Feasibility and Effects of a Tai Chi Self-Help Education Program for Korean Gastric Cancer Survivors

Eun Ok Lee, PhD, RN, Young Ran Chae, PhD, RN, Rhayun Song, PhD, RN, Aeyong Eom, PhD, RN, Paul Lam, MD, and Margaret Heitkemper, PhD, RN, FAAN

Exercise has been recommended as an intervention to enhance physical functioning (Segal et al., 2001) and health-related quality of life (HRQOL) in cancer survivors (Courtney, 2003; Mustian et al., 2004; Mustian, Katula, & Zhao, 2006). Tai chi is a form of Chinese martial art that is considered to be a light to moderate form of exercise. Tai chi is a widely practiced movement exercise combining characteristics of meditative practice and aerobic exercise (Mansky et al., 2006). Tai chi exercise has been shown to have multiple positive effects on physical fitness (Audette et al., 2006; Brismee et al., 2007; Burke, Al-Adawi, Lee, & Audette, 2007; Li et al., 2005; Song, Lee, & Lee, 2002), HRQOL (Barrow, Bedford, Ives, O’Toole, & Channer, 2007; Mustian et al., 2004), and improved mood state (Chou et al., 2004; Jin, 1989, 1992). Tai chi also has been shown to improve depression in patients with heart failure (Barrow et al.) and older patients with depressive disorders (Chou et al.). Very little data exist on the potential for tai chi as a therapeutic intervention for patients with cancer or cancer survivors.

A limited number of studies suggest that tai chi influences immune function (e.g., natural killer [NK] cell activity), which may provide an additional benefit for patients with cancer as well as survivors. For example, Yeh, Chuang, Lin, Hsiao, and Eng (2006) demonstrated that tai chi had positive effects on regulatory T cells by increasing the ratio of T helper to suppressor cells in healthy middle-aged adults. Similar results were found in healthy older adults (Irwin, Olmstead, & Oxman, 2007). Tai chi may have potentially positive effects on overall health outcomes as well as immune function in cancer survivors, including patients with cancers of the gastrointestinal tract.

In the Republic of Korea, gastric cancer is the most common form of cancer. Gastric cancer is the leading cause of cancer death in Korean women and third most common cause of death in Korean men (Korea National Statistical Office, 2007). If gastric cancer is detected in an early stage, the overall five-year survival rate in