

Correspondence

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Axillary-sheath Distention, A Useful Sign in Performing Axillary Block

To the Editor:—The nerves and blood vessels that pass through the axilla are enveloped by a “firm tubular fascial sheath.”¹ Winnie points out that surgeons have long known that a collection of fluid within the sheath may “appear as a swelling on the lateral wall of the axilla along the course of the artery.”² de Jong described the anatomy of the axillary sheath, reporting that its diameter was approximately 3 cm in adult cadavers, and calculated that a volume of 42 ml should fill the sheath.¹ Axillary block is frequently performed by making a single injection of 40–50 ml of local anesthetic solution into the sheath.² Following completion of injection of such volumes, I have noticed that a firm, sausage-like distention of the axillary sheath may often be seen and palpated. It extends from the distal occluding thumb³ to the pectoralis major, and is 3–4 cm in diameter. In slender individuals sheath swelling may be observed with as little as 10 ml of solution and may be pronounced upon completion of

the injection; swelling may not be at all evident in the obese. Observation of sheath distention is unequivocal evidence of proper drug placement; I have found it quite unusual to have an unsatisfactory block when definite sheath distention has been seen.

WILLIAM R. DUDLEY, M.D.
*Chief, Anesthesia and Operative Service
U. S. Army Hospital
Fort Carson, Colorado 80913*

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Vaporizer Leak

To the Editor:—The vaporizer filler plugs on the Ohio 5000 Anesthesia Machine are situated at the back of the machine, out of sight of the anesthetist. The

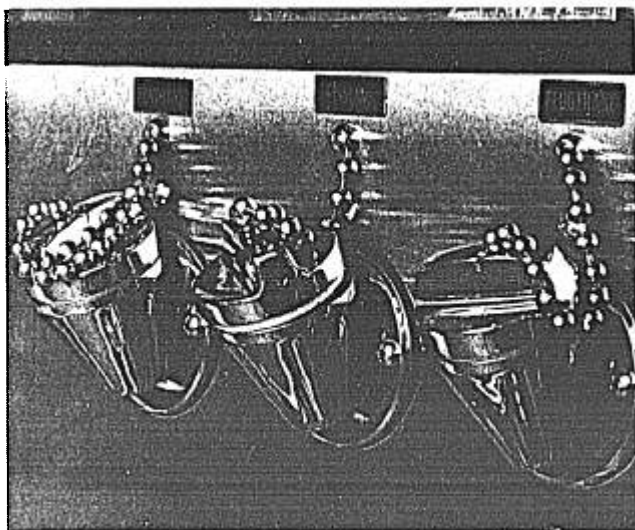


FIG. 1. Ohio DM 5000 vaporizer filler plugs.

vaporizer plugs have machine-screw threads. When the plugs are not securely tightened, a large part, if not all, of the fresh gas flow will escape via this leak. Despite awareness of this possibility, it was recently discovered that a leak of fresh gas from a seemingly tight vaporizer filler plug was present. On first inspection, the cause of the leak was not readily apparent. On close inspection from the side (Fig. 1) it was found that the middle vaporizer plug was cross-threaded and hence not seated. Users of this machine should be aware that the vaporizer filler plugs must be not only tight but also correctly threaded.

P. F. DOLAN, M.B., CH.B.
*Assistant Professor
Department of Anesthesiology
School of Medicine
University of North Carolina at
Chapel Hill
Chapel Hill, North Carolina 27514*

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