

5. Psychiatric/behavior disorders

References

Terasawa K, Shimada Y, Kita T, et al. Choto-san in the treatment of vascular dementia: A double blind, placebo-controlled study. *Phytomedicine* 1997; 4: 15-22.

Terasawa K. Chotosan in the treatment of vascular dementia. *Pharma Medica* 2007; 25: 57-9 (in Japanese). Ichushi Web ID: 2008035997 [MOL](#), [MOL-Lib](#)

1. Objectives

To evaluate the efficacy of chotosan (釣藤散) for vascular dementia using more objective criteria.

2. Design

Double-blinded randomized controlled trial (DB-RCT).

3. Setting

Nine hospitals including university hospitals of Toyama Medical and Pharmaceutical University, Kagoshima University, Tohoku University, etc., Japan.

4. Participants

A total of 139 patients (50 males and 89 females with a mean age of 76.6 years) who were diagnosed with vascular dementia according to the Diagnostic and Statistical Manual of Mental Disorders (DSM)-III-R criteria for dementia and who fulfilled the following guidelines (Carlo Loeb modified ischemic score of ≥ 5 points; stable physical condition; informed consent obtained).

5. Intervention

Arm 1: treatment with TSUMURA Chotosan (釣藤散) Extract Granules 2.5 g t.i.d. after meals for 12 consecutive weeks (n=69; 28 males and 41 females).

Arm 2: treatment with placebo consisting of lactose, dextrin, maltose, cellulose, etc., which was manufactured by Tsumura & Co. and not distinguishable from chotosan in terms of color or taste, at the same dose and frequency as in arm 1 (n=70; 22 males and 48 females).

6. Main outcome measures

The rating of severity and improvement in subjective symptoms, neurological symptoms, psychiatric symptoms, and disturbance in activities of daily living (ADL) as well as cognitive function using the Revised Hasegawa's Dementia Scale (HDS-R) assessed every 4 weeks. The overall safety rating and utility rating assessed at Week 12.

7. Main results

In the chotosan group compared with the placebo group, the scores for overall improvement ($P < 0.01$ at Week 8, $P < 0.001$ at Week 12), utility ($P < 0.001$ at Week 12), improvement in subjective symptoms ($P < 0.05$ at Week 8, $P < 0.01$ at Week 12), psychiatric symptoms ($P < 0.05$ at Week 4, $P < 0.001$ at Week 8, $P < 0.001$ at Week 12), and ADL ($P < 0.05$ at Week 12) were significantly higher. No significant between-group difference was observed in neurological symptoms. The following symptoms improved significantly in the chotosan group compared with the placebo group: spontaneity of conversation; lack of facial expression; decline in simple arithmetic ability; global intellectual ability; nocturnal delirium; sleep disturbance; hallucination or delusion. The HDS-R score tended to be higher in the chotosan group.

8. Conclusions

These results suggest that chotosan may be effective in the treatment of vascular dementia.

9. From Kampo medicine perspective

Chotosan has traditionally been used in physically weak, middle-aged or older patients with symptoms such as headache, heaviness of head, vertigo, hot flashes, sleeplessness, or tinnitus. Since these symptoms may also be associated with cerebrovascular disorder, the clinical efficacy of chotosan for vascular dementia was objectively evaluated in this study.

10. Safety assessment in the article

While adverse drug reactions occurred in 5 patients in the chotosan group (rash, diarrhea, appetite loss, heartburn, and hypertension), there was no difference in the overall safety rating between the two groups.

11. Abstractor's comments

This RCT evolved from a prior larger study that evaluated the efficacy of chotosan for vascular dementia (Shimada Y, Terasawa K, Yamamoto T, et al. A well-controlled study of Chotosan and placebo in the treatment of vascular dementia. *Wakan Iyakugaku Zasshi [Journal of Traditional Medicines]* 1994; 11: 246-55.). It was well designed and produced high-quality evidence. The results were generally similar to those of the previous study, with a few differences in the symptoms that showed improvement (refer to the above reference). In the future, chotosan should be compared to the gold standard treatment in modern medicine. The article by Terasawa (2007) is the Japanese digest of the paper by Terasawa et al (1997).

12. Abstractor and date

Tsuruoka K, 22 April 2008, 31 December 2013.