

# SCIENCE

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## LOCAL ANESTHETICS<sup>1</sup>

SINCE earliest times, those who have resorted to surgery for the relief of their fellow creatures, have desired to mitigate their procedures by the exclusion of pain. Generally speaking, this has been brought about by a complete abolition of consciousness, whence the term *anesthesia* ("without sensation").

To those cases in which sensation is removed by the application of a drug only at the point of operation is applied the term *local anesthesia*; substances used for this purpose are termed local anesthetics. Some authorities consider this designation inaccurate because during the employment of these substances consciousness is fully retained. They might therefore be described as local *analgesics* ("without pain") but the other term has the sanction of usage.

Historians cite abundant instances of the employment in ancient times of general anesthesia, the oldest being a case of removal of a rib. For this purpose we are told that "the Lord God caused a deep sleep to fall upon Adam," the patient. The commonest of the age-old general anesthetics are alcohol opiates and mandragora, all of which were given separately or mingled with other ingredients.

Local anesthesia, on the other hand, was attempted with comparative infrequency before the last century. Perhaps the earliest authentic description of an approach to this method is that which emanates from the school of Salerno,<sup>2</sup> in the twelfth century. In those days was practised a form of general anesthesia by causing the patient to inhale the vapors of so-called "soporific sponges," the chief ingredients of these being poppy, hen-

<sup>1</sup> Lecture given before the Brooklyn Institute of Arts and Sciences, February 7, 1920.

<sup>2</sup> Cited by Husemann, *Deutsch. Zeitschr. f. Chirurgie*, 1896, 42, 585.