

## Japanese Acupuncture - Current Research

*Japanese Traditional Medicine Text (20) Palliative Care*

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Cancer is the number one cause of death in Japan since 1981. With the addition of the rapid aging of society as another major factor, these are times when one in every two people has cancer and one in every three people dies of cancer in Japan.

Given that cancer has become a serious issue to people's lives and health, the Japanese government established the Cancer Control Act in June 2006 and put it into force in April 2007. Article 16 of the Act, titled "Maintenance and Improvement of the Quality of Recuperation by Cancer Patients," stipulates that "medical care to relieve pain and other suffering should be implemented early and appropriately." Thus, education to develop dedicated cancer specialists is now being promoted among healthcare professionals in various fields.

### 1. Definition of Palliative Care

Palliative care refers to specialized medical care given to cancer patients, from the point they are told they have cancer and begin treatment, through to their receiving terminal care. WHO defines palliative care as "an approach that improves the quality of life of patients and their families facing the problem associated with life-threatening illness, through the prevention and relief of suffering by means of early identification and impeccable assessment and treatment of pain and other problems, physical, psychosocial and spiritual." Cancer patients face various types of pain and distress that disrupt their ability to live humanly. Based on this understanding, it is important for health workers to actively help cancer patients live their one and only precious life as a unique human being by relieving them of their pain and distress while respecting their will,

values and dignity to the greatest extent. The meaning of cancer treatment is thus to prolong life, provide cure, alleviate symptoms, and improve QOL. Providing treatment may have the effect of prolonging life, but it causes QOL to decline in many cases. Palliative care, on the other hand, neither hastens nor delays death, but improves QOL by alleviating the patient's various pains and distress. Therefore, palliative care and cancer treatment are not contradictory, but rather supplement each other, and the two combined could perhaps deliver "ideal cancer treatment" that aims to both improve QOL and prolong life.

The role of acupuncture therapy in palliative care must be considered not from a one-directional approach to treatment, but from a multi-dimensional perspective of the situation at hand. It could be classified into therapy for (1) prevention of recurrence after Western medical treatment, (2) management of the physical condition of patients, (3) alleviation of symptoms among cancer patients, (4) mitigation of side-effects produced by Western medical treatment, and (5) terminal care.

### 2. Overview of Studies in Japan and Overseas

Below is an introduction of publications on symptoms of cancer patients that are expected to benefit from acupuncture, based on "Acupuncture guidelines based on palliative evidence of cancer treatment using acupuncture" presented in a study report published by Shimoyama<sup>1)</sup>.

#### **a. Publication search conditions and evaluation (Table 20)**

Publications (study designs) were classified into systematic reviews (SR) and meta-analyses (MA), randomised controlled trials (RCT), non-randomised controlled trials, studies with no control group, and others.

A total of 261 publications were adopted from

among a list of 1,757 English publications composed of database search results and other related publications, obtained after eliminating all duplications. They included 15 systematic reviews and meta-analyses, 30 randomised controlled trials, 5 non-randomised controlled trials, 140 studies with no control group, and 71 others.

To evaluate research quality, systematic reviews were evaluated according to 11 items of the Quality of Reporting of Meta-Analyses (QUOROM) Checklist. Those that satisfied 7 or more items were considered to be high in quality, and those that satisfied 6 or less items were considered to be low. Randomised controlled trials were evaluated using the van Tulder scale (11 items). Those that satisfied 7 or more items were considered to be high in quality, and those that satisfied 6 or less items were considered to be low.

Table 20 Publication search conditions

November 2006 & October 2007

	Search Engine	Condition
English publications	PubMed	Publications on acupuncture and cancer.
Japanese publications	Ichushi-Web (service provided by the Japan Medical Abstracts Society)	Publications on acupuncture and cancer.

January 2008 & January 2009

	Search Engine	Condition
English publications	MEDLINE, EMBASE, AMED, COCHRANE LIBRARY, PubMed	Publications on acupuncture and cancer
Japanese publications	Ichushi-Web (service provided by the Japan Medical Abstracts Society)	Words related to acupuncture. Words related to cancer

## b. Symptoms that are expected to benefit from acupuncture

Symptoms that emerged included aching pain, hiccups, diarrhea, vasomotor disturbance, xerostomia, nausea, poor feeding, dysuria, leukopenia, fatigue and malaise, anxiety,

insomnia, edema, abdominal fullness, constipation, numbness, and acupuncture anesthesia. Of these symptoms, five with the largest number of references are discussed below.

1) Aching pain (including both cancerous pain and pain unrelated to cancer)

The search yielded 47 English papers and 39 Japanese papers. They consisted of 4 systematic reviews, 9 randomised controlled trials, 51 case reports, and 11 studies with no control group.

Among these, “Acupuncture for the relief of cancer – related pain – a systematic review” by Lee, H. et al., a publication that discusses acupuncture treatment, scored high on the Quality of Reporting of Meta-Analyses (QUOROM) Checklist. The evaluation of “Efficacy of complementary and alternative medicine therapies in relieving cancer pain: a systematic review” by Bardia, A. was such that “acupuncture treatment may be valid, but as there are too few studies that have been carefully designed, it cannot be said to be useful to relieving pain.” The Japanese papers were all case reports, and included a report by Kobayashi et al., which discusses 7 cases of treatment that combined EAP and an analgesic.

In terms of clinical applicability, evidence level was 1a, and recommendation level was C.

2) Nausea, vomiting, poor feeding

The search yielded 21 English publications and 6 Japanese publications. They consisted of 6 systematic reviews, 7 randomised controlled trials, 6 studies with no control group, and 8 case reports.

“Cochrane systematic reviews examine P6 acupuncture – point stimulation for nausea and vomiting” by Ezzo, J., Streitberger, K. et al. scored relatively high on the Quality of Reporting of Meta-Analyses (QUOROM) Checklist, and was judged as a substantial systematic review. The Japanese publications were all case reports, and included a report on the improvement of cancer symptoms by Yoshikawa.

In terms of clinical applicability, evidence level was 1a, and recommendation level was A (conditional). The condition was that electroacupuncture is effective against vomiting after chemotherapy.

All Japanese papers were case reports.

### 3) Vasomotor disturbance (hot flashes)

The search yielded 12 English papers and no Japanese papers. They consisted of 2 systematic reviews, 2 randomised controlled trials, 6 studies with no control group, and 2 case reports. Most literature was about breast cancer patients.

In terms of clinical applicability, evidence level was 1b, and recommendation level was B.

There were no relevant Japanese papers.

### 4) Fatigue and malaise

The search yielded 8 English papers and 11 Japanese papers. They consisted of 1 systematic review, 1 randomised controlled trial, 4 studies without a control group, and 12 case reports.

“The management of cancer – related fatigue after chemotherapy with acupuncture and acupressure: A randomised controlled trial” by Molassiotis, A., Sylt, P., and Diggins, H. scored a high 8/11 on the van Tulder scale. In it, the feeling of fatigue and malaise is compared among an acupuncture group, a shiatsu finger-pressure therapy group and a sham shiatsu therapy group, with the result that all groups showed significant improvement in general fatigue, physical fatigue, activity and motivation, and the acupuncture group showing particularly greater efficacy compared to the other groups.

All case reports were Japanese papers, with 10 out of 12 papers showing a positive result.

In terms of clinical applicability, evidence level was 1b, and recommendation level was A, on the condition that it is recommended only to cancer patients who complain of fatigue after chemotherapy.

The Japanese papers were all case reports, with the exception of 2 studies without a control

group. They were “Acupuncture and moxibustion therapy for cancer patients” and “Cancer care – Pain relief provided to cancer patients – The reality and efficacy of acupuncture and moxibustion” by Yokokawa et al.

### 5) Edema

The search yielded 4 English papers and 4 Japanese papers.

Evidence level was low, as they were all studies without a control group. Acupuncture is not recommended, due to scattered results.

Of the 8 papers, 4 showed a positive result.

In terms of clinical applicability, evidence level was 5, and recommendation level was C (precaution needed). Due to the scattered results presented in the papers, no conclusion was able to be reached at the present stage.

The Japanese papers included a study without a control group titled “An experience in acupuncture and concoction combined treatment against leg edema after radical hysterectomy or radiation therapy” by Takashi and a case report on 40 cases by Yokokawa et al.

## **3. Summary**

Judging by the numbers of Japanese papers published in the last 10 years, there is increasing interest in palliative care, but most papers are case reports, and do not discuss the efficacy of acupuncture treatment or present any evidence of its scope of application. Recently, however, an increasing trend has begun to be seen in papers on moxibustion, such as “Leukokinetic analysis of moxibustion therapy applied in combination with chemotherapy for peritoneal cancer” by Nakamura, and papers on the mitigation of the side effects of Western medical treatment, such as “Acupuncture therapy against the side effects of cancer treatment – The safety and efficacy of acupuncture therapy against peripheral neuropathy caused by cancer chemotherapy” by Fukuda et al. and “Cancer and integrative

medicine – Palliative care” by Kitsuya et al.

## References

- 1) Shimoyama, Naoto (research reporter). “Study on the mechanism of endogenous analgesia, including acupuncture and moxibustion, and its clinical applicability to palliative cancer care: FY2009 General/shared research report funded by the Grants-in-Aid for Scientific Research (research on region medical) of the Ministry of Health, Labour and Welfare,” April 2010 (Material 1).