Invasive acupuncture for radiotherapy-induced nausea and vomiting is not more effective than placebo acupuncture


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Conclusion

This large, randomized study shows that invasive manual acupuncture was not more effective than sham in reducing nausea or vomiting in cancer patients receiving radiotherapy. It confirms that nearly all patients treated with acupuncture and sham thought that the treatment had been effective to reduce nausea. Approximately 90% of the patients in both the acupuncture group and the sham group were interested in receiving the same treatment again if relevant.

Introduction

Acupuncture has been used for thousands of years but its role in modern health care remains to be defined due to scientific identification of beneficial and harmful effects. For radiotherapy-induced nausea, acupuncture is still an unexplored treatment. Nausea is experienced by approximately 60% of patients receiving radiotherapy treatment over pelvic or abdominal fields. The median incidence was 33% in a recently published study. Previous clinical trials suggest that acupuncture reduces nausea caused by radiotherapy in a patient group with a >50% risk of experiencing the symptoms (abdominal or pelvic region).

Methods

237 patients were randomized to invasive manual acupuncture in the anteriometric point PC6 or sham, with a telescopic non-penetrating placebo needle (Park sham device) at a non-acupuncture point for 30 minutes. Patients were over 18 years with gynaecologic- anal, rectal, colon, ventricular, pancreatic or testicular tumours. The patients were treated two to three times per week during the entire radiotherapy period (median 5 weeks).

Data was collected in patient diaries and questionnaires during the entire treatment period as well as 2 and 4 weeks after radiotherapy.

Results

Incidence of nausea

In the acupuncture group, 46% experienced nausea for a mean number of 1 days. In the sham group, 41% experienced nausea for a mean number of 17 days. Figure 1 shows the mean number of days reported each week. The mean weekly proportion of patients experiencing nausea was 37% in the acupuncture group and 32% in the sham group.

Nausea intensity

Figure 2 shows that the nausea intensity was similar in both groups. 19% of the nausea days in the acupuncture group and 15% of the nausea days in the sham group was graded as mild or moderate or severe. Nausea intensity was mild in 7% percent of the nausea days in the acupuncture group and in 80 percent of the nausea days in the sham group.

Vomiting

Vomiting was experienced by 24% in the acupuncture group and 28% in the sham group.

Concomitant chemotherapy

Fifty eight patients received radiotherapy combined with chemotherapy. Of these 23 (42%) in the acupuncture group and 24 (40) % in the sham group experienced nausea, for a mean number of 19 and 13 days, respectively.

Satisfaction with treatment

Figure 3 shows that both groups had positive attitudes to the antiemetic effect of the treatment they received and a majority stated that they would be much or moderately interested in receiving the same treatment again if relevant.

Future research. In the current study, the mean weekly proportion of patients experiencing nausea was 37% in the acupuncture group and 32% in the sham group. The weekly prevalence in our previous study covering a similar patient group was 33%. The more than 20% difference in weekly prevalence raises questions regarding the placebo effect and warrants further research.

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Figure 1

Days with nausea

Mean number of days with nausea per week during and the two weeks after radiotherapy.

Figure 2

Nausea intensity

The proportion (%) of days of the radiotherapy period with different intensities of nausea in the acupuncture group and in the sham group.

Figure 3

Satisfaction with treatment

Attitudes to the antiemetic effect and the interest to receive the same needling again in the future (% of n (n = 95 in each group).