

- Title** Chinese Herbal Medicines as an Adjunct Management for Fatigue and Muscle Weakness in Cancer Receiving Chemotherapy
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**Aim**

To review evidence on the efficacy/effectiveness and cost-effectiveness of using Chinese herbal medicines as an adjunct management for fatigue and muscle weakness in cancer patients receiving chemotherapy.

**Conclusions and results**

Six studies were included in this review: one systematic review, four randomised controlled trial (RCT's), and one pre and post interventional study. We found two Chinese papers with abstracts in English and full text in Chinese. However due to lack of funds, it was not translated by a professional translator. The article on systematic review had most of the articles included in the study from the Chinese database. All papers were from China and studies were done on the Chinese population.

**Management of fatigue**

There was limited fair to low level of evidence to suggest that Chinese herbal medicines was effective in improving the QoL such as fatigue symptoms severity when used as an adjunct management for fatigue in cancer patients receiving chemotherapy. Most of the side effects of the Chinese herbal medicine in these studies were mild such as agitation, anxiety, insomnia, nausea, and vomiting. There were no morbidity and severe adverse events reported. There was no retrievable evidence on cost-effectiveness. However, the retail price of certain Chinese herbal medicine in Malaysia ranges from RM26 to RM151 per 100 gm. However, small number of subjects limited most of the studies and most studies did not report on allocation concealment as well as blinding. The studies included involved the use of many different types of Chinese herbal medicines and many different types of assessment tools were used to measure the efficacy/effectiveness of the Chinese herbal medicines for the management of fatigue in cancer patients receiving chemotherapy.

**Management of muscle weakness**

There was no retrievable evidence on effectiveness, safety and cost-effectiveness of Chinese herbal medicine as an adjunct management of muscle weakness for cancer patients receiving chemotherapy.

**Recommendations (if any)**

Based on the above review, most of the studies suggested that Chinese herbal medicines such as Yi-fei-bai-du

decoction, Fei-liu-ping extract, Hai-shen-su, Fu-zheng-jie-du decoction Kang-la-te injection, Shen-qi-fu-zheng injection, compound ku-shen injection, Kang-ai injection, Zi-jin-long tablet, Xiao-ai-ping injection, Shen-fu injection, American ginseng, Ren Shen Yangrong Tang (RSYRT), Bojungikki-tang and Panax Ginseng may have potential benefit for the management of fatigue in cancer patients receiving chemotherapy. However, the evidence retrieved was limited and had biases. More rigorous and well-designed clinical trials investigating the effects of Chinese herbs on relieving the fatigue and muscle weakness effect in cancer patients receiving chemotherapy is warranted. Hence, Chinese herbal medicines may be used for the management of fatigue in cancer patients receiving chemotherapy in a research environment by a certified and registered practitioner.

**Methods**

Major electronic databases such as Medline, Embase, PubMed, EBM reviews, HTA databases, Cochrane Central Register of Controlled Trials and Cochrane Database of Systematic Review, Database of Abstracts of Reviews of Effects (DARE), NHS Economic Evaluation Database (NHS EED) and Health Technology Assessment (HTA) databases were searched until November 2016. Studies were reviewed separately according to the research questions. Retrieved records were screened for relevance. The search was limited to publication year from 2000-2016. Additional articles were identified by reviewing the bibliographies of retrieved articles and hand searching of journals. Potentially relevant papers were retrieved and independently checked against predefined criteria for inclusion by two reviewers. Included reviews and primary papers were critically appraised using the Critical Appraisal Skills Programme (CASP), evidence was graded based on guidelines from U.S./Canadian Preventive Services Task Force, and data were extracted and narratively presented.

**Further research/reviews required**

Further research are needed to confirm the true evidence of beneficial efficacy/effectiveness and safety of using Chinese herbal medicine as an adjunct management for fatigue and muscle weakness of patients receiving chemotherapy.

**Written by**

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