the study.

What were the limits of the study?

Fewer patients enrolled in the study than planned, making it hard to find differences in symptoms.

Patients who received acupressure had more pain at the start of the study, which may have affected the results.

Future research could look at other ways to manage side effects in children and youth having cancer treatment.

How can people use the results?

Doctors can use these results when considering ways to help children and youth manage cancer treatment side effects.

To learn more about this project, visit www.pcori.org/Lown378.