CORRESPONDENCE

A 55-yr-old woman scheduled for ankle surgery had normal preoperative airway examination results. After induction with propofol and rocuronium, standard mask ventilation, eventually using both an oral airway and two anesthesiologists, yielded no detectable gas exchange. Multiple attempts at laryngoscopy revealed only an abundance of soft, redundant, almost papillomatous appearing tissue at the base of the tongue. Transtracheal jet ventilation was attempted, but after several seconds, subcutaneous crepitus occurred without evidence of gas exchange. The catheter was removed, and a #4 LMA was inserted easily. Although gas exchange was occurring, the highest pulse oximeter reading attained was 92% with an EtCO₂ of 1. The inadequate gas exchange was confirmed further by a simultaneous blood gas analysis (PaO₂ 62 mmHg). Using a fiberoptic bronchoscope through the LMA, only a very small portion of the vocal cords could be seen posteriorly. The anterior aspect of the cords was covered with folds of hyperplastic tissue from the lingual tonsil. The bronchoscope was guided through a tiny opening between the cords, and a normal appearing trachea was identified. We were unable, however, to pass a 6.0 mm-ID endotracheal tube over the bronchoscope through the vocal cords. The SpO₂ decreased to 30% during this anptic intubation attempt, increasing to 85% over about 1 min after the bronchoscope was removed and ventilation resumed via the LMA. Because of the apparently edematous periglottic tissue and decreasing pulse oximeter readings, it was decided to proceed to a cricothyrotomy. Subsequent biopsy revealed a clear diagnosis of lingual tonsillar hyperplasia.

This case illustrates, as has been described previously, that the LMA can be a life-saving tool. It also serves as a reminder that this tool at times may be of only limited efficacy as a superglotic ventilatory conduit in the presence of a significant periglottic obstruction.

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Postoperative Management Strategies May Obviate the Need for Most Preoperative Cardiac Testing

To the Editor.—As clinicians who run a preoperative evaluation center and provide intraoperative anesthesia and postoperative intensive care, we, like Mangano,1 have been frustrated with the problem of preoperative cardiac risk assessment. However, as we question whether "a cardiac risk assessment paradigm is possible," our answer is slightly different. Whereas Mangano concludes with a call for development of screening algorithms and large-scale trials assessing testing technologies, we suggest that a more sensitive, specific, and cost-effective paradigm is probably not feasible and, equally important, may not be necessary. Rather, we believe that the focus should be shifted from preoperative testing to development of improved methodologies for postoperative ischemia detection and treatment.

For the past two decades, the conventional approach to cardiac risk management in anesthesia has been preoperative monitoring and interventions (to arrest or immediately correct evolving ischemia). A variety of screening tests have been proposed to identify high-risk patients who are either asymptomatic or have stable symptomatology; however, these tests have a low positive predictive value and a real incidence of false negatives. The positive predictive value of these tests is low, not because the tests are unable to detect significant coronary disease, but rather, because current management strategies have reduced the likelihood of patients with coronary disease experiencing major cardiac complications. Moreover, because plaque rupture can occur in physiologically insignificant lesions, there always will be a low but real incidence of false negatives.

The current economic environment is challenging all of us to examine our practice patterns and evaluate whether they are cost-effective. We believe that the way preoperative cardiac screening tests are used does not meet the challenge of cost-effectiveness. Available tests are expensive, and detection of unrecognized coronary atherosclerosis, by necessity, entails fairly widespread testing. Data on the societal costs of preoperative cardiac testing are difficult to obtain, but a recent survey2 indicates widespread preoperative testing in vascular surgery patients (60% of 400,000 cases/year). According to current estimates, 9 million patients are at risk for cardiac complications each year; whereas the actual number undergoing preoperative testing is unknown, the cost of cardiac screening is enormous. Cost-effective testing also requires that the results can be used to change outcome. Available data do not support that this is the case for preoperative cardiac screening tests. When angiography and angioplasty or bypass surgery are performed for the sole purpose of reducing perioperative risk, overutilization may be increased.

The perioperative period is a time of stress to the body, neuroendocrine changes. These stresses increase the risk of myocardial infarctions and the postoperative events.3,4 Yet, we have no evidence in postoperative research to believe that the perioperative period has become more dangerous. Perioperative therapies may complicate current care, as continuous 12-lead ECG monitoring of patients during the first 48 hr after surgery may obviate central alarm capabilities. Based on recent data suggesting that cardiac events in more than 50% of patients occur after the first 48 hr, central alarm capabilities could use this information to alert nurses and physicians to a "surgical stress test" occurring in the coming days.

In summary, if we are to continue with current practice patterns, we need to develop new methodologies. We contend that systemic approaches may be required before we make additional incremental changes that have been in place for many years.

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There is no question that effective preoperative cardiac risk assessment in vascular surgery is challenging. However, with the current pathophysiological state, therefore, an open and acute disease state can lead to pathophysiologic changes, especially. Development

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