

of about 0.8–1.0, and respiratory rates regulated in accordance with infants' ages from 60 to 50 min. Maximal Venturi effect was controlled through endotracheal tubes of various size. We made sure that the delivered volume could never exceed 10 ml/kg (normal tidal volume). Premedication comprised atropine sulfate (0.02 mg/kg) and diazepam (0.1 mg/kg). Anesthesia was induced by the continuous infusion of Althesin[®], 2 mg · kg⁻¹ · h and d-toxiferin, 0.1 mg/kg, iv. The fiberoptic then was introduced and jet ventilation induced. After every distal exploration, the fiberoptic was removed above carina for ensuring bipulmonary insufflation for 15 s. Monitoring procedures did not reveal significant disturbances. The eight infants who benefited by continuous measurement of tissue P_{O₂} showed only slight variations ranging from 81–159 mmHg. The three patients whose tissue P_{CO₂} could be obtained continuously demonstrated a tendency for slight hypercarbia (greatest value: 47 mmHg). We did not observe any complication during the jet-ventilation itself. Severe bronchospasm occurred during induction in a 5-month-old male infant with an unrecognized intrabronchial foreign body. At the end of the procedure, and after removing the fiberoptic, two infants remained dyspneic for about one hour, and two other infants experienced slight bronchospasm which did not require special treatment support except for oxygen supplementation for a few minutes.

Following this procedure of jet-ventilation, no addi-

tional material had to be introduced into the respiratory tract and the jet source (tip of the fiberoptic) could be controlled visually without interruption. This and the precise regulation of delivered gas volumes and pressures prevented either damage to the pulmonary parenchyma,^{2,3} or to the fiberoptic. In this way, we think that such a procedure for jet-ventilation is suitable in children and especially in infants in poor conditions.

BERNARD DALENS, M.D.

Assistant Professor of Anesthesiology

ANDRÉ LABBÉ, M.D.

Assistant Professor of Pediatrics

JEAN-PIERRE HABERER, M.D.

Associate Professor of Anesthesiology

Department of Anesthesiology and Department of Pediatrics, University of Clermont-Ferrand, France

REFERENCES

1. Satyanara T, Capan L, Ramanathan S, Chalon J, Turndorf H: Bronchofiberscopic jet ventilation. *Anesth Analg* 59:350–354, 1980
2. Oliverio R Jr, Ruder CB, Fermon C, Cura A: Report on pneumothorax secondary to ball-valve obstruction during jet ventilation. *ANESTHESIOLOGY* 51:255–256, 1979
3. Mette PJ: Avoiding complications during jet-ventilation. *ANESTHESIOLOGY* 59:451–452, 1980

(Accepted for publication June 17, 1982.)

A New Anatomic Laryngoscope

To the Editor:—During laryngoscopy, a problem frequently encountered is placement of the narrow blades directly into the esophagus. One of us (H.v.Z.B) designed a blade to fit the broad base of the tongue bordering on the base of the epiglottis. After a study of postmortem specimens, we decided that the beak would fit best between epiglottis and tongue if it was broadened to more than twice that of presently used blades.

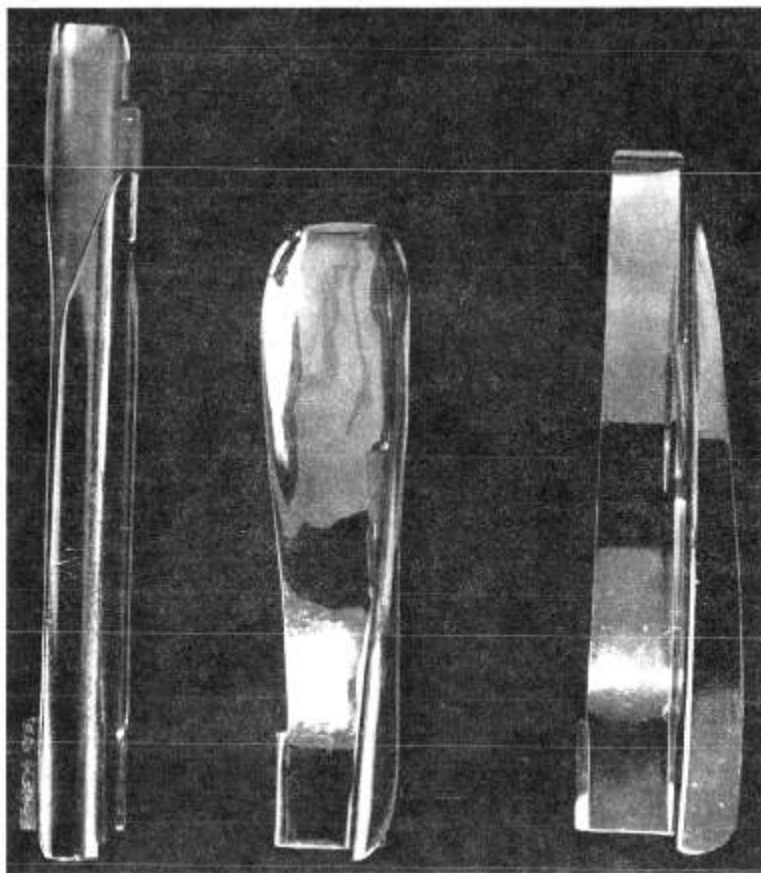
Three sizes were designed: a small size for children, a medium size for the average adult, and a large size for exceptionally large and morbidly obese patients (fig. 1).

We have used the new blades for teaching students, house staff, and residents, as well as for routine practice in all branches of clinical anesthesia for over a year. Particularly, beginners appreciate the ease with which

the lubricated blade slides over the tongue directly into the glosso-epiglottic recess, so that very little if any portion of the tongue encroaches on the field of vision. A return to the traditional Magill and Macintosh laryngoscopes is now unthinkable to us, *except during the first three years of life*, when the relatively bulky tongue reduces the efficacy of the curved, Macintosh principle by limiting the upward (horizontal) lift of the laryngoscope. We believe the straight Magill laryngoscope remains the instrument of choice for visualization of the anterior glottis during the first three years of life.

The beak of the Beukes blade should be passed as far down in the valleculae as it will comfortably go with the cervical spine of the patient flexed by support of the head into the "sniffing" position. This maneuver significantly shortens the distance from teeth to glottis, as

FIG. 1. The upper surface of the new children's blade is shown in the center, with a standard No. 2 Phillips (Magill) blade on the left, and a standard No. 2 Macintosh blade on the right. Note the broadening of the beak of the new blade.



may be verified readily by repetition of the laryngoscopy with the head maximally extended at the atlanto-occipital joint in association with maximal extension of the cervical spine.

HERMAN V.Z. BEUKES, M.B., M.MED.,
Senior Lecturer in Anaesthesia

JACOBUS W. MOSTERT, M.D.
Professor

*Department of Anesthesiology (Box 667)
University of Pretoria
Pretoria, South Africa*

(Accepted for publication June 17, 1982)

Anesthesiology
57:553-554, 1982

Oxygen Analyzers as Viewed by the Public, Attorneys, and an Anesthesiologist

To the Editor:—A recent nationwide television news magazine featured a story which told the public that personal tragedies caused by anesthesia mishaps could have been avoided by the addition of simple and inexpensive oxygen analyzers to anesthesia machines. I disagree with this simplistic analysis of our monitoring needs.

For two years I worked in an operating suite where all anesthesia machines were equipped with oxygen analyzers. Although the purchase of these analyzers was

heralded as a quantum increase in patient safety, after several weeks, these analyzers were turned OFF most of the day. The anesthesia personnel became weary of continual false alarms which occurred at the beginning and end of cases. Also, the devices required frequent maintenance and calibration.

Apparently, as a result of our litigious times, many doctors support the suggestion that anesthesia machines contain oxygen analyzers. They argue that even though the analyzers might not solve any prevalent monitoring