



ADVISORY OPINION OF THE CODE OF ETHICS

Subject: Learning New Techniques Following Residency

Issue Raised: What are the ethical and practical aspects of learning new techniques following residency, and what is the ophthalmologist's responsibility to patients, colleagues, and himself/herself with respect to the learning curve?

Applicable Rules: Rule 1. Competence
Rule 2. Informed Consent

Background

The technology available to ophthalmologists continues to develop at a rapid pace. It is usually fairly straightforward for experienced ophthalmologists to assimilate new modifications of familiar techniques. Occasionally, however, new techniques require the development of new skills that differ significantly from current skills, and formal study should be undertaken in these situations to achieve competence. Although recent literature addresses the learning curve in resident surgical experience, there has been less discussion about the learning curve for the established practitioner when he/she wishes to learn a new technique. This advisory opinion suggests an approach to learning new techniques after residency and discusses the related ethical concerns. As an advisory opinion, this document does not intend to restrict or regulate practices, and it should not be used for the purposes of medical-legal actions.

General Discussion

When a new technique is shown to be superior to an older one, it creates a dilemma for the experienced ophthalmologist who is not facile with the newer technique, and its benefits for patients should be considered. The ophthalmologist must decide whether to incorporate the new technique into his/her practice or to refer the patient to a colleague who is proficient in the technique instead. Care of the patient must be foremost. The ophthalmologist, however, must also consider his/her own career and decide whether the additional time needed and the stress of learning a new technique is in his/her professional interest.

When an ophthalmologist decides to incorporate new techniques or technology into his/her practice, a commitment to formal study is strongly recommended. The extent of the formal study depends on the degree to which the new technology varies from previously learned skills. Suggested resources for study may include courses and skills transfer sessions, surgical simulators, surgical videos, self-assessment materials, assistance of a skilled mentor, and review of initial cases with a mentor. Some new technology may also require specific certification. Certification is a symbol of successful completion of a program of study, but successful completion of any one or more training components or objectives does not necessarily signify an individual's clinical competence in a specific procedure or technique. Areas of competency or user proficiency include patient selection; preoperative evaluation and preparation; familiarity with instrumentation; surgical skills and judgment; safe, expeditious completion of the procedure; postoperative planning; and complication avoidance.

Appropriate patient selection is a particularly important factor, because it will help ensure success when using these new skills with early cases, build confidence in performing the technique, and reduce the likelihood of complications. Patient selection should initially be made on the basis of anticipated technical difficulty of the new technique. Additionally, patient personality should be considered; patients who exert extra pressures through their anxiety, impatience, or demanding style may not be suitable candidates.

Of special consideration is the process of providing appropriate informed consent. The ophthalmologist should disclose his/her level of experience as a surgeon and level of experience with the new technique. An experienced surgeon can appropriately inform the patient that he/she is modifying or improving a portion of an otherwise familiar procedure. When discussing success rates for a given procedure, it may be appropriate to provide data from more experienced surgeons, provided, however, that the less experienced surgeon does not imply that these success rates are his/her own. The patient should be made aware of the mentor's role, if applicable, as part of the surgical team.

The operating surgeon should carefully evaluate patients postoperatively during the learning period. If a serious complication occurs, appropriate disclosure to the patient is an ethical imperative, as is prompt management. A second opinion about management of the complication might be obtained from a mentor, or, if the complication is severe, referral to a subspecialist may be necessary, depending on the problem and the desires of the patient. Dispassionate assessment and understanding how the complication arose will help avoid future complications.

The ophthalmologist is ready to perform a new technique when he/she is sufficiently proficient. All applicable guidelines should be reviewed and followed if clinically appropriate. Hospitals typically have stringent guidelines governing acquisition of new procedures, frequently under the supervision of the department chief, and managed care entities often have their own guidelines.

A learning curve is an integral part of acquiring new skills, and all ophthalmologists will work through this process at various stages in their careers. A careful, honest, and ethical approach will distinguish the competent ophthalmologist as he/she learns a new technique. The foregoing suggestions will help place the patient first, minimize the risk of complications, and allow the ophthalmologist to gain technical expertise with confidence.

Applicable Rules

"Rule 1. Competence. An ophthalmologist is a physician who is educated and trained to provide medical and surgical care of the eyes and related structures. An ophthalmologist should perform only those procedures in which the ophthalmologist is competent by virtue of specific training or experience or is assisted by one who is. An ophthalmologist must not misrepresent credentials, training, experience, ability, or results."

"Rule 2. Informed Consent. The performance of medical or surgical procedures shall be preceded by appropriate informed consent. When obtaining informed consent, pertinent medical facts and recommendations consistent with good medical practice must be presented in understandable terms to the patient or to the person responsible for the patient. Such information should include alternative modes of treatment; the objectives, risks, and possible complications of such a treatment; and the consequences of no treatment. The operating ophthalmologist must personally confirm with the patient or patient surrogate their (his or her) comprehension of this information."

Other References

"Principle 1. Ethics in Ophthalmology. Ethics are moral values. An issue of ethics in ophthalmology is resolved by the determination that the best interest of the patient is served."

"Principle 7. An Ophthalmologist's Responsibility. It is the responsibility of the ophthalmologist to act in the best interest of the patient."

"Rule 3. Research is conducted to provide information on which to base diagnostic, prognostic or therapeutic decisions and/or to improve understanding of pathogenesis in circumstances in which insufficient information exists. Research and innovation must be approved by appropriate review mechanisms (Institutional Review Board; IRB) and must comply with all requirements of the approved study protocol to protect patients from being subjected to or potentially affected by inappropriate or fraudulent research. In emerging areas of ophthalmic treatment where recognized guidelines do not exist, the ophthalmologist should exercise careful judgment and take appropriate precautions to safeguard patient welfare. Appropriate informed consent for research and innovative procedures must recognize their special nature and ramifications. The ophthalmologist must demonstrate an understanding of the purpose and goals of the research and recognize and disclose financial and non-

financial conflicts of interest. Commensurate with the level of his/her involvement, the investigator must accept personal accountability for patient safety and compliance with all legal and IRB-imposed requirements.

American Academy of Ophthalmology. Advisory Opinions of the Code of Ethics (2007), Research and Innovation in Clinical Practice (2017), Informed Consent (2017), and Determining the Need for Medical or Surgical Intervention (2016). San Francisco, CA. American Academy of Ophthalmology. Available at: <http://www.aao.org/about/ethics>.

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P.O. Box 7424 / San Francisco, CA 94120 / 415.561.8500