



Learning From Others:

Anesthesia
Quality Institute

ANESTHESIA INCIDENT
REPORTING SYSTEM (AIRS)

A Case Report From the Anesthesia Incident Reporting System

Review of unusual patient care experiences is a cornerstone of medical education. Each month, the AQI-AIRS Steering Committee abstracts a patient history submitted to the Anesthesia Incident Reporting System (AIRS) and authors a discussion of the safety and human factors challenges involved. Real-life case histories often include multiple clinical decisions, only some of which can be discussed in the space available. Absence of commentary should not be construed as agreement with the clinical decisions described. Feedback regarding this article can be sent by email to the AIRS Committee: airs@asahq.org. Report incidents or download the AIRS mobile app at www.aqiairs.org.

Case 2017-02: “But she drove a long way to be here!”

A 67-year-old woman presented for gynecological surgery. On arrival to the preoperative holding area, she was holding an ice pack on the right side of her face. During the preoperative interview by the anesthesiologist she removed the ice pack and revealed a large burn on the right side of her face. She recounted that she had travelled 1,000 miles to undergo this surgery, and had accidentally pulled a pot of hot water onto her face when getting ready in her hotel room that morning. She said that she had talked to her home dermatologist who had recommended steroids and silvadine topical cream.

After discussion between the surgeon and anesthesiologist, the case was cancelled, and the patient transferred to the emergency room. The emergency room physician ruled out deliberate abuse and consulted plastic surgery, who treated the burn with topical ointment and a dressing. At the end of the day, the ER and plastic surgery service concluded it was safe to proceed with her surgical procedure.

Discussion:

A common and cognitively difficult decision for the practicing anesthesiologist is whether to cancel a scheduled surgical procedure on the day of surgery. The anesthesiologist must judge whether an abnormality identified during the preoperative interview represents a significant threat to successful surgery. He/she must consider the urgency of the surgical procedure, cope with production pressure, resist financial incentives from the hospital and surgeon to “do cases” and consider the impact on the patient. In the case above, the distance travelled by the patient introduces a layer of complexity: whether the case can be rescheduled expeditiously.

Variation between academic and private practice patterns also contribute to the difficulty of the “cancel” decision. Whereas many academic centers have well-staffed pre-anesthesia clinics that effectively reduce day-of-surgery cancellation rates,¹ community practices with less complex procedures and healthier



patients may operate in a more streamlined fashion, delaying preoperative evaluation until the day of surgery. The 2012 ASA Practice Advisory for Pre-anesthesia evaluation² explicitly recognizes this practice diversity, noting that “For procedures with low surgical invasiveness, the review and assessment of medical records may be done on or before the day of surgery,” while at the same time cautioning that “limitations in resources available to a specific health care system or practice environment may affect the timing of pre-anesthetic evaluation.”

A review of the literature likewise provides discouragingly few uniform cancellation thresholds for identified abnormalities. Should a 75-year-old man presenting for knee arthroscopy be cancelled for a preoperative blood pressure of 180/100? Although the literature supports a general theme that higher preoperative blood pressures are associated with worse outcomes,³ the magnitude of that association is frustratingly elusive,^{4,5} the

benefits of treatment uncertain,⁶ and most guidelines limit recommendations to “weigh benefits and risks.”⁷ Similarly, associations between hypokalemia and adverse cardiac outcomes are well known,⁸ but explicit cancellation thresholds are hard to come by. Another controversy, currently unanswered, is when to cancel for preoperative hyperglycemia. In a recent ASA clinical forum, more than 75 percent of the audience would not cancel cancer surgery for a preoperative glucose above 300 mg/dl.

Studies focusing on cancellation rates themselves fail to clarify matters. Published case cancellation rates vary from 0.2 percent to 26 percent,^{9,10} the reasons for cancellation are diverse¹¹ and even the reason for cancellation may depend on whether the nurse, anesthesiologist or surgeon is answering.¹² Admonishments that most cancellations are preventable do not help,¹³ as they equivocate a case cancellation with a medical error or adverse outcome.

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In the case report above, the anesthesiologist must consider even less well-defined potential risks. Judging the depth of a fresh burn and the degree of subsequent tissue edema is difficult even for experienced burn specialists. Would sufficient swelling occur to endanger the airway postoperatively? Would preventable facial scarring complicate this patient’s surgery? And what if the patient wants to go ahead anyway or the surgery is for cancer? Patient satisfaction may then conflict directly with patient outcome. In this case, the surgeon agreed to cancel the case. But almost every anesthesiologist can recount a story of coming under tremendous pressure to proceed with elective surgery in the face of a preoperatively identified issue that increases perioperative risk. The risk of being labelled “picky” and losing case opportunities is real, as newer literature suggests that 30-50 percent of cancelled cases are never rescheduled.^{14,15} Production pressure is insidious and common.¹⁶ The risk of proceeding must be balanced by the potential benefit to the patient – not benefit to the staff or the facility.

In such circumstances, what can the anesthesiologist do? A strong command of the literature is a good start, as it can establish that the risk of proceeding with a cancellable issue is increased. Departmental or group policies may also help as they prevent “anesthesiologist shopping” behaviors, as might clear triage protocols for potential case cancellations and good relationships with surgical colleagues. Ultimately, the anesthesiologist should recognize that his or her duty is to the patient first and should work to ensure the highest quality and safest perioperative care.

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