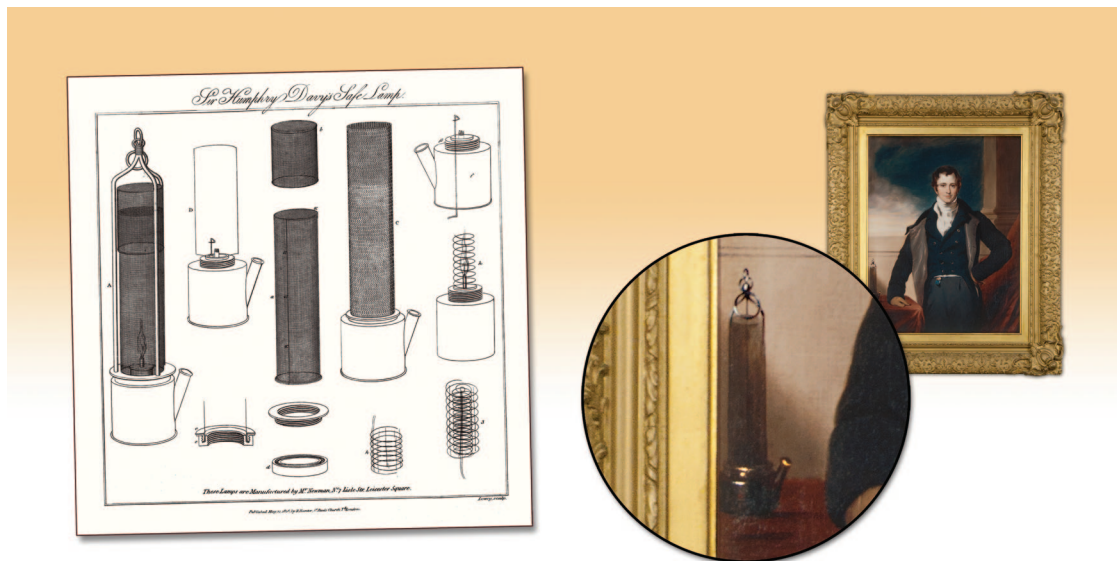


- User's Guide. Icon Development Solutions, Ellicott City, Maryland, 1989–2009
25. Ihmsen H, Geisslinger G, Schüttler J: Stereoselective pharmacokinetics of ketamine: R(–)-ketamine inhibits the elimination of S(+)-ketamine. *Clin Pharmacol Ther* 2001; 70: 431–8
  26. Persson J, Hasselström J, Maurset A, Oye I, Svensson JO, Almqvist O, Scheinin H, Gustafsson LL, Almqvist O: Pharmacokinetics and non-analgesic effects of S- and R-ketamines in healthy volunteers with normal and reduced metabolic capacity. *Eur J Clin Pharmacol* 2002; 57:869–75
  27. Yanagihara Y, Ohtani M, Kariya S, Uchino K, Hiraishi T, Ashizawa N, Aoyama T, Yamamura Y, Yamada Y, Iga T: Plasma concentration profiles of ketamine and norketamine after administration of various ketamine preparations to healthy Japanese volunteers. *Biopharm Drug Dispos* 2003; 24:37–43
  28. Portmann S, Kwan HY, Theurillat R, Schmitz A, Mevissen M, Thormann W: Enantioselective capillary electrophoresis for identification and characterization of human cytochrome P450 enzymes which metabolize ketamine and norketamine *in vitro*. *J Chromatogr A* 2010; 1217:7942–8
  29. Hagelberg NM, Peltoniemi MA, Saari TI, Kurkinen KJ, Laine K, Neuvonen PJ, Olkkola KT: Clarithromycin, a potent inhibitor of CYP3A, greatly increases exposure to oral S-ketamine. *Eur J Pain* 2010; 14:625–9
  30. Köppel C, Arndt I, Ibe K: Effects of enzyme induction, renal and cardiac function on ketamine plasma kinetics in patients with ketamine long-term analgesedation. *Eur J Drug Metab Pharmacokinet* 1990; 15:259–63
  31. Vavricka SR, Van Montfoort J, Ha HR, Meier PJ, Fattinger K: Interactions of rifamycin SV and rifampicin with organic anion uptake systems of human liver. *Hepatology* 2002; 36:164–72
  32. Schüttler J, Stanski DR, White PF, Trevor AJ, Horai Y, Verotta D, Sheiner LB: Pharmacodynamic modeling of the EEG effects of ketamine and its enantiomers in man. *J Pharmacokinetic Biopharm* 1987; 15:241–53
  33. Herd DW, Anderson BJ, Keene NA, Holford NH: Investigating the pharmacodynamics of ketamine in children. *Paediatr Anaesth* 2008; 18:36–42
  34. Dahan A, Bauer M, Sarton E, Sigtermans M, van Hilten B, Marinus H: Response to Drs. Kapural and Stanton-Hicks. *Pain* 2010; 149:410–1

## ANESTHESIOLOGY REFLECTIONS

### The Davy Safety Lamp and “Miner’s Lung”



Titled “Sir Humphry Davy’s Safe Lamp,” this diagram (*left*) was published on May 21, 1818, from St. Paul’s Church Yard, London by “R. Hunter.” A painted version of that lamp (*middle*) also appears in the lower left corner of this issue’s cover portrait of Sir Humphry Davy. These Davy safety lamps replaced miners’ canaries for detecting asphyxial and/or flammable gases in the mines—without igniting explosions of methane. Because of such safety lamps, miners were able to spend more years laboring underground. So, the safety of the Davy lamp contributed, ironically, to an increase in deaths from an occupational disease later known as “miner’s lung.” (Copyright © the American Society of Anesthesiologists, Inc. This image also appears in the *Anesthesiology Reflections* online collection available at [www.anesthesiology.org](http://www.anesthesiology.org).)

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