

tributable to the presence of a bunion and a hammer toe on the left foot as well as bilateral flat feet. In March, 1947, the bunion and hammer toe were surgically corrected. Spinal anesthesia with pontocaine was used. Preoperative neurologic examination was normal. Immediately after the operation the patient first noted difficulty with the right, the unoperated leg in the form of unsteadiness in his gait and an inability to raise the leg high enough to permit him to take a normal step. Occasional nonradiating pain in the right hip and in the back was also described along with fatigue in both legs, more marked on the right. The patient also experienced clonic movements in the right ankle when he stepped up. . . .

"The presence of pyramidal tract and cerebellar tract abnormalities with nystagmus, optic neuritis and the spinal fluid changes constituted a characteristic picture of multiple sclerosis which first became evident after the operative procedure. The medical as well as the legal implications of this problem emphasize the importance and value of a thorough neurologic review before a patient is subjected to spinal anesthesia."

J. C. M. C.

HARGER, R. N.; TURRELL, E. S., AND MILLER, J. M.: *A Viscosity-effusion Meter for Measuring the Concentration of Anesthetic Cases*. *J. Lab. & Clin. Med.* 34: 566-581 (April) 1949.

"Our apparatus is a modification of the device described in 1920 by Viehoff for determining the concentration of carbon dioxide in flue gas. . . . The Viehoff viscosity-effusion bridge has been employed by Jenkins for determining the levels of both oxygen and carbon dioxide inside an oxygen therapy chamber. Since ether also has a higher density and a lower viscosity

than air or oxygen, the differences being much greater than for carbon dioxide, this procedure, somewhat modified, was found to be admirably suited for the determination of ether. . . . The method was found to be satisfactory for the determination of nitrous oxide, cyclopropane, and ethylene in the presence of nitrogen or oxygen. . . .

"One also can use the apparatus to determine both nitrous oxide and ether and cyclopropane and ether when these pairs are present in the gas mixture, since one may selectively remove the ether, thus obtaining a second reading for the ether-free gas. However, since the total manometer drop exceeds the sum of the drops due to ether and nitrous oxide or ether and cyclopropane, it is necessary to employ a table or monogram constructed from observed manometer readings with various mixtures of ether-nitrous oxide or ether-cyclopropane in air or oxygen. Our data for this purpose are not yet complete."

J. C. M. C.

CULLEN, S. C.: *The Rational Application of Sedative and Analgesic Drugs*. *J. Michigan M. Soc.* 48: 169-173 (Feb.) 1949.

"If the physician is interested in the comfort of his patients as well as in their physical well-being, he can well afford to take the time necessary to administer a sedative and an analgesic drug prior to or concomitant with the diagnostic or surgical procedure. . . . All too often sedative and analgesic drugs are given to patients without any consideration of the pharmacologic properties of the drugs, without anything more than a cursory evaluation of the dose required, and usually because in some prior more or less similar situation the physician had seen the drug given. To obtain a consistently safe and satisfactory response to sedative and analgesic drugs, it is ex-