The numbness regressed gradually from the chin cephalad; it resolved completely within a period of 5 weeks.

Case 2. A 47-yr-old woman was scheduled for excision of a breast mass. She had no prior history of medical problems; she smoked two packs of cigarettes per day. The preoperative findings were as follows: blood pressure $120 / 85 \mathrm{mmHg}$, heart rate 80 beats $/ \mathrm{min}$, serum sodium $139 \mathrm{mEq} / \mathrm{l}$, and serum potassium $4.7 \mathrm{mEq} / \mathrm{l}$. The patient was premedicated with droperidol 1.25 mg and fentanyl 0.1 mg iv a few min before induction of anesthesia. Anesthesia was induced with sodium thiopenthal 250 mg iv and maintained with nitrous oxide-oxygen and halothane administered by mask. A plastic oropharyngeal airway was used. The procedure lasted 45 min , and recovery from anesthesia was uneventful.

On the day following surgery the patient noticed numbness of the lower lip; she could sense neither temperature nor touch with the lip. When she drank the fluid would spill at both comers of her mouth. The numbness regressed gradually from her chin cephatad; it resolved completely 45 days later.

## DISCUSSION

Although transient, the complication reported here distressed both patients greatly. We were concerned because the loss of sensation for temperature and touch could lead to thermal injury and self-induced trauma to the lip and buccal mucosa.

The exact cause of this complication is not clear. The numbness followed the distribution of the mental branch of the inferior alveolar nerve. Acute peripheral nerve damage is usually a result of chemical or physical injury.

None of the anesthetic agents and adjuvants that were administered is known to cause acute neuropathy.

Numbness of the lower lip was most likely related to excessive pressure exerted by the rim of the anesthesia mask directly on the mental nerves bilaterally where they emerge from the mental foramina in the mandible. A less likely possibility is pressure exerted by the plastic oropharyngeal airway on the inferior alveolar nerve as it entered the mandibular foramen on the inner aspect of the mandibular ramus.

The transient nature of this complication in our patients should be reassuring; however, patients should be advised that precautions must be taken to avoid injuries to the lip and mouth during the $1-2$ months of local numbness.

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## Transdermal Clonidine Therapy for the Perioperative Period

To the Editor:-The recent report by Johnston et al. ${ }^{1}$ represents one approach to the problem of rebound hypertension from clonidine withdrawal in the perioperative period.

An alternative strategy for managing patients receiving clonidine preoperatively is the use of the new CatapresTTS ${ }^{\circledR}$ patches (Boehringer Ingelheim), a transdermal drug delivery system. The patches come in sizes 1,2 , and 3 formulated to deliver $0.1,0.2$ and 0.3 mg , respectively, of clonidine daily for one week. Peak concentrations are reached in 24-48 h . The patch can be applied to the upper arm or torso (manufacturer's recommendation) the day prior to surgery while patients continue to take their usual claily oral clonidine dose. After that the transdermal drug delivery system will medicate the patients for the rest of the perioperative period. Because the dose relationship between oral and transdermal therapy may not be equal, it is suggested that the smallest patch (CatapresTTS $^{\oplus}$ 1) be used first. If unacceptable hypertension de-
velops, an increased dosage patch should be applied over the same site as the previous patch and the patient maintained in the interim with rectal clonidine.

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