Task Force for Evidence Reports, the Japan Society for Oriental Medicine

Note) The quality of this RCT has not been validated by the EBM committee of the Japan Society for Oriental Medicine.

5. Psychiatric/Behavioral Disorders

Reference

Imai H, Takeshima N, Oda H, et al. Choto-san versus placebo for patients with dementia: systematic review and meta-analysis. *Psychogeriatrics* 2017; 17: 466-78. PROSPERO 2015: CRD42015027029, Pubmed ID: 28589702, Ichushi Web ID: 2018244046

1. Objectives

To assess the effectiveness and acceptability of choto-san(釣藤散) in the treatment of adults with cognitive impairment.

2. Data source

Cochrane Central Register of Controlled Trials, PubMed, the International Clinical Trials Registry Platform, the Japan Medical Abstract Society, the China National Knowledge Infrastructure: Relevant trials up to October 12, 2015.

3. Study selection

Randomized controlled trials (RCTs) evaluating chotosan (釣藤散) compared with placebo for cognitive impairment in dementia patients.

4. Data extraction

English language databases were searched using the following key words: "dementia" or "cognitive impair*" and "choto-san" or "cho-to san" or "chotosan" or "gouteng*" or "uncaria". The Japanese database was searched using the following key words: "dementia/TH" or "dementia/AL" or "cognitive/AL" and "impair*/AL" or "釣藤散/TH" of "choto-san/AL" or "cho-to/AL" and "san/AL" or "釣藤散/TH" or "chotosan/AL" or "鉤藤散/TH" or "chotosan/AL" or "鉤藤散/TH" or "bit the following key word: "gouteng". Two review authors independently assessed the selected trials. RavMan was used for the meta-analysis.

5. Main outcome measures

Primary endpoints: Short-term (defined as 3 to 12 months) global improvement; improvement of behavioral and psychological symptoms of dementia (BPSD); number of dropouts.

Secondary endpoints: Improvement of cognitive function, activity of daily living (ADL), burden of caregivers, quality of life (QOL).

6. Main results

The meta-analysis included 3 RCTs. Of these, all used placebo as the control. Two were studies on vascular dementia, and the other was on Alzheimer's dementia. The short-term (3–12 months) global improvement (n=199) did not significantly differ between the chotosan and control groups. Improvement of BPSD was not evaluated in any RCTs. The number of dropouts among the total of 219 patients did not differ between the chotosan and control groups. The short-term (3–12 months) cognitive function was significantly higher in the chotosan group (P=0.03). None of the RCTs reported long-term (defined as >1 year) outcomes of cognitive function. ADL (n=199) and caregiver burden (n=20) showed no significant differences between the chotosan and control groups. No study reported short-term improvement in QOL.

7. Conclusions

Chotosan can be one of the choices for the treatment of vascular dementia as it is well tolerated.

8. From Kampo medicine perspective

None.

9. Safety assessment in the article

The number of dropouts due to adverse effects and the number of patients who experienced adverse effects showed no significant differences between the chotosan and control groups.

10. Abstractor's comments

This important article describes a meta-analysis of the efficacy of chotosan in dementia patients. In terms of the primary endpoints, short-term global improvement showed no significant difference, while no studies reported outcomes of BPSD. However, among the secondary endpoints, chotosan was more effective than placebo for short-term improvement of cognitive function, a core component of dementia, and this analysis result appeared to be important. Unfortunately, this meta-analysis included studies on different conditions (vascular dementia and Alzheimer's dementia). More advanced research is desired in the future, such as evaluation of the efficacy of chotosan for core symptoms of Alzheimer's dementia, which has not been studied.

11. Abstractor and date

Koike H, 9 November 2019.