JAY B. BRODSKY, M.D.

JAMES B. D. MARK, M.D.

Departments of Anesthesia and Surgery (Division of Thoracic Surgery) Stanford University School of Medicine Stanford, California 94305

REFERENCES

1. Benumof JL. Partridge BL, Salvatierra C, Keating J: Margin of safety in positioning modern double-lumen endotracheal tubes. ANESTHESIOLOGY 67:729–738, 1987
2. Brodsky JB, Shulman MS, Mark JBD: Malposition of left-sided double-lumen endobronchial tubes. ANESTHESIOLOGY 62:667–669, 1985
3. Atwell SW: Major anomalies of the tracheobronchial tree. Chest 52:611–615, 1967

(Accepted for publication March 8, 1991.)

Anesthesiology
74:1164, 1991

Unrecognized Cyanosis during Laser Treatment of Cutaneous Vascular Lesions

To the Editor:—The flash-lamp pumped 585-nm tunable pulsed dye laser is currently used extensively in the treatment of cutaneous vascular lesions.[1] At the 585-nm wavelength range (yellow color), this laser is able to pass through epidermis and be absorbed preferentially by oxyhemoglobin in blood vessels.[2] This allows lesional resolution with a dramatic diminution in cutaneous side effects. During the use of this laser, all room personnel as well as the patient need eye protection to prevent retinal damage. The patient's eyes can be closed and covered by an opaque material, while the laser operator and others in the room must wear protective eyewear. Protective glasses and goggles intended for use with this laser block light efficiently in the 577–585-nm range.

The effect of wearing this eyewear, besides protection, is a highlighting of red colors and diminution of blue hues. On more than one occasion, we have noted sedated patients who appeared to be clinically well-oxygenated but in whom oxyhemoglobin saturation (Sp_{O_2}) was decreasing. Only with the removal of the protective eyewear was cyanosis readily apparent. In view of this problem, it is imperative that pulse oximetry be used and meticulously followed during the course of anesthesia for laser treatment of cutaneous skin lesions. We also recommend periodic patient assessment without protective eyewear during the procedure, while the laser is on standby. Supplemental oxygen for sedated patients should also be considered, keeping in mind the incendiary potential of this laser as recently reported by Epstein *et al.*[2] Since other lasers used in the treatment of cutaneous vascular lesions (such as the copper-vapor and argon-pumped tunable dye laser) also emit a yellow color, protective eyewear used during their operation could potentially cause similar distortion.

JOHN PALMIERI, M.D.
Fellow in Pediatric Anesthesia

JEROME M. GARDEN, M.D.
Associate Professor of Clinical Dermatology

FRANK L. SELENY, M.D.
Professor of Clinical Anesthesia

G. W. STEVENSON, M.D.
Assistant Professor of Clinical Anesthesia

Children's Memorial Hospital Northwestern University Medical School Chicago, Illinois 60614

REFERENCES

1. Tan TO, Sherwood K, Gilchrest BA: Treatment of children with port-wine stains using the flashlamp-pulsed tunable dye laser. N Engl J Med 320:416–424, 1989
2. Epstein RH, Brummett RR, Lask GP: Incendiary potential of the flash-lamp pumped 585 nm tunable dye laser. Anesth Analg 71:171–175, 1990

(Accepted for publication March 8, 1991.)

Anesthesiology
74:1164–1166, 1991

New Anatomic Landmarks for Percutaneous Catheterization of the Internal Jugular Vein

To the Editor:—One of anatomic reasons for choosing the internal jugular vein (IJV) for central venus cannulation is its consistent position in the neck,[1] and most approaches use the sternocleidomastoid muscle as a landmark.[2] The carotid artery (CA)[3] and the IJV itself[4] can also be palpable and visible landmarks. In some cases of anesthetized patients and obese patients, however, all of the above landmarks are less apparent, and it is even more difficult to identify these landmarks during cardiac arrest. For those reasons, we have developed a new approach for internal jugular venipuncture using bony rather than soft tissue landmarks. In order to validate our experience, we evaluated the new approach in 134 patients prospectively.

With institutional approval and written informed consent from patients, our new approach to internal jugular venipuncture was employed for placement of a pulmonary artery catheter in 134 (96 male, 38 female) anesthetized patients ranging in age from 21 to 84 yr, who were to undergo major abdominal surgery. After general anesthesia