Efficacy of homeopathic therapy in cancer treatment
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CRD summary
This review evaluated the effectiveness of homeopathic therapy for patients with cancer. The authors concluded that although evidence for homeopathy was encouraging, there was insufficient evidence to support the use of homeopathy and further research is required. There were limitations to the review but, overall, the authors’ conclusions about the limitations of the evidence are likely to be reliable.

Authors' objectives
To evaluate the effectiveness of any type of homeopathic therapy in the treatment of patients with cancer.

Searching
AMED (from 1985), CINAHL (from 1982), EMBASE (from 1974), MEDLINE (from 1951) and CAMbase (from 1998) were searched using the reported search strategy.

Study selection
Study designs of evaluations included in the review
Randomised controlled trials (RCTs) and non-randomised controlled trials (CCTs) were eligible for inclusion. The duration of follow-up, where reported, ranged from 10 weeks to 1 year.

Specific interventions included in the review
Studies that compared single or combined homeopathic interventions, used either alone or as an adjuvant to conventional treatments, with any other intervention or no intervention were eligible for inclusion. The included studies used a variety of different homeopathic therapies: cobaltum 30, causticum 30, TraumeelS, Belladonna 7cH, X-ray 15cH, Hyland's menopause and an assortment of different remedies (details of all preparations used were reported). All but one of the included studies used a placebo control.

Participants included in the review
Studies of patients with cancer or a history of cancer were eligible for inclusion. The included studies were in children, teenagers and adults with a variety of types of cancer: patients undergoing radiation therapy who were at risk of radiation reaction; patients with breast cancer undergoing radiotherapy who were at risk of radiodermatitis; patients with blood malignant cancer who underwent bone marrow transplant and were at risk of chemotherapy-induced stomatitis; and breast cancer survivors with menopausal or oestrogen withdrawal symptoms.

Outcomes assessed in the review
The main outcome in the review was symptom response. The secondary outcomes included tumour response and quality of life. The included studies assessed a variety of outcomes: degree of radiation reaction, opiate requirement for pain, duration of symptoms, quality of life, skin heat, hyperpigmentation, erythema, oedema, total severity of symptoms, stomatitis, time to worsening of symptoms, oral pain, severity and frequency of hot flushes, and Measure Yourself Medical Outcome Profile (MYMOP) activity score and overall profile score. The review also assessed adverse effects.

How were decisions on the relevance of primary studies made?
The authors did not state how the studies were selected for the review, or how many reviewers performed the selection.

Assessment of study quality
Validity was assessed and scored using the Jadad scale, which considers the reporting and handling of randomisation, blinding and handling of withdrawals. The maximum possible score was 5 points.
Two reviewers independently assessed validity and resolved any disagreements with the aid of a third reviewer.

**Data extraction**

Two reviewers independently extracted the data and resolved any disagreements with the aid of a third reviewer. The main results with levels of statistical significance were extracted for each study.

**Methods of synthesis**

**How were the studies combined?**

The individual studies were described and discussed, but few attempts were made to synthesise the evidence.

**How were differences between studies investigated?**

Differences between the studies were evident from information provided in the text and tables.

**Results of the review**

Six studies (n=336) were included: five RCTs (n=309) and one non-randomised CCT (n=27).

Four of the RCTs scored 4 or 5 for quality out of a possible 5 on the Jadad scale; one RCT scored 1. The non-randomised CCT scored 0. Three studies were double-blinded and one was triple-blinded. Methodological flaws included insufficient information about the patients, interventions and study methods, and small sample size.

The non-randomised CCT (27 children and teenagers receiving chemotherapy and at risk of chemotherapy-induced stomatitis) reported an immediate reduction in pain in all patients treated with TraumeelS, but no significant difference in opioid requirements for the group receiving TraumeelS compared with the untreated group. One RCT (30 patients aged 3 to 25 years who had received allogeneic or autologous stem-cell transplant and were at risk of chemotherapy-induced stomatitis) reported that TraumeelS oral rinse was associated with a statistically significant reduction in the severity and/or duration of symptoms (P<0.01) and a significantly longer time to worsening of symptoms (6.9 versus 4.3 days, P<0.001) compared with a placebo oral rinse. There were no statistically significant differences between treatments in serious complications. Graft versus host disease, sepsis and gastrointestinal adverse effects were more common in the placebo group, while venous occlusive disease and pneumonitis were more common in the group receiving TraumeelS. One RCT (61 patients with breast cancer who were receiving chemotherapy and were at risk of skin reactions; all patients received topical fluocortolone) reported significantly less hyperpigmentation at 5 weeks (P=0.050) and a significant decrease in skin heat at 8 weeks (P=0.011) with Belladona 7cH plus X-ray 15cH compared with placebo, but found no statistically significant differences between treatments at 10 weeks. Oedema was significantly more common with the intervention at 5 and 6 weeks (P=0.015). Other adverse effects were similar for both treatments.

Other studies reported no significant differences between cabaltum 30 and causticum 30 in radiation reaction or tumour reduction (one study); no significant differences in hot flushes between placebo combination plus verum single remedy, verum combination plus verum single remedy and two placebo combinations, but increased headaches with the combination homeopathic-treated group (one study of survivors of breast cancer with menopausal symptoms); and no statistically significant differences between 71 different individualised homeopathic treatments and placebo in MYMOP activity, overall profile or adverse effects (one study in women who had survived breast cancer and had symptoms of oestrogen withdrawal).

**Authors’ conclusions**

Although the evidence for homeopathy was encouraging, there was insufficient evidence to support the use of homeopathy in patients with cancer. Further research is required.

**CRD commentary**

The review addressed a clear question that was defined in terms of the participants, intervention, outcomes and study
design. Several relevant conventional and complementary medicine databases were searched, but it was unclear whether attempts were made to reduce publication and language bias. Methods were used to minimise reviewer errors and bias in the validity assessment and data extraction, but it was not clear whether similar steps were taken in the study selection process. Validity was assessed using criteria appropriate for RCTs and the results of this assessment were reported. Adequate information on the individual studies was provided. Given the diversity of the studies, the narrative synthesis was appropriate. Limitations of the review were the restricted search and lack of full reporting of review methods. Overall, the authors’ conclusions about the limitations of the evidence are likely to be reliable.

Implications of the review for practice and research
Practice: The authors did not state any implications for practice.
Research: The authors stated that there is a need for well-designed, adequately powered trials to assess the effects of homeopathic therapies in patients with cancer. They also stated that studies should assess the effect of homeopathic therapies on tumour response.

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