Video recording of ophthalmic surgery—ethical and legal considerations

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Abstract

Video documenting is increasingly used in ophthalmic training and research, with many ophthalmologists routinely recording their surgical cases. Although this modality represents an excellent means of improving technique and advancing knowledge, there are major ethical and legal considerations with its use. Informed consent to record is required in most situations. Patients should be advised of any risk of identification and the purpose of the recording. Systems should be in place to deal with issues such as data storage, withdrawal of consent, and patients requesting copies of their recording. Privacy and security of neither patients nor health care professionals should be compromised. Ownership and distribution of video recordings, the potential for their use in medical litigation, the ethics and legality of editing and the impact on surgeon performance are other factors to consider. Although video recording of ophthalmic surgery is useful and technically simple to accomplish, patient safety and welfare must always remain paramount.

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Doctors have a professional responsibility to advance medical knowledge. Visual records, from basic diagrams through to photographs, have always been pivotal in medical education, training, and research. Advances in technology in recent decades have enabled the recording of videos to demonstrate all manner of medical and surgical concepts, from normal anatomy to psychiatric pathology. In the wake of the conversion from analog to digital media, there has been increased discussion in the ophthalmic and general surgical literature regarding the best techniques for making successful, high-quality audiovisual recordings. The use of video recording is perhaps most prevalent in surgical specialties. Surgical techniques can be clearly demonstrated, with trainees able to pause and rewind in order to study a particular surgical step in more detail. Surgeons can record their own operations as part of reflective practice, looking at areas that can be developed or improved. Unusual or ground-breaking procedures may be recorded and disseminated so that other clinicians may gain experience and increase knowledge. Intraoperative complications can also be brought to a wider audience, so that lessons can be learned and safety improved for future patients. Furthermore, patients, too, may benefit—either by using online videos to educate themselves about a procedure which they may be undergoing, or through the satisfaction gained from knowing they are contributing to medical and scientific advancement.

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Receiving real-time feedback from video recordings has the long-term benefit of improving surgical performance and thus patient safety and outcomes. Trainees in ophthalmology may find surgical opportunities limited in the early years of training, and it is vital to maximize the educational value of each surgical opportunity. The microscopic nature of intraocular surgery makes it less possible for trainees to learn by assisting, as they might in other branches of surgery. In the event of complications and in the high-pressure operating room (OR) environment, it may be difficult for junior surgeons to appreciate what went wrong and how that could be avoided in the future. Having a video recording that can be reviewed at a later stage, with input from the supervisor in a safe environment, is a useful method of making the most of these situations.

In a large proportion of cases, surgical videos may simply be viewed once and then erased or kept in a surgeon’s personal library. Alternatively, videos may be presented at conferences, published in scientific journals (either online or as still image captures) or disseminated through other, often publicly accessible online fora. Real-time live and interactive broadcasts of operations are also growing in popularity, although these have generated some controversy. Consequently, the audience for such videos has the potential to vary from a single clinician to millions of viewers on popular video-sharing Web sites.

The potential utility of such media is not disputed, but it is not just practical and technological issues that warrant consideration. Ethical and legal implications of making and using video recordings of patients also exist. In creating videos, surgeons may inadvertently expose themselves to an increased risk of medicolegal liability. We shall provide an overview of these considerations in the context of ophthalmic surgery, with reference to guidance from the American Medical Association (AMA) and the General Medical Council of the United Kingdom (GMC). As well as the guidelines set out by regulatory bodies such as the AMA and GMC, individual organizations may have their own local policies. Surgeons must ensure they are aware of and comply with these policies.

Much of what follows is applicable to video recording of any medical procedure. However, with video recording of intraocular surgery being performed routinely by many ophthalmic surgeons (partly due to the ease of fitting a camera to the operating microscope), this review is of particular importance within our specialty. We recognize some disparities between ophthalmic surgery and other surgical specialties regarding the possibility of patient identification. In most cases of video recording of ophthalmic procedures, a camera is attached to the operating microscope and only the eye is visible within the camera’s field. Although one could reasonably argue that there is no possibility of patient identification, we are currently restricted by what regulatory bodies have stated and what medicolegal cases have demonstrated regarding non-opthalmic procedures. We suggest it is prudent to comply with this guidance until more definitive advice is available specifically for ophthalmic surgery.

1. Informed consent

A recent case at the High Courts of Justice (UK) identified major concerns when photographic material was obtained of a female patient intraoperatively without consent, in the context of plastic and cosmetic surgery. Patient consent needs to be reliably and appropriately sought. If any doubt exists, the simplest options are either to seek consent or to decide against pursuing a video or photographic record in the first place.

1.1. Risk of patient identification

The International Committee of Medical Journal Editors has previously stated that consent is not required for video recordings of patients where there is no possibility of patient identification from the recording. The views of the GMC and AMA are quite different, however.

The opinion of the AMA is that, “as filming cannot benefit a patient medically, filming should be done only if the patient being filmed can explicitly consent.” Since 1997, the GMC’s stance has been that before making a video recording that is not part of a patient’s care (e.g., for teaching purposes), it is an ethical requirement that informed consent must be obtained. According to the GMC written consent is desirable, though not essential. If oral rather than written consent is obtained this should be clearly documented in the patient’s notes.

A gray area exists regarding filming procedures where patient identification is felt to be unlikely, but not impossible. The GMC states that “individuals may be identifiable, to those who know them, from minor details that you may overlook.” Therefore, in spite of the improbability of patient identification from videos of ophthalmic surgery, consent is necessary unless making recordings purely of internal organs. Accordingly, recording vitreoretinal surgery is considered exempt from the consent process (c.f. laparoscopic surgery in other surgical specialties). Patient recognition is more likely when recording external eye surgery, for example, oculoplastic procedures.

1.2. Considerations when routinely consenting all patients for video recordings

Some surgeons may routinely record all of their surgery. This has the advantage of capturing any unexpected events which would potentially serve as learning or teaching aids; each patient on the list must have given their prior consent, however. In turn, this requires patients to have been informed of the video recording preoperatively, so they understand why it is being undertaken, who will view the video, storage arrangements, and how it may be used. Patients should be aware that consent may be withdrawn at any time and refusal or withdrawal of consent shall not affect their care. The GMC also suggest that easily comprehensible, written information is provided to patients.

Raju et al. stated in 2006 that one hour of digital video requires 12 gigabytes of storage. Although this has improved with technological evolution, the large amounts of hard disk space required for storage mean it may be common practice to erase most or all videos if no teaching points have arisen. Alternatively, it may be the case that only certain cases are recorded; for example, those predicted to demonstrate a particular technique or challenge. Therefore, if all patients are...