

# Novel Intervention With Acupuncture for Anorexia and Cachexia in Patients With Gastrointestinal Tract Cancers: A Feasibility Study

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Despite advancements in the management of side effects and supportive care, many patients with cancer still suffer from side effects related to treatment interventions and the progression of disease. Most significantly, patients struggle to maintain optimal nutrition and a healthy diet and weight. More than half of patients undergoing treatment experience malnutrition, anorexia, and weight loss (Smith, Malinauskas, Garner, & Barber-Heidal, 2008), which are independent factors that contributes to a lower survival rate, decreased quality of life, and functional impairment (Andreyev, Norman, Oates, & Cunningham, 1998; Fearon et al., 2011; Tisdale, 2009). More than 15% of weight loss leads to impaired physiologic function, and weight loss of more than 30% body mass can predict death in patients with cancer (Tisdale, 2002). In addition, studies have shown that patients with solid tumors, particularly gastrointestinal (GI) cancers, experience severe weight loss (Dewys et al., 1980; Tan & Fearon, 2008), and another study revealed that participants who lost at least 2.5 kg (about 3% of baseline body weight loss) during six to eight weeks demonstrated lower Karnofsky Performance Status scores and triceps skinfold thickness compared to patients who maintained a stable weight (O’Gorman, McMillan, & McArdle, 1999). Therefore, the evidence suggests that food intake and weight loss may help to predict functioning and prognosis of patients with GI cancers (Fearon, Voss, & Hustead, 2006).

Clinicians have emphasized the importance of nutritional support for patients with cancer (Burden, Hill, Shaffer, & Todd, 2010). For example, clinicians often use pharmacologic therapies, such as progesterone (megestrol acetate [MA]) and corticosteroids, to improve appetite, and more powerful drugs are continually under investigation (Mantovani & Madeddu, 2010; Mantovani, Madeddu, & Macciò, 2013). In addition to pharmacologic therapies, clinicians frequently use

**Purpose/Objectives:** To investigate the feasibility of using acupuncture as a complementary intervention to existing treatments and to evaluate the efficacy of acupuncture in improving appetite and slowing weight loss with patients with gastrointestinal (GI) tract cancers.

**Design:** One-group pre- and postintervention feasibility study.

**Setting:** Outpatient clinic for patients with cancer and a community setting, both in Florida.

**Sample:** A convenience sample of seven adults with GI cancer.

**Methods:** Eight acupuncture sessions were provided during eight weeks. Data were collected using the visual analog scale (VAS) for appetite, Simplified Nutritional Appetite Questionnaire (SNAQ), Karnofsky Performance Status, and bioelectrical impedance analysis.

**Main Research Variables:** Appetite, weight, attrition rate.

**Findings:** Seven patients with a mean age of 61 years completed the intervention. Acupuncture was well accepted, feasible, and safe without any reported side effects. Appetite showed improvement, with an average score of 3.04 on the VAS and 4.14 on SNAQ compared to the preintervention scores. The average weight loss was 1.32% compared to the baseline during an eight-week period.

**Conclusions:** The acupuncture intervention was feasible and indicated positive outcomes. Because of the small sample size and lack of a control group, statistical significance of effectiveness was not determined. Acupuncture seemed to improve appetite and slow weight loss in patients with GI cancers, so additional studies with a larger sample size and a variety of cancers are warranted.

**Implications for Nursing:** Oncology nurses are uniquely able to equip patients with information about complementary therapy modalities, such as acupuncture, which is a promising way to improve appetite and slow weight loss in patients with GI cancers.

**Key Words:** acupuncture; unintentional weight loss; anorexia; cachexia; gastrointestinal tract cancers; bioelectrical impedance analysis

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