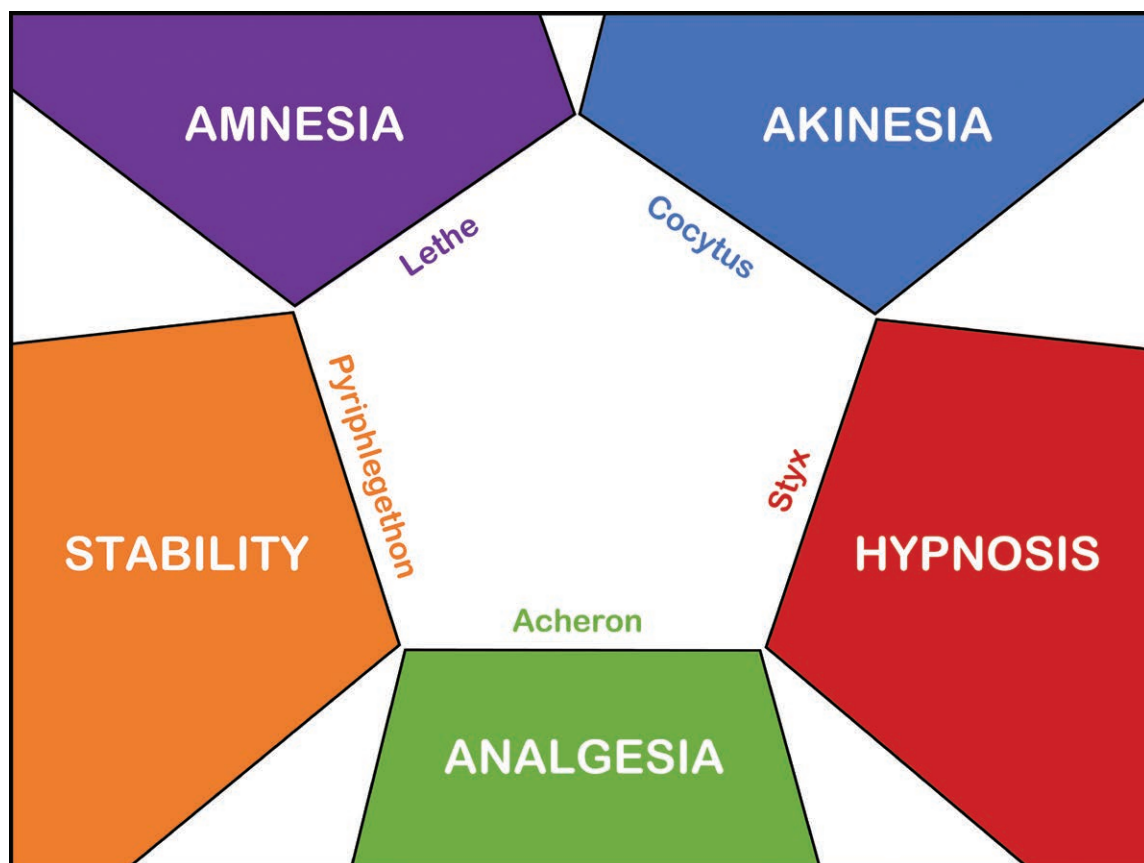


- paraventricular hypothalamic nucleus produce antinociceptive effects that are reversed by an oxytocin antagonist. *Pain* 2006; 122:182–9
36. Rood BD, De Vries GJ: Vasopressin innervation of the mouse (*Mus musculus*) brain and spinal cord. *J Comp Neurol* 2011; 519:2434–74
 37. Ray P, Torck A, Quigley L, Wangzhou A, Neiman M, Rao C, Lam T, Kim JY, Kim TH, Zhang MQ, Dussor G, Price TJ: Comparative transcriptome profiling of the human and mouse dorsal root ganglia: An RNA-seq-based resource for pain and sensory neuroscience research. *Pain* 2018; 159:1325–45
 38. Gong L, Gao F, Li J, Li J, Yu X, Ma X, Zheng W, Cui S, Liu K, Zhang M, Kunze W, Liu CY: Oxytocin-induced membrane hyperpolarization in pain-sensitive dorsal root ganglia neurons mediated by Ca(2+)/nNOS/NO/KATP pathway. *Neuroscience* 2015; 289:417–28
 39. Qiu F, Qiu CY, Cai H, Liu TT, Qu ZW, Yang Z, Li JD, Zhou QY, Hu WP: Oxytocin inhibits the activity of acid-sensing ion channels through the vasopressin, V1A receptor in primary sensory neurons. *Br J Pharmacol* 2014; 171:3065–76
 40. Gärtner R, Jensen MB, Nielsen J, Ewertz M, Kroman N, Kehlet H: Prevalence of and factors associated with persistent pain following breast cancer surgery. *JAMA* 2009; 302:1985–92

ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

Streams of Unconsciousness VI: General Anesthesia Reflected in Plutonic Rivers



In the Hades-Pluto underworld of Greco-Roman mythology, there were five major streams. The rivers Lethe, Cocytus, Styx, and Pyriphlegethon reflected amnesia, akinesia, hypnosis, and stability, respectively—four of the hallmarks of general anesthesia. The fifth hallmark, analgesia, could be provided by Charon, who ferried paying souls across the “River of Pain” (or “of Woe” or “of Aches”), the Acheron. Although today’s patients may consider anesthesia heavenly, in classical times, the afterworld comprised heaven and hell and was traversed by five plutonic rivers, each of which reflected what many today would regard as hallmarks of general anesthesia. (Copyright © the American Society of Anesthesiologists’ Wood Library-Museum of Anesthesiology.)

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