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A Case of Eye Injury from a Reusable Anesthetic Mask

To the Editor:—In their recent letter to the editor, Durkan and Fleming¹ present a case of potential eye injury not anticipated by ASA's distributed* (but FDA formulated)† checkout procedure for anesthesia apparatus. Both authors are to be commended for acknowledging their patient's burning eye sensation during pre-oxygenation, detecting fluid squirting from the anesthesia mask's rim pad, and promptly flushing the eye with saline. The patient's contaminated eye was reported to suffer no postoperative sequelae.

Following a similar incident, saline irrigation did not protect our patient from developing bilateral bulbar and palpebral conjunctival inflammation, tearing, eyelid swelling, burning pain, and photophobia.² Diagnosis was "moderate chemical conjunctivitis" with therapy, including removal of a contact cataract lens from one eye, application of an ophthalmic antibiotic ointment to both eyes every 6 h for 3 days, and twice daily examinations by an ophthalmologist. Inflammation did completely resolve with no additional visual injury, but this serious complication extended hospitalization 2 days.

Why did the two experiences result in such different outcomes? In our patient, did cataract extraction from one eye and glaucoma in the other add predisposing factors? Did presence of the contact lens discourage successful irrigation or provide protection from contaminating fluid? Being already anesthetized when the mask was fitted, our patient had no opportunity to indicate discomfort. As in the case reported by Durkan and

Fleming, our mask was also exposed to a disinfecting solution of 2% glutaraldehyde from repeated processing in Cidematic machines which wash, rinse, disinfect, and spin-dry in programmed cycles. It is speculated that, during a cleaning process, heat caused a weak spot in this mask's pneumatic cushion to rupture, exchanging its air with available solutions. Identification of the discharged solution collecting in each internal canthus was facilitated by glutaraldehyde's odor.

Clean anesthetic masks are a necessity, but only liquid disinfectant procedures can replicate these described events. Such a threat can be avoided by: 1) careful inspection of every mask treated with liquid chemicals, 2) selection of reusable masks that can be cleaned by ethylene oxide or autoclaving, and 3) use of disposable masks.

Durkan and Fleming conclude their letter by recommending that masks be vigorously inspected, and, if defects are frequent, alternate "methods of sterilization" considered. It should be clarified that anesthesia masks are *not* usually sterilized, but cleaned/disinfected.

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2. Murray WJ, Ruddy MP: Toxic eye injury during induction of anesthesia. *South Med J* 78:1012-1013, 1985

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* Anesthesia Apparatus Checkout Recommendations, ASA Newsletter, pp 5-6, October, 1986

† The Center for Devices and Radiological Health, Food and Drug Administration: Anesthesia apparatus checkout recommendations; Availability. Federal Register, pp 5383-5384, February 25, 1987

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Epiglottitis in Young Infants

To the Editor:—The report by Blackstock *et al.*¹ contained several misquotations in their table 2. First of all, the age of our patients (Blanc *et al.*)² ranged from 13 months to 6 yr, and not from 1 month to 6 yr. Secondly, we did not report a 24% incidence of positive neck

roentgenograms; we reported that, in a series of 27 consecutive pediatric cases, 24 patients had radiological studies of the soft tissues of the neck (100% of which were positive), while three patients were much too sick to be submitted to radiological studies. Thirdly, we did