



REVIEW ARTICLE

HOW DO ANESTHESIOLOGIST CREATE VALUE IN OPHTHALMIC CARE?

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ABSTRACT

Innovation has always been fueled by thinkers. William Morton revolutionized dentistry and surgery by utilizing ether as an anesthetic although he was not a doctor. The goal of anesthesia in the beginning was to prevent pain during surgical procedures; without pain, patients would not move, and surgery could be performed successfully. Now a days, the goal of anesthesia is to provide a well-rounded experience that satisfies patient's and surgeon's expectations. In ophthalmic anesthesia, this is especially important as patients are sedated in a particular manner according to the surgery type, the step of the surgery and the surgeon's needs. The anesthetic experience provided in ophthalmic care is directly related to the communication and rapport the anesthesiologist establishes with both patients and surgeons. Anesthesiologists increase value in ophthalmic care by acknowledging the expectations of all those involved and implementing humanizing little details may directly impact the success of a surgical procedure.

INTRODUCTION

Innovation has always been fueled by thinkers. Many times, amateurs, not experts, have been inventors and improvers in a myriad of products and services. This is what William Morton, an American dentist, did. When he was 27 years old, he revolutionized dentistry by performing a painless tooth extraction after administering ether to a patient. He was not a doctor; he spent two years at Harvard Medical School and left without graduating. His passion and curiosity inspired him to innovate. Sixteen days after the painless tooth extraction, a surgeon from Boston, Dr. Bigelow, arranged a demonstration at the Massachusetts General Hospital where they removed a tumor from the neck of a patient without any pain. Back then, the goal of the anesthesia became evident, if patients had no pain during a surgical procedure, they would not move, and the surgery could be performed successfully. Everyone was extremely satisfied with these results. Now a days, things can be a lot different. The goal of anesthesia care is no longer just focused on avoiding pain and patient movement during surgical procedures. Today's medications and technology, allow anesthesiologists to monitor and provide the most efficient care for patients throughout the duration of the surgery, as well perioperatively.

However, patients expect a lot more than just the anesthetic care provided to perform a surgical procedure; today, patients crave a well-rounded experience. Patients are no longer content with only receiving a technical service from their physicians, they desire a humane experience, that recognizes that patients are a biopsychosocial entity. Today's anesthesiologists need to create innovative approaches to compliment anesthesia experience to address patient's needs, especially in ophthalmologic surgery. Unlike, most surgical procedures, in ophthalmologic surgery, patients do not undergo general anesthesia; they are only sedated. The sedation must be superficial enough for patients to follow orders and deep enough for patients to allow surgeons to perform surgery on their eyes. Patients must be calm, tranquil, yet vigilant and pain-free. It is imminent for anesthesiologist, who work with ophthalmologic surgeons, to address all the patient's needs and expectations to improve patient satisfaction. Nevertheless, innovation does not spontaneously occur. If anesthesiologists continue to just sit on their stools with an employee mindset, then anesthesia care will never evolve; it is necessary to implement an entrepreneurial approach to anesthesia to look for ways to do things safer, faster, and better. Only this mindset can impact the anesthesia experience given to patients. The value of an anesthesia experience differs among those involved. To our patients, an optimal anesthetic experience would include a safe and pain free surgery, provided by the best drugs and technology, accompanied by an empathetic care.

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To ophthalmologists, an appropriate anesthetic experience includes adequate surgical conditions to perform a successful operation. Adequate surgical conditions for an ophthalmologic procedure involve a patient who does not talk, does not move, does not snore, has no memory of the surgery, and rapidly recovers from anesthesia. To anesthesiologists the ideal anesthetic experience is the one that fulfills the expectations of both patients and surgeons. The act of administering anesthesia is perceived differently by everyone, as all those involved in an anesthetic experience have different expectations and needs. The balance between expectations and perceptions of what is received, is called satisfaction. But why is satisfaction important and why should we bother measuring patient satisfaction? Satisfaction is of paramount importance as it demonstrates whether the needs of all those involved were met. If satisfaction is not measured it is unlikely that improvement can exist. To maintain and provide a high-quality anesthetic care, we must continue to identify, monitor, and modify factors that may improve patient satisfaction. The anesthesia experience must start with a genuine, caring attitude and an ability to place a patient at ease by professionally answering questions and addressing major concerns. It has been demonstrated that one of the most easily modifiable factors related to patient satisfaction is information. Providing patients videos and printed information regarding their upcoming anesthesia decreases anxiety but may be excessive for most patients (1,2). So, we must be very careful with what we communicate to our patients, as well as how we communicate. The best care is not necessarily the most expensive. The ability to nicely communicate with patients does not impact their hospital check and significantly improves patient satisfaction. While talking to patients before the surgical procedures, holding the patient's hand or arm works wonderfully in allaying their fears.

Unbelievable as it may seem, the simple act of holding a patient's hand during an ophthalmologic surgery, when a patient is sedated, can cause a significant decrease in anxiety as demonstrated in the study by Moon *et al.*, that proved that serum levels of epinephrine, a stress hormone, are lower in patients whose hand was held during surgery (3). Having a little chat with the surgeon about the patient's medical record is key for success. For example, anesthesiologists may ask ophthalmologists the following questions: Is the eye to be operated the patient's only functional eye? Is the surgery technically complex? Do you need the patient to cooperate? Is the patient anxious? This kind of information helps anesthesiologists make decisions about drugs used, preemptive analgesia, patient's position, level of sedation, etcetera. Furthermore, the type of surgery influences the anesthesia experience.

In surgeries such as pterygium removal patient's cooperation is necessary; on the other hand, in a vitrectomy, the patient's absolute immobility is crucial. Furthermore, it is important for anesthesiologist to know the sequence of the surgery as to identify which moments require special attention. Different moments will require different levels of patient consciousness. In anticipation to painful moments, anesthesiologists need to reinforce the dose of opioids; during moments when the eye is not being touched anesthesiologists may have a chance to talk to the patient and ask them how they are doing; for critical moments, anesthesiologists must anticipate and prepare the patient both pharmaceutically and psychologically. Evidently, the anesthetic experience, in ophthalmologic surgery, is directly influenced by the level of attention the anesthesiologist offers both patient and surgeon. Not all anesthesia experience is the same, in ophthalmic care. Anesthesiologist must plan according to the patient's expectations and just as importantly, the surgeon's needs. As novel ophthalmological techniques and devices emerge, the anesthetic experience must be reevaluated to fit the new needs for surgery. In conclusion, the anesthetic experience provided is directly related to the communication and rapport the anesthesiologist establishes with both patients and surgeons. Anesthesiologists can increase value in Ophthalmic Care by acknowledging the expectations of all those involved and implementing humanizing little details may directly impact the success of a surgical procedure.

Glossary Abbreviations

Anesthesia, Anesthesia value, Ophthalmic Anesthesia, Ophthalmic Anesthesia Valuae, Ophthalmic Care

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