

and a second adapter (Vital Signs®), both of which are interposed between the y piece of the circle and the mask. Stimulation of the pharynx in an inadequately anesthetized patient may cause bucking and coughing. Therefore, as when inserting an airway, the probes should be placed in the pharynx only after the patient is anesthetized.

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Use of Etomidate for Elective Cardioversion

To the Editor:—Recently, the use of etomidate for elective cardioversion has been described.¹ We present a case where myoclonic movements secondary to etomidate interfered with an elective cardioversion.

A 67-yr-old, 60-kg man was scheduled for an elective cardioversion for atrial fibrillation. The patient was given .15 mg/kg of etomidate intravenously. The patient became unresponsive to verbal stimuli, and then developed gross myoclonic movements. The patient was then immediately cardioverted. The myoclonic movements continued after the cardioversion such that it was impossible to ascertain by the electrocardiogram whether the patient still had atrial fibrillation. When the myoclonic movements finally stopped, it was determined that the cardiac rhythm was still atrial fibrillation. Four minutes after the initial bolus of etomidate, the patient was awake and responsive to verbal commands. We then elected to give the patient 125 mg of thiopental intravenously. After administration of the thiopental, there were no myoclonic movements, and cardioversion restored cardiac rhythm to normal sinus rhythm.

The incidence of myoclonus after etomidate administration has been reported to be 10–38% (1.2). Any drug that causes significant myoclonus can cause difficulty in

the interpretation of electrocardiograms. The inability to readily interpret a patient's cardiac rhythm because of myoclonus can be especially troubling to both the anesthesiologist and the cardiologist. Therefore, we feel that etomidate may not be the ideal anesthetic agent for cardioversions.

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Inadvertent Intra-arterial Injection of Vecuronium

To the Editor:—The inadvertent intra-arterial injection of anesthetic agents has been a well-recognized operating room hazard for many years.^{1,2} Severe tissue ischemia, gangrene, and loss of a limb may follow the intra-arterial injection of a wide variety of agents, in-

cluding barbiturates, narcotics, and phenothiazines,³ although other frequently used drugs appear not to cause tissue damage.^{3,4} Awareness of the likley sequelae of intra-arterial administration of specific drugs is clearly of prognostic value, as well as of relevance to the man-