

CORRESPONDENCE

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Epidural Hematoma Associated with Epidural Anesthesia: Complications of Anticoagulant Therapy

To the Editor:—We read the article by Onishchuk and Carlsson, describing a patient who had a major compression of the spinal cord after epidural hematoma.¹

The perception of back pain involves central and peripheral neural pathways, both of which can be impaired by diabetes.^{2,3} In patients with diabetes and an evolving hematoma, back pain may not be an early symptom, and peripheral neurologic change may be the only clinical sign. Therefore, it is important that peripheral neuropathy be documented before epidural placement so that subsequent changes may be noted.

In addition to the recommendation proposed by Onishchuk *et al.*, we suggest that patients with long-standing diabetes should have neurologic assessment before epidural anesthesia.

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A Simple Alternative Precordial Stethoscope

To the Editor:—Commercially available precordial stethoscopes exist in several sizes, designs, and prices. Standard neonatal precordial stethoscopes have limited efficacy in extremely small premature infants, in whom the diameter of the precordial may preclude proper contact on the chest wall and stethoscope weight might inhibit spontaneous ventilation. We found an excellent substitute using relatively inexpensive materials found universally in clinical areas (fig. 1). Using disposable syringe plunger-tips (Monoject Sherwood Medical, St. Louis, MO) of the appropriate diameter, a 14-G intravenous catheter is inserted into the side of the isolated plunger tip and trimmed to fit (fig. 2). This is then connected to standard tubing and an ear piece. The wholesale cost of this apparatus is approximately \$0.50, which is much less than the standard precordial stethoscopes, with costs ranging from (\$6.50 to \$8.50). This precordial stethoscope can be applied to the patients' chest wall using the standard precordial adhesive ring (Double-Stick disks, 3M, St. Paul, MN).

In addition to the diverse sizes and excellent sound quality, this light-weight precordial stethoscope (table 1) has other advantages. Its low cost allows this to be used as a disposable item, when required by infection control considerations. Since this model contains no

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Fig. 1. A 560-g neonate with a 3-ml precordial stethoscope in place, with commercial metallic pediatric and neonate precordial stethoscopes for comparison.