

CORRESPONDENCE

morphine on the minimum anesthetic concentration of fluroxene. *ANESTHESIOLOGY* 26:134-139, 1965

17. Bert P: Sur la possibilite d'obtenir, a l'aide du protoxyde d'azote, une insensibilite de longue duree, et sur l'innocuite de cet anesthesique. *Compt Rendu Acad Sci (Paris)* 87:728-730, 1878

18. Bert P: Anesthesic par de protoxyde d'azote melange—d'oxygene et employ sour prission. *Compt Rendu Acad Sci (Paris)* 89:132-135, 1879

(Accepted for publication August 11, 1994.)

Anesthesiology
81:1312, 1994
© 1994 American Society of Anesthesiologists, Inc.
J. B. Lippincott Company, Philadelphia

Subarachnoid Hemorrhage Unexpectedly Found on Spinal Anesthesia

To the Editor:—We describe a patient with unexpected subarachnoid hemorrhage found during spinal anesthesia for an operation of urethrocele.

A 59-yr-old woman who had been suffering from migraine for 30 yr was admitted to undergo an operation for urethrocele. On the day of surgery, she complained of slight headache beginning at 6 AM, when a preoperative glycerin enema was administered. She was transferred to the operating room at 11 AM without premedication. She was conscious, and vital signs were normal. Subarachnoid puncture was performed at the L4-L5 interspace with a 22-G spinal needle. Cerebrospinal fluid (CSF) was found to be bloody. We suspected CSF was stained with blood because of traumatic puncture. However, 2-3 ml of bloody CSF was obtained through the spinal needle. A second puncture at the L3-L4 interspace again disclosed bloody CSF. Because subarachnoid hemorrhage was suspected, the operation was postponed, and computed tomography scan was performed, which revealed subarachnoid hemorrhage. A cerebral aneurysm at the bifurcation of right internal carotid-posterior communicating artery was found by cerebral angiography. On the next day, a clipping of the cerebral aneurysm was performed uneventfully.

In this case, the subarachnoid hemorrhage was thought to have occurred at 6 AM, when the glycerin enema was performed. However, because of her previous history, the headache was assumed to have

been caused by a migraine attack. Furthermore, the headache was mild and was accompanied by no other signs or symptoms. Obviously, proper management of such a patient is necessary if complications related to this potentially devastating problem are to be kept to a minimum.

Kazuhiko Saitoh, M.D.
Clinical Assistant

Yoshihiro Hirabayashi, M.D.
Lecturer

Hiromasa Mitsuhata, M.D.
Lecturer

Reiju Shimizu, M.D.
Professor and Chairman of Anesthesiology

Department of Anesthesiology
Jichi Medical School
3311-1 Minamikawachi-machi
Tochigi, 329-04 Japan

(Accepted for publication August 23, 1994.)