

## 5. Psychiatric/Behavioral Disorders

### Reference

Kongpakwattana K, Sawangjit R, Tawankanjanachot I, et al. Pharmacological treatments for alleviating agitation in dementia: a systematic review and network meta-analysis. *British Journal of Clinical Pharmacology* 2018; 84 (7): 1445-56. Pubmed ID: 29637593, CRD42017056722

#### 1. Objectives

To determine the most efficacious and acceptable treatments of agitation (including yokukansan (抑肝散) in dementia.

#### 2. Data source

MEDLINE, EMBASE, PsycINFO, CENTRAL, Clinicaltrials. gov (-7th February 2017)

#### 3. Study selection

Randomized controlled trials (RCTs) of treatments to alleviate agitation in people with all-types dementia, compared with either placebo or other medications were performed, and agitation was assessed using one of the following: the Cohen-Mansfield Agitation Inventory (CMAI); the Neuropsychiatric Inventory–Agitation subscale score (NPI-A); the Behavioural Pathology in Alzheimer's Disease rating scale–Aggression/agitation subscale score (BEHAVE-AD-A); or the Neurobehavioral Rating Scale–Agitation subscale score (NBRS-A).

#### 4. Data extraction

Two reviewers independently selected articles using the above-mentioned databases. Search terms included “dementia,” “agitation,” along with other related terms. The quality of the included studies was assessed using the revised Cochrane Risk of Bias Tool for Randomized Trials. Data were pooled using meta-analysis. The primary outcome of efficacy was the 8-week response rate, defined as the proportion of people with a 50% reduction from baseline agitation score. The secondary outcome was treatment acceptability, defined as treatment continuation for 8 weeks.

#### 5. Main results

Thirty-six RCTs comprising 5585 participants (30.9% male; mean  $\pm$  standard deviation age,  $81.8 \pm 4.9$  years) were included. In terms of 8-week response, dextromethorphan/quinidine (odds ratio [OR] 3.04; 95% confidence interval [CI], 1.63–5.66), risperidone (OR 1.96; 95% CI, 1.49–2.59), and selective serotonin reuptake inhibitors as a class (OR 1.61; 95% CI, 1.02–2.53) were found to be significantly more efficacious than placebo. Haloperidol appeared less efficacious than nearly all comparators. Yokukansan (OR 1.44; 95% CI, 0.84–2.38) showed no significant difference from placebo. Most treatments had noninferior treatment continuation compared to placebo, except oxcarbazepine, which was inferior.

#### 6. Conclusions

Risperidone, serotonin reuptake inhibitors as a class, and dextromethorphan/quinidine demonstrated evidence of efficacy for agitation in dementia, although findings for dextromethorphan/quinidine were based on a single RCT. The findings do not support prescribing haloperidol due to lack of efficacy, or oxcarbazepine due to lack of acceptability.

#### 7. From Kampo medicine perspective

None.

#### 8. Safety assessment in the article

Not stated.

#### 9. Abstractor's comments

This article describes a systematic review and network meta-analysis of RCTs of multiple pharmacological treatments for alleviating agitation in dementia. Among the 36 RCTs included in the meta-analysis, there were 3 studies of yokukansan. Yokukansan was not significantly more efficacious compared with placebo. Given that there were 11 RCTs of risperidone, which showed significant difference, accumulation of RCTs of yokukansan in the future may lead to demonstration of efficacy.

#### 10. Abstractor and date

Goto H, 21 September 2019.