

19. Chua SM, Sia AT: Automated intermittent epidural boluses improve analgesia induced by intrathecal fentanyl during labour. *Can J Anaesth* 2004; 51:581-5
20. Sia AT, Lim Y, Ocampo C: A comparison of a basal infusion with automated mandatory boluses in parturient-controlled epidural analgesia during labor. *Anesth Analg* 2007; 104:673-8
21. Kaymar AM, Shankar KB: Epidural infusion: continuous or bolus? *Anesth Analg* 1999; 89:534 (Letter)
22. Hogan Q: Distribution of solution in the epidural space: examination by cryomicrotome section. *Reg Anesth Pain Med* 2002; 27:150-6
23. Dhir S, Ganapathy S: Use of ultrasound guidance and contrast enhancement: a study of continuous infraclavicular brachial plexus approach. *Acta Anaesthesiol Scand* 2008; 52:338-42
24. Feinglass NG, Clendenen SR, Torp KD, Wang RD, Castello R, Greengrass RA: Real-time three-dimensional ultrasound for continuous popliteal blockade: a case report and image description. *Anesth Analg* 2007; 105: 272-4
25. Klein SM, Fronheiser MP, Reach J, Nielsen KC, Smith SW: Piezoelectric vibrating needle and catheter for enhancing ultrasound-guided peripheral nerve blocks. *Anesth Analg* 2007; 105:1858-60

## ■ ANESTHESIOLOGY REFLECTIONS

### Bengué Methyl Chloride Cylinder



The brass and copper cylinder (pictured here) features a refrigerant first popularized as a cooling topical and then as a general anesthetic by French pharmacist Jules Bengué. Translated from the French, the cylinder's plaque reads "Pure Methyl Chloride of Doctor Bengué; Patented Devices, Airtight Guarantee; Dr. Bengué Pharmacist, 16 Ballu Street, Paris." By 1901 use of the chemical had grown, largely because methyl chloride comprised 30% of Somnoform, an irrational general anesthetic mixture. Two decades later, methyl chloride (leaking from a refrigerator) may have contributed to a nightclub fire in 1942 inside Boston's Coconut Grove. Today, methyl chloride's flammability and spectacular profile of side effects (neurotoxicity, birth defects, and even frostbite) have sidelined its clinical and most of its industrial use. Luckily for Dr. Bengué, his business in balms outlasted his one in anesthetics. Today, Americans know the late pharmacist's arthritis liniments as "Bengay®." (Copyright © the American Society of Anesthesiologists, Inc. This image appears in the *Anesthesiology Reflections* online collection available at [www.anesthesiology.org](http://www.anesthesiology.org).)

George S. Bause, M.D., M.P.H., Honorary Curator, ASA's Wood Library-Museum of Anesthesiology, Park Ridge, Illinois, and Clinical Associate Professor, Case Western Reserve University, Cleveland, Ohio. [UJYC@aol.com](mailto:UJYC@aol.com).