been implicated in femoral neuropathies, but their role in the
development of neuropathies in our patients is unknown.

There may be factors other than retractor associated with peri-
operative femoral neuropathies. As we have shown, a variety of pa-
tient factors, such as very thin body habitus and smoking in the pre-
operative period, may be associated with lower extremity neuropath-
ies. Three of these four patients had one or more of these factors.
Two of the women undergoing vaginal hysterectomy had body mass
indexes 20 kg/m2 or less and were smokers. The man undergoing
resection of a rectal carcinoma was in the low lithotomy position for
approximately 5 h and was a smoker. Extremes of either hip flexion
or extension also may be associated with femoral neuropathies.6,7
Hemorrhage in the iliopsoas muscle and subsequent compression or
ischemia of the femoral nerve also have been reported to occur during
the perioperative period.7

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Fiberoptic Bronchoscopy in a Patient Requiring Continuous
Positive Airway Pressure

To the Editor.—Diagnostic and therapeutic fiberoptic bronchosco-
py under topical anesthesia in a patient whose lungs require ven-
tilation using continuous positive airway pressure (CPAP) but in
whom the trachea is not intubated, is not easily performed because of
difficulties in ensuring an airtight breathing system equipped with
oxygen and a PEEP/CPAP valve. Failure to administer CPAP even for
a short period may lead to severe hypoxemia. When a Patil-Syracuse
mask is not available and positive pressure ventilation and/or oral
fiberoptic intubation are necessary, the simple system described by
Higgins and Marco1 can be used.

We adopted their method to enable the application of CPAP during
fiberoptic bronchoscopy. A large endotracheal tube (ETT), size 9 or
10, is cut short, the tube’s cuff is inflated within the connector orifice
of a face mask to form a seal (fig. 1), and the ETT is attached to an
anesthetic machine equipped within a PEEP valve.

The fiberoptic bronchoscope is inserted through a fiberoptic bron-
choscope swivel connector (Portex, United Kingdom) into the ETT
and, from there, into the patient’s nose or mouth. The face mask is
kept tightly applied to the face, while the patient receives continuous
oxygen and the desired PEEP.

Fig. 1. A fiberoptic bronchoscope is passed through an endo-
tracheal tube, which is fixed into a face mask by inflating the
cuff, permitting administration of continuous positive airway
pressure in a spontaneously breathing patient.

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Measurements of Occlusion Pressure during Anesthesia with Volatile Anesthetics in Humans

To the Editor.—Recently, Canet et al., reporting on changes in occlusion pressure and ventilation with different depths of anesthesia using either halothane or isoflurane, suggested that only one study previously analyzed occlusion pressure in humans, at increasing concentrations of a halogenated anesthetic agent and that studies of the occlusion pressure wave are scarce.

In an analysis of the occlusion pressure wave and inspiratory flow patterns of patients anesthetized with enflurane and nitrous oxide, I found that ventilatory depression caused by an increase in inspired enflurane concentration was related solely to a reduction in central drive and not to the peripheral factors more favored by Canet et al. in their discussion. The same study also reported changes in the occlusion pressure and inspiratory flow pattern caused by opioid administration. There was no marked change in estimates of active elastance and impedance, again suggesting that the depression was central. Occlusion pressure also was used in a further study, investigating the findings of Wahba and Sadkova, who found that atropine increased ventilation during anesthesia with enflurane. The effects of atropine administration were studied in patients anesthetized with enflurane and halothane, using occlusion pressure to distinguish central effects from peripheral, mechanical effects. The findings suggested a minor effect after premedication with meperidine, consistent with the possibility of bronchodilation. Atropine caused an increase in inspiratory flow, although occlusion pressure was unaltered.

These observations support the suggestion of Canet et al. that further analysis of occlusion pressure waveform in spontaneously breathing anesthetized patients can be helpful to investigate the neural mechanisms of respiratory depression.

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