tured. The expulsion of intraocular contents following succinylcholine induction is more than merely a theoretical concern. One of us (A.L.R.) has witnessed this complication, and the result was enucleation following a simple scleral laceration. For these reasons, we prefer the use of nondepolarizing agents in a small "priming" dose in the awake patient, followed by a larger "intubating" dose as described by Nagashima et al., and by Waldburger et al. We have found that this allows the advantage of safe, quick intubation with a smaller total dose of the agent. Contrary to the impressions expressed in Bourke's letter, we have not seen an increased morbidity or mortality rate in our experience of approximately 200 patients over the past year.

The concept that the loss of sight in open eye injuries should be accepted as inevitable runs counter to the very purpose of surgery in these patients. If the loss of binocular vision could be accepted with equanimity, the fields of ophthalmology and ophthalmic anesthesia would not have developed to their present level of sophistication. Most patients with penetrating eye injuries are children or young adults with the major portion of their work life ahead of them. Monocularly may seriously reduce the range of job opportunities available to these patients. There are also serious psychologic and cosmetic considerations for monocular patients.

With the development of rapid-acting, nondepolarizing agents, we feel that succinylcholine is contraindicated in the induction of patients with open eye injuries because an alternative exists that is both safe to the patient and compatible with successful ocular reconstruction efforts.

Alvin L. Rich, M.D.
Director of Anesthesiology

C. Douglas Witherspoon, M.D.
Clinical Assistant Professor of Ophthalmology

Robert E. Morris, M.D.
Clinical Assistant Professor of Ophthalmology

University of Alabama Eye Foundation Hospital
1720 University Boulevard
Birmingham, Alabama 35233

Richard M. Feist
Director
Retina Research and Treatment Foundation of the South
Suite 401, Medical Towers Building
1717 Eleventh Avenue South
Birmingham, Alabama 35205

References

(Accepted for publication February 24, 1986.)

Anesthesia for Open Eye Surgery

To the Editor:—In his letter, Dr. Bourke complimentary to Libonati et al. on their recent article supporting the use of succinylcholine in open eye surgery. He adds that, based on his own survey of ten ophthalmologists, "only a small percentage of patients with penetrating eye injuries recovered any useful sight in the injured eye" and that only two of 27 patients who had lost an eye considered monocular vision a handicap. We believe that these limited surveys seriously underestimate both the potential for useful vision postoperatively and the advantage of binocularity.

In a series of three reports on a total of 1,077 patients who had perforating eye injuries, the prognosis for useful vision after surgery was encouraging: 40–65% had vision of 20/40 or better; only about 20% of eyes had no useful vision. The prognosis was affected by several fac-

tors, especially by whether the injury involved the anterior and/or posterior segment of the eye, whether there was uveal prolapse, and whether intraocular reaction resulted. Recent advances in retinal surgery have demonstrated the salvage of vision after severe traumatic injuries to the posterior segment, i.e., techniques to treat vitreoretinopathy, use of long-acting intracocular gases, silicone oil tamponade, intraoperative endophotocoagulation, and the use of retinal tacks.

Libonati's study, a retrospective report without a control group for comparison, is without statistical validation. The only endpoint in the study is whether the surgeon complained of extrusion of eye contents. No mention is made of difficulty with uveal prolapse, bleeding, or reformation of the globe. There is no information regarding
the degree of preservation of useful vision afterward. The fact that some of the most serious eye injuries result from scleral rupture, after which one may be unable to observe extrusion of eye contents until after exploration of the globe and orbit, is not discussed.

Before surgery for penetrating eye injury, adequate examination is often not feasible until after the patient is anesthetized, prepped, and draped. Prolapse of eye contents is not unusual. Just because the surgeons in Libonati et al.’s report did not complain of extrusion after anesthetic induction and use of succinylcholine does not mean that there was none or that there was no additional loss of contents.

We are fortunate to have alternatives to use of succinylcholine for intubation. Given the potential for good visual outcome, we feel that the literature supports evidence for avoidance of use of succinylcholine in penetrating eye injuries.7,8

MARK J. WEINER, M.D.
Instructor
R. JOSEPH OLK, M.D.
Assistant Professor
Department of Ophthalmology

ELSIE F. MEYERS, M.D.
Associate Clinical Professor, Department of Ophthalmology
Associate Professor, Department of Anesthesiology
Washington University School of Medicine
660 South Euclid Avenue
St. Louis, Missouri 63110

REFERENCES

(Accepted for publication February 18, 1986)

In reply:—I thank Drs. Rich and Weiner and their colleagues for their interest and sharing their experience. However, the effect of succinylcholine during a rapid-sequence induction has not been well described in the literature. In fact, one of their own references summarizes ‘‘We found that Dtc, 3 mg . . . , given three or more minutes prior to the use of Sch, will prevent an increase in intraocular pressure.’’ My point remains that the report by Libonati et al.5 demonstrates that succinylcholine can be used safely for open eye injuries. This gives the anesthesiologist another option in considering the total care of patients.

DENIS L. BOURKE, M.D.
Department of Anesthesia
Boston University Medical Center
75 East Newton Street
Boston, MA 02118

REFERENCES

(Accepted for publication February 24, 1986.)

Anesthesiology
65:110–111, 1986

Assay for Serum Sufentanil Level Is Not Sensitive

To the Editor:—We agree with Weldon et al.1 that there are no assays that allow one to estimate accurately the elimination clearance of sufentanil after small standard doses. Unfortunately, their capillary gas chromatographic method, as it is presented,1 does not seem to change this situation and may actually lend confusion to what might otherwise have been a straightforward clinical report.2

The most serious deficiency in the report of this new

Downloaded From: http://anesthesiology.pubs.asahq.org/pdfaccess.ashx?url=/data/journals/jasa/931398/ on 07/09/2018