

## CORRESPONDENCE

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*In Reply:*—Tanaka *et al.*<sup>1</sup> introduce an additional, intriguing factor (with an historical past) in the search for the explanation as to why phenylephrine might be associated with such a high incidence of transient neurologic symptoms (TNS). The subsequent comments by Sakura *et al.*<sup>2</sup> put this concern about sodium bisulfite into sharp perspective—a critical step that helps us maintain an appreciation for the clinical relevance of the actual doses of sodium bisulfite given and one that discourages us from unduly focusing on just one potential contributor.

Lambert<sup>3</sup> voices the anticipated reaction to the rhetorical emphasis of the Editorial View.<sup>4</sup> The valid question posed is, is tetracaine a safer anesthetic (whether it increases blood flow or not)? He provides the reasonable opinion that the answer is no. Further, we learn that commonly used local anesthetics share the potential for neurotoxicity. *This* is an important reality, especially as we consider the contemporary manifestations thereof through TNS.

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## References

1. Tanaka M, Nishikawa T: Is phenylephrine or sodium bisulfite neurotoxic? *ANESTHESIOLOGY* 1998; 89:272-273
2. Sakura S, Sumi M, Sakaguchi Y, Saito Y, Kosaka Y, Drasner K: The addition of phenylephrine contributes to the development of transient neurologic symptoms after spinal anesthesia with 0.5% tetracaine. *ANESTHESIOLOGY* 1997; 87:771-8
3. Lambert DH: Transient neurologic symptoms when phenylephrine is added to tetracaine spinal anesthesia—An alternative. *ANESTHESIOLOGY* 1998; 89:273
4. Rowlingson JC: Transient neurologic symptoms. Now, with phenylephrine? *ANESTHESIOLOGY* 1997; 87:737-8

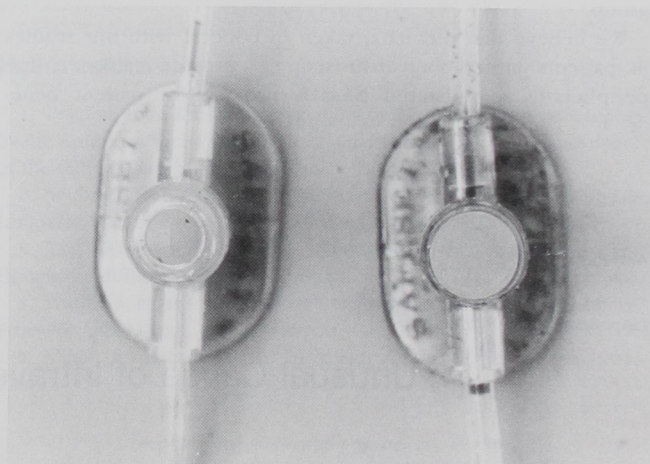
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## Blood Loss from a Defective Needleless Arterial Sampling Port

*To the Editor:*—To decrease the risk of needle sticks, our institution uses a closed system for sampling of arterial blood (Triple Line Safeset Kit #46076-27, Abbott Laboratories, Chicago, IL). At the sampling port, a thick rubber cap with a built-in slit is penetrated with a blunt needle. Recently we had a case in which flushing of the arterial tubing resulted in dislodgment of the rubber cap from the sampling port. This led to an open arterial line with bleeding and loss of the arterial trace. Attempts to plug off the hole were unsuccessful because standard Luer-lock caps are too small for the size of the resulting defect. In this patient, the arm in which the arterial catheter had been placed was tucked at his side and was not readily accessible. We stopped the bleeding by covering the open port with a sterile transparent dressing (Tegaderm, 3M company, St. Paul, MN). A silk string was wrapped around the sides of the dressing to prevent the arterial pressure from displacing it. This restored the arterial tracing, but the sampling port could not be used, and subsequent arterial samples had to be taken at the transducer site. At the end of the procedure, the arterial line system was replaced with a new one. Inspection of the malfunctioning sampling port revealed that the plastic housing had not been molded over the rubber cap (fig. 1). Without the molding, there is nothing to hold the rubber cap, and it can easily be displaced during flushing.

We estimated the blood loss caused by the defective sampling port at approximately 20 cc. However, the system we were using had an identical sampling port close to the insertion site. If the defect had



**Fig. 1.** Close-up view of a standard arterial sampling port (*left*) and the defective one (*right*).

been on that sampling port, the blood loss would not have been immediately apparent because it was covered by surgical drapes, and larger amounts of blood would have been lost. We have contacted the manufacturer and informed them of this defect so that hopefully this type of problem can be avoided in the future.