



FIG. 2. A portion of a CSA tracing is shown. At the beginning of the tracing (*top*) the PNS is stimulating the facial nerve at 1 Hz and the CSA display is clearly abnormal. When stimulation of the facial nerve is discontinued, a normal CSA tracing is observed.

nerve, so that the increase in the amplitude of the power display caused by nerve stimulation may go unrecognized until stimulation is discontinued.

In contrast to its effect on the CFM or PSA-1, stimulation of the facial nerve produces an artifact in the CSA display that is distinguished easily from a normal display (fig. 2). When stimulation is discontinued and software gain settings reset, a normal CSA display is observed. Stimulation of the ulnar nerve at the wrist causes no interference on either the CFM, PSA-1, or CSA.

The purpose of this communication is to alert users of the CFM, PSA-1, or CSA to the interference caused by stimulation of the facial nerve and to the potential for failure to recognize significant EEG events due to this interference.

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### An Atraumatic Method for Topical Application of Local Anesthetics to the Nasal Mucosa

*To the Editor:*—The topical application of cocaine or other local anesthetics to the nasal mucosa using cotton swabs or the Macintosh atomizer can be distressing to the awake patient. In addition, devices of such large caliber inserted through the nares have the potential for causing epistaxis.

To circumvent these problems, we have adapted the

Portex epidural catheter (No. 389300, Portex Inc., Wilmington, Massachusetts), cut to a length of approximately 15 cm and attached to a syringe, for this purpose. The catheter is advanced gradually into the nasal cavity using a to-and-fro motion, while maintaining a slow steady pressure on the syringe plunger. The radially oriented holes in the terminal 2 cm of the catheter provide good coverage

of all surfaces of the nasal mucosa. The distance markers allow insertion to a known depth, usually 6–7 cm in the adult. It is atraumatic and well tolerated in the fully alert patient. The technique makes efficient use of the anesthetic solution; 1 ml 4% cocaine usually provides satisfactory vasoconstriction and topical anesthesia in each nasal cavity.

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### Bronchopulmonary Lung Lavage

*To the Editor:*—We would like to take exception to a few points made in a recent article concerning bronchopulmonary lung lavage.<sup>1</sup>

Our institution has done 56 lung lavages in patients with severe asthma and pulmonary alveolar proteinosis over the past 8 years. We use red rubber Robertshaw double-lumen tubes instead of National Catheter Corporation left lung double-lumen tubes. Occasionally we use a small Carlens or White double-lumen tube in patients under 50 kg. The distance from the proximal edge of the endobronchial cuff to the proximal edge of the tracheal lumen is only 3.4 cm in the 39 and 41 Fr. National Catheter tubes. The distance in the medium and large red rubber Robertshaw double-lumen tube is 5.3 and 5.8 cm respectively (fig. 1). The much smaller distance in the National Catheter double-lumen tube leaves little margin

for error in placement of the tube. The proximal edge of the bronchial cuff cannot be placed more than 3 cm into the left main bronchus. Therefore, any event that could cause even the slightest motion of the tube may cause it to become displaced, leading to a potential catastrophe.

Instead of using a bronchoscope for proper placement of the double-lumen tube, we use a chest x-ray and fluoroscopy. This technique has the advantage in that not only can we determine correct double-lumen tube placement, but we can watch for movement of all lobes of the right or left lung during controlled ventilation. Occasionally it is very difficult to auscultate the chest in these patients to insure correct double-lumen tube placement. The use of fluoroscopy allows us to check position and ventilation at any time during the procedure. Fluoroscopy

FIG. 1. Comparison of double-lumen tubes.

