Update on Yokukansan

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Introduction

According to the 2012 Nikkei medical online survey on the use of Kampo by physicians, nearly 86% of physicians reportedly prescribe Kampo in their daily clinical practice. The use of Kampo among specialists of various disciplines is also on the rise at Juntendo University, a university that takes pride in being at the forefront of Western medical care. We consider cutting-edge scientific research on the pharmacologic effects of Kampo as essential to prescribe these medicines effectively; thus, the acquisition of high-quality scientific evidence is of the utmost importance to support the application of Kampo in modern medicine.

Here, we provide a short synopsis of the latest scientific evidence on one of the Kampo medicines, called yokukansan, presented by different specialists. Yokukansan is a traditional Japanese herbal medicine that has long been used for the treatment of night terror and temper tantrums in children and sleep disorders in adults, as well as irritability and aggressiveness, regardless of the cause of the mental disorder, in recent years. On the basis of its empirical use, contemporary studies have investigated and demonstrated the therapeutic potential of yokukansan for the treatment of behavioral and psychological symptoms of dementia (BPSD), such as hallucination, delirium, depression, anxiety, agitation, irritability, aggressiveness, abnormal behaviors, and wandering. While most physicians still resort to conventional pharmacotherapy of typical and atypical antipsychotics for BPSD, the side effects of these medications, such as extrapyramidal symptoms and oversedation, have become increasingly problematic for many elderly patients with dementia. For instance, the U.S. Food and Drug Administration (FDA) has issued a warning on the increased mortality rate from cardiac failure, pneumonia, and cerebrovascular disorder related to the use of antipsychotics, and now requires physicians to exercise caution and to provide a full explanation and obtain consent before prescribing these drugs, highlighting the serious unmet need for a safe and effective alternative medication. Following the first report of yokukansan’s effectiveness for the treatment of mood disorders in elderly patients, its therapeutic success for the treatment of BPSD in Alzheimer’s disease (AD) and Dementia with Lewy Bodies (DLB) has been reported from numerous clinical settings. The latest neuropharmacological underpinnings of yokukansan have been shown to involve modulation of the neurotransmitters serotonin and glutamine. As such, the use of yokukansan is expanding to the treatment of multitudinous diseases, becoming one of the most indispensable Kampo in Japan. Given that Kampo contains multiple components that act on multiple targets, future research is poised to reveal further evidence on its complex yet synergistic pharmacologic effects, thereby making it a viable option for some of the recalcitrant diseases in modern medicine. As a leading authority on the harmonization of Western medicine and Kampo medicine, Juntendo University aims to deliver the highest-quality evidence on Kampo to the scientific community worldwide.