- 42. Takarada-Iemata M, Kezuka D, Takeichi T, Ikawa M, Hattori T, Kitao Y, Hori O: Deletion of N-myc downstream-regulated gene 2 attenuates reactive astrogliosis and inflammatory response in a mouse model of cortical stab injury. J Neurochem 2014; 130:374–87
- 43. Wang F, Gao Z, Li X, Li Y, Li X, Zhong H, Xu N, Cao F, Wang Q, Xiong L: NDRG2 is involved in anti-apoptosis induced by electroacupuncture pretreatment after focal cerebral ischemia in rats. Neurol Res 2013; 35:406–14
- 44. Xuan AG, Chen Y, Long DH, Zhang M, Ji WD, Zhang WJ, Liu JH, Hong LP, He XS, Chen WL: PPARα agonist fenofibrate ameliorates learning and memory deficits in rats following global cerebral ischemia. Mol Neurobiol 2015; 52:601–9
- Webster CM, Kelly S, Koike MA, Chock VY, Giffard RG, Yenari MA: Inflammation and NFkappaB activation is decreased by hypothermia following global cerebral ischemia. Neurobiol Dis 2009; 33:301–12

ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

Eucaine Lactate from H. K. Mulford Company of Philadelphia



Using a pharmacy schoolmate's financing and presidential leadership, Henry K. Mulford (1866 to 1937) reorganized his own namesake corporation in 1891 with himself as vice president. Soon "H. K. Mulford Company of Philadelphia" began synthesizing and compounding an astonishing array of pharmaceuticals, including (beta-)eucaine lactate. Less toxic than alpha-eucaine, beta-eucaine had the additional advantage of stability in aqueous solutions sterilized by prolonged boiling. Sold by Mulford as "one-quarter grain" hypodermic tablets (above), the lactate formulation of eucaine was less irritating to patients than was the hydrochlorate one. (Copyright © the American Society of Anesthesiologists' Wood Library-Museum of Anesthesiology.)

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