

ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

Balanced Anesthesia with Moonflowers and Monkshoods: Behind Hanaoka's *Mafutsusan* (Year 1804, Part 3)



After adding four minor sedating herbs to his gradually ranging ratio from a 2:1 up to a 4:1 mixture by weight of moonflowers to monkshoods, Japan's Seishū Hanaoka (1760–1835) produced an herbal potion now considered the world's first successful *recorded* surgical anesthetic. Not a “slash and dash” surgeon, Hanaoka spent two decades formulating his anesthetic *mafutsusan* (“powder to make go away”) in order to minimize his patients' side effects by balancing moonflowers' tachycardia against monkshoods' bradycardia and by allowing monkshoods' aconitine to potentiate moonflowers' anticholinergic delirium. Hanaoka's use of *mafutsusan* for surgical anesthesia preceded William Morton's ether demonstration by 42 years, but ironically both anesthetic firsts occurred in the same month of the year—October. (Copyright © the American Society of Anesthesiologists, Inc.)

George S. Bause, M.D., M.P.H., Honorary Curator, ASA's Wood Library-Museum of Anesthesiology, Schaumburg, Illinois, and Clinical Associate Professor, Case Western Reserve University, Cleveland, Ohio. UJYC@aol.com.