

when the drug is run through polyvinylchloride (PVC) infusion sets<sup>6</sup> and that we used non-PVC-type, polyethylene-polypropylene administration sets.

The results of our two investigations should be appreciated with respect to the age of the patients studied, the severity of their coronary artery disease, their incidence of previous myocardial infarction, and to the presence of a peripheral vascular disease. Most of the patients studied were unfit for coronary arteriography or for cardiac surgery because of their age or their peripheral vascular disease. In such patients, left ventricular function is often depressed,<sup>7</sup> which probably permits the full exertion of the beneficial hemodynamic and antianginal effects of iv NTG.<sup>6</sup>

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### A Potential Hazard: Interchanging Fentanyl and Sufentanil

*To the Editor:*—A recent probable drug administration error prompts us to share details of the episode and express a note of concern.

During a lengthy upper-extremity operation performed under axillary block, a Physical Status I, 38-yr-old man received 5 ml of fentanyl over 2.5 h initially for sedation and then, subsequently, for tourniquet pain. A second 5-ml ampul of fentanyl was ordered and 1 ml administered. Approximately 2-3 min later, the patient was noted to be apneic, cyanotic, unresponsive, and demonstrating tonic-clonic movement of the unanesthetized arm. Following an uncomplicated resuscitation, the patient breathed with a large tidal volume and a spontaneous respiratory rate of 4 breaths/min for some time thereafter. Naloxone was not given. Initially, the cause for this event was not known, but a recheck of the operating room narcotic log revealed a one-ampul surplus of fentanyl and a one-ampul shortage of sufentanil. Unfortunately, because it had been recently emptied, the glass disposal container could not provide a missing ampul of either possible drug. Consequently, we classified this as a probable, rather than certain, error.

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*In Reply:*—Janssen Pharmaceutica recognizes the concern that Ward and Sanford have expressed. We have been in the process, over the past several months, of ac-

quiring specially designed equipment and obtaining the necessary Food and Drug Administration (FDA) approval to market our intravenous anesthesia products in paper-

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