2. Cancer (Condition after Cancer Surgery and Unspecified Adverse Drug Reactions of Anti-cancer Drugs)

Reference

Ohara T, Onda M, Futagawa S, et al. Clinical evaluation of the combined effect of bu-zhong-yi-qi-tang (Japanese name, hochu-ekki-to) or ren-shen-yang-rong-tang (Japanese name, ninjin-youei-to) and the anticancer drug tegafur. *Yakuri to Chiryo* (*Japanese Phamacology & Therapeutics*) 1993; 21: 4423–34 (in Japanese). CENTRAL ID: CN-00546092, Ichushi Web ID: 1994154383 MOL, MOL-Lib

1. Objectives

To evaluate the clinical effects of hochuekkito (補中益気湯) and ninjin'yoeito (人参養栄湯) in patients undergoing chemotherapy (tegafur).

2. Design

Randomized controlled trial using sealed envelopes for allocation (RCT-envelope).

3. Setting

Fourteen university hospitals (3rd Department of Surgery, University of Tokyo, 1st Department of Surgery, Nippon Medical School, 2nd Department of Surgery, Juntendo University, etc.) and 11 other hospitals, Japan.

4. Participants

One-hundred and seventy-eight patients with cancer receiving an anticancer drug (tegafur 400 mg/day or 600 mg/day). The cancer types were gastric cancer (n=91), colorectal cancer (n=63), breast cancer (n=18), and other cancers (n=6). The efficacy analysis population consisted of 162 patients who could receive the above treatment for at least 1 month.

5. Intervention

Arm 1: Kanebo Hochuekkito (補中益気湯) Extract Fine Granules 2.5 g t.i.d. for 6 months (n=57).
Arm 2: Kanebo Ninjin'yoeito (人参養栄湯) Extract Fine Granules 2.5 g t.i.d. for 6 months (n=56).
Arm 3: Tegafur alone for 6 months (n=49).

6. Main outcome measures

Subjective symptoms (appetite, nausea/vomiting, etc.), objective symptoms (performance status [PS], body weight, blood pressure, etc.), hematology (blood counts, carcinoembryonic antigen, and immunosuppressive acidic protein), and biochemistry at baseline and after 2, 4, and 6 months of treatment.

7. Main results

Subjective symptom improvement (comparison between pre- and post-dose): Appetite was significantly improved in arm 1, while nausea/vomiting, bowel movement abnormality, motivation, and fatigue/malaise were significantly improved in arm 2. In arm 3, no symptoms were improved. Overall, improvement was noted in 21/57 patients (36.8%) in arm 1, 19/56 patients (33.9%) in arm 2, and 7/49 patients (14.3%) in arm 3, with significant differences in the percentage of patients showing improvement between arm 1 and arm 3 and between arm 2 and arm 3.

Objective symptom improvement: Overall, improvement was noted in 21/57 patients (36.8%) in arm 1, 22/56 patients (39.3%) in arm 2 and 10/49 patients (20.4%) in arm 3, with significant differences in the percentage of patients showing improvement between arm 1 and arm 3 and between arm 2 and arm 3.

Hematology: There were no significant differences between any 2 of the 3 arms.

Cancer type: Only in patients with gastric cancer, the percentage showing improvement in both subjective and objective symptoms was significantly greater in arm 1 than arm 3 and greater in arm 2 than arm 3. For colorectal cancer, there were no significant differences between any 2 of the 3 arms.

8. Conclusions

Combination of either hochuekkito or ninjin'yoeito is useful in patients on chemotherapy with tegafur.

9. From Kampo medicine perspective

None.

10. Safety assessment in the article

There was no significant difference in the incidence of adverse events between arm 1 (2/57 patients) and arm 2 (7/56 patients).

11. Abstractor's comments

Kampo medicine combined with anticancer drug treatment is intended to maintain quality of life (QOL), suppress adverse events during treatment, and potentiate the action of the anticancer drug. In this study, Kampo medicine treatment and anticancer drug treatment were both started at the same time. In this case, the endpoint should be either 1) time-course of QOL score including PS during the treatment period rather than significance of the difference in the percentage of patients showing improvement or 2) differences in QOL score and adverse events between groups treated with the anticancer drug alone and treated with the anticancer drug/Kampo drug combination. The results of this study are based on a comprehensive evaluation of various symptoms. However, the patient's physician may partially bias the findings because of lack of blinding. Regarding the safety evaluation, adverse events can be caused by either the anticancer drug itself or the Kampo medicine (when combined with the anticancer drug). Therefore, some thought is required to distinguish between the causes for these adverse events.

12. Abstractor and date

Hoshino E, 23 April 2009, 1 June 2010.