

Correspondence

Anesthesiology
49:372, 1978

Acute Phlebitis from Nitroprusside

To the Editor:—We report herein a case of acute transient phlebitis following nitroprusside administration. The patient, a 49-year-old woman, was admitted for thoracic laminectomy and removal of a tumor of the spinal cord. Anesthesia for tonsillectomy in childhood, and for a cervical dilatation and uterine curettage in 1970, had been uneventful. The patient had no history of allergies. Physical examination and preoperative laboratory data were normal.

Following premedication with secobarbital and atropine, anesthesia was managed utilizing a sequence of droperidol, fentanyl, thiopental, pancuronium, and nitrous oxide. All intravenous agents were administered through a 16-gauge Teflon catheter, inserted into a vein on the dorsum of the left wrist; the intravenous solution being lactated Ringer's solution. There was no obstruction to venous flow. The solution and administration set were well within their expiration dates.

Three hours after induction of anesthesia, a freshly prepared solution of sodium nitroprusside, 50 mg, in 500 ml of dextrose, 5 per cent, in water was infused at a rate of 1–2 ml/min. Within 30 min, phlebitis of the venous system of the left hand and forearm became apparent (fig. 1). The catheter in the left arm was removed. A second 16-gauge Teflon catheter was inserted into the right arm, and the same concentration of sodium nitroprusside solution was infused. Five minutes later, phlebitis appeared on this arm. The nitroprusside infusion was then discontinued and the necessary hypotension was achieved by administration of halothane. Over the next hour, the red streaks gradually faded and the arms returned to normal appearance. Anesthesia was thereafter uneventful,

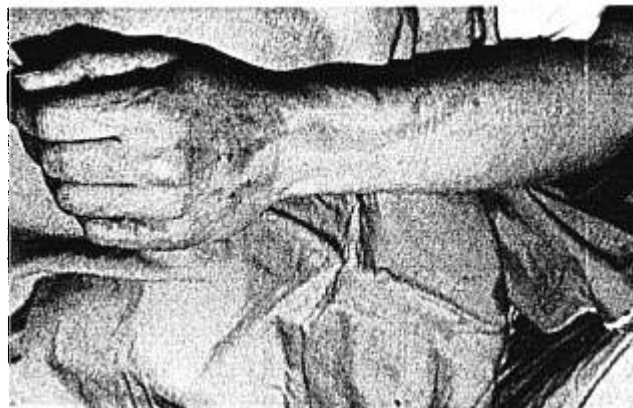


FIG. 1. Phlebitis of the hand and forearm.

the postoperative course was uneventful, and all the arm veins remained patent.

The recommended procedure for the preparation of sodium nitroprusside had been rigidly followed; nevertheless, the acute phlebitis was clearly related to the administration of this drug. To our knowledge, this is a complication of nitroprusside use not previously reported.

RAYMOND MILLER, M.D.
Associate Clinical Professor
DAVID C. C. STARK, M.D.
Clinical Professor
Department of Anesthesiology
Mount Sinai School of Medicine
City University of New York
New York, New York 10029

(Accepted for publication June 20, 1978.)

Anesthesiology
49:372–373, 1978

Caudal Anesthesia in Children

To the Editor:—We wish to reply to some comments by Takasaki and his colleagues¹ on our data for caudal dose requirements in children.^{2,3} Takasaki *et al.* claim that body weight is a better predictor of dose requirements than height. In our experience of more than 150 pediatric cases, height, age and weight all correlate well with caudal dose requirements, but weight is the

least powerful predictor ($r = 0.94$ for age, 0.94 for height, and 0.90 for weight). There is a high intercorrelation among all three variables, and in practice it makes little difference which one is taken. The fact that Takasaki *et al.* found the best correlation with body weight may be explained by the predominantly younger age group in their series, and by the novel