Avoiding Mucosal Damage during Airway Management. Ulrich-Pur et al. (page 933)

In this experimental cadaver investigation, Ulrich-Pur et al. compared the pressures exerted on the pharyngeal, tracheal, and esophageal mucosa by different airway management devices. In fresh cadavers, the researchers strategically placed microchip sensors on the anterior, lateral, and posterior surfaces of the proximal balloons or distal cuffs of seven different airway management devices. Included in the investigation were conventional endotracheal tubes, intubating laryngeal masks, and mask airways, as well as a laryngeal tube airway device.

Depending on the respective airway device, the cuff volume was increased in 10-ml increments (from 0–100 ml) at the proximal balloon, or in 2-ml increments (from 0–12 ml) at the distal cuff. In addition, mucosal pressures exerted by proximal cuffs were compared to the amount of inflation pressure recommended by manufacturers for emergency situations. The researchers found that, using a pharyngeal cuff volume of 40 ml, the intubating mask airway and the laryngeal mask airway devices exerted significantly higher pressures compared to the other devices. Although it is important to follow recommended pressure volumes, the observed differences in devices seen here did not appear to be clinically relevant. The authors note, however, that measurements and results in cadavers may not be comparable to those in awake and anesthetized patients.

Is Geography a Factor in Responsiveness to Rocuronium Bromide? Dahaba et al. (page 950)

Stimulated by other studies which have reported transatlantic differences in patients’ sensitivity to neuromuscular blocking agents, Dahaba et al. conducted a prospective, controlled clinical study to ascertain how patients in different countries, with different lifestyle, diet, and ambient habits, responded to incremental doses of rocuronium bromide.

The team recruited 18 patients each from New Jersey; Graz, Austria; and Dalian Hospital in the People’s Republic of China. Patients in the first two groups were Caucasian, whereas those in the Chinese group were of Han ancestry. The study drug for all three countries, the authors recommend larger studies to determine dosage recommendations of rocuronium bromide for different geographic regions.

Practice Guidelines for Managing Patients with Sleep Apnea Reported. ASA Task Force (page 1081)

Pediatric and adult patients with obstructive sleep apnea (OSA), even if asymptomatic, present special challenges which clinicians must address in order to minimize the risk of perioperative morbidity or mortality. The American Society of Anesthesiologists appointed a 12-member Task Force to review published evidence, obtain opinions of consultants, and build consensus for practice guidelines for the perioperative management of patients with OSA. The Task Force included anesthesiologists in private and aca...
changing role of anesthesiology surveyed in rovenstine lecture. warner (page 1094)

the 44th rovenstine lecture was presented by mark a. warner, m.d., at the american society of anesthesiologists annual meeting, on october 24, 2005, in atlanta, georgia. the meeting, moved from its originally scheduled venue in new orleans, commemorated the 100th anniversary of the specialty. in his address, dr. warner described his dreams for the future of the specialty. anesthesiology, he said, must cleave to its core values—commitment to the critically ill and patients in pain and commitment to improving the care and safety of patients—while adapting to a changing health care environment.

in the next decades, the practice of anesthesiology will be influenced by several new realities, according to dr. warner: changing patient demographics (notably, the influx of immigrants and the aging of the population), advances in genomics, and increased use of minimally invasive procedures. with the continuing elucidation of the human genome, anesthesiologists will be able to tailor perioperative drug therapy to target the unique genetic makeup of their patients. for instance, investigations of β-adrenergic receptor polymorphisms may allow targeting of perioperative β blockade and better management of patients with impaired vascular responsiveness. similarly, knowledge of pharmacogenomic markers may soon yield information to predict patients’ metabolism of common perioperative drugs such as warfarin and ondansetron.

miniaturization and minimalization of surgical procedures also promise to modify anesthesia practices, dr. warner contended. in view of these shifting dynamics, anesthesiologists must prepare to change their models for delivering anesthesia care. with too few anesthesiologists and shrinking reimbursements, physician-intensive, one-on-one care will not be possible. indeed, in healthy patients undergoing minimally invasive procedures, direct delivery of care may not be necessary. physician oversight of well-trained sedation and critical care nurses, nurse anesthetists, and anesthesiology assistants offers a cost-effective model for delivering care to appropriately selected patients, dr. warner said.

in his conclusion, dr. warner noted that anesthesiologists possess unique skills which could be extended to new areas, expanding the influence and scope of the specialty. for example, anesthesiologists are already well trained and experienced in the intricacies of supervising care for medically complex patients, and could step into administrative roles entailing oversight of perioperative services to care for the increasing percentage of acutely ill, physiologically unstable patients who make up an increasing percentage of hospital-based practice. to take advantage of and expand upon scientific progress and process changes, the field of anesthesiology must develop, fund, and implement specialty-sponsored fellowships. in this way, anesthesiology can make significant contributions in the house of medicine in the next 100 yr of its existence.

Gretchen Henkel