

Herbal products. There is insufficient evidence to recommend for or against the use of Xiao Zheng Zhitong paste, Jinlongshe granule, Shuangbai San paste, or Xiao-Ai-Tong decoction for general cancer pain. Four trials tested the effects of Chinese herbal preparations on treating general cancer pain, including Xiao Zheng Zhitong paste in patients with a range of different cancer types,²⁰⁷ Jinlongshe granules in patients with gastric cancer,²⁰⁸ Shuangbai San paste in patients with liver cancer,²⁰⁹ and Xiao-Ai-Tong decoction with and without morphine in patients with a range of different cancer types.²⁰⁶ Given that there was only one trial of each treatment intervention, variability in quality of the trials, there are insufficient data to make a clinical recommendation.

Chemotherapy-induced peripheral neuropathy.

Natural products. There is insufficient evidence to recommend for or against the use of omega-3 fatty acids, and glutamine to patients experiencing CIPN from cancer treatment. A single moderate-size randomized, double-blind, placebo-controlled trial (N = 69) tested the effects of omega-3 fatty acid on reducing the incidence and severity of peripheral neuropathy in patients with breast cancer receiving paclitaxel chemotherapy.¹⁹⁴ Trial results showed that patients receiving the omega-3 fatty acids were less likely to develop peripheral neuropathy, but there were no differences in severity of neuropathy and motor nerve conduction measurements. Although the trial results are intriguing, subsequent trials need to replicate and confirm these findings before a clinical recommendation can be made.

Two RCTs tested the effects of glutamine on the incidence and severity of peripheral neuropathy.^{186,187} The first trial was a moderate-size (N = 86) trial comparing oral levo-glutamine compared with no intervention in patients with colorectal cancer receiving oxaliplatin.¹⁸⁶ Patients who received levo-glutamine had lower incidence and severity of peripheral neuropathy symptoms; however, the trial did not control for placebo effects. The second smaller trial (N = 43) compared oral glutamate to placebo in women with ovarian cancer receiving paclitaxel.¹⁸⁷ There were no differences between groups in incidence of peripheral neuropathy; patients who received glutamate reported lower pain severity. No clinical recommendations can be made on the basis of these results because of low study quality and/or small sample size.

Surgical or procedural pain.

Meditation-based interventions. There is inconclusive evidence to recommend for or against the use of meditation-based interventions to patients with breast cancer experiencing procedural pain. Four RCTs evaluated meditation or mindfulness-based interventions for patients experiencing procedural pain for breast cancers.¹²⁷⁻¹³⁰ Two studies examined loving-kindness meditation versus

music intervention versus UC, and showed loving-kindness meditation's superiority to UC, but not to music.^{129,130} The third study examined guided meditation plus massage versus massage alone, and showed no significant difference between study arms.¹²⁸ The fourth study was composed of three arms comparing guided mindfulness-based meditation to guided focused breathing and standard of care in women scheduled for stereotactic breast biopsy.¹²⁷ The result of this study was also negative. All four studies were relatively small in size (n < 50 per arm). The mixed findings suggest that meditation-based therapies are not superior to active control conditions, but it is likely that these studies were underpowered. In the absence of fully powered trials, there are no clear indications for meditation-based therapies for patients experiencing procedural pain for breast cancers.

Music therapy. There is inconclusive evidence to recommend for or against the use of music therapy to patients experiencing procedural pain. The five trials reviewed¹¹⁹⁻¹²³ showed either no effect^{119,123} or suffered from various methodologic flaws, including weak music therapy interventions,¹²² high risk of bias in trial methodology,¹²¹ inadequate assessment and reporting of pain scores,^{121,122} and inconsistent tracking of analgesic or anxiolytic medication provided during the intervention period.^{120,121} These studies, therefore, yielded results insufficient to determine the effect of music therapy on procedural pain.

Reflexology. There is insufficient evidence to recommend for or against the use of reflexology for pain associated with surgery or procedure. There is only one small, randomized trial¹³⁸ (n = 31 patients per arm) in patients with gastric or liver cancer who received major abdominal surgery evaluating the effectiveness of foot reflexology compared with a control. The foot reflexology was provided at least 24 hours after surgery by a trained reflexologist (10 minutes on each foot for 3 consecutive days). The control group received routine care. The results were inconclusive; although there was no significant group difference for the McGill Pain Questionnaire, the VAS showed a difference in favor of the intervention group. The present data are insufficient to recommend the use of reflexology for pain associated with cancer-related surgery or procedures.

Hypnosis. There is inconclusive evidence to recommend for or against the use of hypnosis in treating surgical pain in patients with cancer. Two studies evaluated hypnosis for surgical pain with inconsistent results.^{84,85} Montgomery et al⁸⁵ randomly assigned 200 patients with breast cancer scheduled for excisional biopsy or lumpectomy to 15-minute hypnosis intervention before surgery versus an attention control. Subjects in the hypnosis group reported less pain intensity (means = 22.43 v 47.83; difference = 25.40; 95% CI, 17.56 to 33.25) and pain unpleasantness