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

Reference

Fujiwara M, Koumoto Y. Effect of juzentaihoto on myelosuppression due to chemotherapy for gynecologic malignant tumor*. *Sanfujinka Kampo Kenkyu no Ayumi* (*Recent Progress of Kampo Medicine in Obstetrics and Gynecology*) 1998; 15: 86-9 (in Japanese).

1. Objectives

To evaluate the effect of combined juzentaihoto (十全大補湯) on myelosuppression during chemotherapy in patients with gynecologic cancers.

2. Design

Randomized cross-over controlled trial (RCT-cross over).

3. Setting

Department of Obstetrics and Gynecology, Kawasaki Medical School Hospital.

4. Participants

Ten patients who underwent chemotherapy following surgery for gynecological malignancies at the Department of Obstetrics and Gynecology, Kawasaki Medical School Hospital, Japan.

5. Intervention

Arm 1: Juzentaihoto (十全大補湯) 7.5 g/day administered for 21 days beginning the day before administration of the anticancer drug in the odd-day cycle and no administration in the even-day cycle (n=5 patients with odd numbers).

Arm 2: Juzentaihoto (十全大補湯) 7.5 g/day administered for 21 days beginning the day before administration of the anticancer drug in the even-day cycle and no administration in the odd-day cycle (n=5 patients with even numbers).

In both arms, chemotherapy consisted of intraabdominal administration of carboplatin (CBDCA) at 500 mg/m^2 and parenteral administration of cyclophosphamide (CPA) at 450 mg/m^2.

6. Main outcome measures

White blood cell (WBC) count, neutrophil count, red blood cell (RBC) count, hemoglobin value, platelet count, and use of granulocyte colony-stimulating factor (G-CSF).

7. Main results

The juzentaihoto and non-juzentaihoto groups completed 20 courses of treatment.

Decrements in WBC, neutrophil, and RBC counts were significantly smaller in arm 1 (P<0.01, P<0.05, and P<0.01, respectively), as was the number of G-CSF units used (P<0.05). Hemoglobin value was significantly increased in arm 1 (P<0.05). There was no significant between-arm difference in platelet count.

8. Conclusions

Juzentaihoto is highly effective in reducing subjective/objective adverse drug reactions during cancer chemotherapy.

9. From Kampo medicine perspective

None.

10. Safety assessment in the article

Not mentioned.

11. Abstractor's comments

This paper describes the preventive effect of juzentaihoto on myelosuppression during chemotherapy. It is meaningful that the use of G-CSF was almost halved by juzentaihoto treatment.

12. Abstractor and date

Nakata H, 1 January 2009, 6 January 2010, 1 June 2010, 31 December 2013.