

# Anesthesiology Trainees Face Ethical, Practical, and Relational Challenges in Obtaining Informed Consent

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**Background:** Categorizing difficulties anesthesiologists have in obtaining informed consent may influence education, performance, and research. This study investigated the trainees' perspectives and educational needs through a qualitative analysis of narratives.

**Methods:** The Program to Enhance Relational and Communication Skills–Anesthesia used professional actors to teach communication skills and relational abilities associated with informed consent. Before attending the program, participants wrote about a challenging informed consent experience. Narratives were analyzed by two researchers following the principles of grounded theory. The researchers independently read the narratives and marked key words and phrases to identify reoccurring challenges described by anesthesiologists. Through rereading of the narratives and discussion, the two researchers reached consensus on the challenges that arose and calculated their frequency.

**Results:** Analysis of the 39 narratives led to the identification of three types of challenges facing anesthesiologists in obtaining informed consent. Ethical challenges included patient wishes not honored, conflict between patient and family wishes and medical judgment, patient decision-making capacity, and upholding professional standards. Practical challenges included the amount of information to provide, communication barriers, and time limitations. Relational challenges included questions about trainee competence, mistrust associated with previous negative experiences, and misunderstandings between physician and patient or family.

**Conclusions:** The ethical, practical, and relational challenges in obtaining informed consent colored trainees' views of patient care and affected their interactions with patients. Using participant narratives personalizes education and motivates participants. The richness of narratives may help anesthesiologists to appreciate the qualitative aspects of informed consent.

ANESTHESIOLOGISTS routinely obtain informed consent from patients. Nonetheless, anesthesiologists may have difficulty excelling at this reoccurring duty, perhaps because of the intricacies of informed consent.<sup>1–3</sup> Literature on informed consent in anesthesiology has focused on the patient's perspective, particularly their understanding and recall of information, and the clinical practices of physicians.<sup>4–11</sup> Few studies address the experiences and difficulties of anesthesiologists or anesthesiology trainees in obtaining informed consent. The use of narrative is one way to explore anesthesiologists' perspectives on informed consent.<sup>12–14</sup>

As part of an educational program on obtaining informed consent developed by the Institute of Professionalism and Ethical Practice at Children's Hospital Boston, Massachusetts, we had the opportunity to collect and review narratives by anesthesiology trainees on "challenges in informed consent." This study investigated the trainees' perspectives and educational needs through a qualitative analysis of their narratives.

## Materials and Methods

The Institutional Review Board of Children's Hospital Boston reviewed the study and considered it exempt according to criterion 1 (*i.e.*, research conducted in established educational settings involving normal educational practices) under the Health and Human regulations 45 Code of Federal Regulation 46. All participants gave their written consent for their narratives and questionnaire data to be used for research purposes.

### Data Collection

Anesthesiology residents and fellows from several Boston-area hospitals voluntarily participated in one of six separate workshops of the Program to Enhance Relational and Communication Skills–Anesthesia offered by the Institute for Professionalism and Ethical Practice between November 2006 and November 2007 at Chil-

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dren's Hospital Boston. A detailed description of the program is described elsewhere.<sup>15</sup> A week before each workshop, participants were requested to "Write about an informed consent experience with a patient/family that you found particularly challenging." Narratives were used not only for research purposes but also as an educational strategy within the Program to Enhance Relational and Communication Skills. Faculty facilitators read the narratives before the workshop to allow them to customize each program with real-life examples and observations from the participants themselves. Participants also completed prequestionnaires that included demographic characteristics and self-appraisal of communication skills and relational abilities.

### Data Analysis

Narratives were qualitatively analyzed according to the principles of grounded theory.<sup>16,17</sup> This research methodology entails an inductive process of analysis whereby qualitative data are organized into themes that emerge from the data rather than being imposed *a priori*. The aim of grounded theory is to identify reoccurring themes that describe the content analyzed and provide a meaningful summary of the data. Analysis was conducted by two researchers (G.L. and E.C.M.) who had previous experience with qualitative analysis<sup>18,19</sup> and whose training is in health education and clinical psychology. The researchers independently read all of the narratives to identify issues experienced by the anesthesiologists and held a joint meeting to compare the issues. Through rereading of the narratives and face-to-face discussion, the researchers reached consensus on the issues that arose, refined their meaning, and grouped them into broad challenges faced by the anesthesiologists. Two practicing anesthesiologists (D.B.W. and N.J.S.) read the narratives and provided feedback on the veracity of the themes. The two researchers then independently coded all of the narratives according to the broad challenges and their component issues. Given the real-life complexity of the informed consent process, most narratives described and were coded for multiple challenges. Finally, the two researchers met to discuss and resolve the disagreements to calculate the frequency of each challenge. The frequency of each challenge was calculated based on the number of times the challenge occurred divided by the total number of narratives.

## Results

Of the 57 participants who attended the Program to Enhance Relational and Communication Skills-Anesthesia workshops, 39 (68%) wrote and returned narratives. The mean age of these respondents was 30.7 yr; 77% were in anesthesia residency (clinical anesthesia [CA]-1 through CA-3), and the remainder were anesthesia fellows. Table 1 reports the demographic characteristics of

the participants who submitted narratives. There were no significant demographic differences between participants who did or did not submit narratives.

Analysis of the narratives by the two researchers led to the identification of three broad challenges facing anesthesiologists in obtaining informed consent: ethical challenges, practical challenges, and relational challenges. Table 2 summarizes the three challenges and their corresponding component issues. Illustrative quotes from the narratives are reported for each challenge. Twenty-two narratives (56%) described more than one challenge. For example, a narrative might describe ethical challenges related to honoring the patient's wishes, practical challenges related to the amount of information to provide, and relational issues of mistrust based on previous healthcare experiences.

### Ethical Challenges

In 67% of the narratives (26 of 39), anesthesiologists described ethical challenges. Ethical challenges encompassed a range of issues, including patient wishes not honored, patient and family wishes conflict with medical judgment, patient decision-making capacity, and upholding professional standards.

**Patient Wishes Not Honored.** The most common ethical challenges were situations in which the patient's wishes regarding anesthesia or surgery were not honored. In most instances, anesthesiologists described patients as competent and with the capacity to make decisions, but family members disagreed and pressed patients to act in opposition to their wishes.

I explained to the patient [a woman in labor] the benefits and complications of an epidural placement and the lady was more than willing to sign the consent. Just as she was about to do it, the husband walked into the room, argued with his wife and refused to have her sign the consent. He told me that some friends of his (who are not in the medical field) have told him epidurals are "dangerous and unnecessary" and that he will not have his wife get one. My attempts to reason with him were futile. The patient was in a lot of pain and clearly wanted to have the epidural put in, but did not want to offend the husband by signing the consent against his wishes.

Other anesthesiologists described ethically challenging situations in which disagreement between the medical team and the patient's wishes led to the enlistment of family members to "push" for the procedure.

I was told she was 82 and otherwise healthy besides her acute type 1 [thoracic aneurysm] dissection, but oh yeah—her son is coming in from home to give consent. I asked if she was intubated or demented or otherwise unable to give consent, and I was told that she was simply refusing so they were getting the son in. Turns out her husband had died on the table 6 months earlier during a CABG [coronary artery bypass graft]. She knew she did not want to go to the heart room and go on bypass, and felt it was just her time to go and she accepted this . . . She was completely competent and making sense, but the surgeons did not agree with her decision so they felt that they could have her son sign consent anyway. There was no way I was going to take her to the operating room unless she wanted to go . . . She apparently stood her

**Table 1. Participant Demographic Characteristics**

Characteristic	Description	Total Participants, n = 57	Participants Who Submitted Narratives, n = 39
Academic level	CA-1	17 (30%)	10 (26%)
	CA-2	18 (31%)	14 (36%)
	CA-3	9 (16%)	6 (15%)
	Fellow	13 (23%)	9 (23%)
	Valid n	57	39
Years of experience	Mean (SD)	3.24 (1.93)	3.21 (2.00)
	Valid n	55	38
Age	Mean (SD)	30.67 (3.66)	30.69 (3.38)
	Valid n	57	39
Sex	Female	22 (39%)	16 (41%)
	Male	35 (61%)	23 (59%)
	Valid n	57	39
Ethnicity	White	28 (51%)	22 (58%)
	Hispanic	1 (2%)	1 (3%)
	African	1 (2%)	0
	Asian	21 (38%)	13 (34%)
	Other	4 (7%)	2 (5%)
	Valid n	55	38
Previous learning opportunities	Coursework	5 (11%)	2 (7%)
	Practicum	10 (23%)	7 (25%)
	Residency	14 (32%)	9 (32%)
	Other	2 (4%)	1 (4%)
	Multiple of the above	9 (21%)	7 (25%)
	None	4 (9%)	2 (7%)
Number of difficult informed consent discussions led	Valid n	44	28
	None	3 (6%)	2 (5%)
	1–10	39 (71%)	26 (71%)
	11–24	9 (16%)	6 (16%)
	25+	4 (7%)	3 (8%)
	Valid n	55	37
Had a mentor/role model	Yes	20 (36%)	16 (42%)
	No	36 (64%)	22 (58%)
	Valid n	56	38

CA = clinical anesthesia [year].

ground and said “I don’t know why you nice kids are here from anesthesia because I am not having surgery tonight.” In the end, common sense prevailed and she did not have her surgery but it blew my mind that so many individuals from so many different teams allowed it to go as far as to call in an emergency heart team in the middle of the night.

**Patient and Family Wishes Conflict with Medical Judgment.** Particularly difficult ethical challenges stemmed from conflicts between the patient’s and family’s wishes and medical judgment. In these conflictual

situations, some anesthesiologists proceeded according to their best medical judgment, whereas others respected the patient’s decision as much as possible even if the choice was medically questionable. Here, the anesthesiologist sought consent for a laparotomy for an obstructing duodenal tumor in a woman whose history included significant temporal–mandibular joint problems.

She refused to sign consent unless I could guarantee her that I would not open her mouth. She also refused to sign for an “awake” intubation. I tried for over 2 hours to discuss rationally what her operation entailed and how we would do everything in our power to prevent opening her mouth . . . We eventually had to have a conference with her, her husband, the surgeon, the attending anesthesiologist, and myself. She eventually had an uneventful awake, nasal fiberoptic intubation.

**Patient Decision-making Capacity.** Anesthesiologists reported dilemmas regarding the patient’s capacity to make decisions regarding his or her own health. In some situations, there were significant doubts about the patient’s ability to understand and provide informed consent due to intoxication or mental problems. In this case, the anesthesiologist described the experience of meeting a homeless schizophrenic man

**Table 2. Challenges and Corresponding Issues in Obtaining Informed Consent**

Ethical challenges
Patient wishes not honored
Patient/family wishes conflict with medical judgment
Patient decision-making capacity
Upholding professional standards
Practical challenges
Amount of information
Communication barriers
Time limitations
Relational challenges
Anesthesiologist’s competence questioned
Mistrust
Misunderstandings



in the preoperative holding area for emergency exploratory laparotomy.

He had been "seen and consented" by the overnight team . . . I met the patient in the holding area, where [he] accused me of . . . trying to kill him. He also said that I was "crazy" if I thought he wanted the surgery. He didn't know where he was . . . I have always wondered if he was really giving informed consent.

Here, the anesthesiologist was concerned that the patient had been deemed incompetent inappropriately, and was unsure how to respond to the patient's expressed wishes.

On a preoperative assessment for a CABG on a gruff 81 yr old patient with a history of COPD [chronic obstructive pulmonary disease] after 100 pack years of smoking, I asked him if he wanted help quitting smoking. "I'll quit smoking the day I die," he responded. Now POD [postoperative day] 2 s/p [status post] CABG, this patient was in the SICU [surgical intensive care unit] in respiratory distress with a rising  $Paco_2$  [arterial carbon dioxide tension] and . . . becoming intermittently somnolent. I was paged to intubate the patient after a psychiatry consult had deemed him incompetent to make decisions for himself and after his son had been called authorizing his being emergently intubated. As I approached the patient, he expressed with the same conviction I noticed in his personality preoperatively: "I don't want that damn breathing tube! Let me die." Should I have pushed the etomidate and performed the intubation?

**Upholding Professional Standards.** Several anesthesiologists described ethically troubling situations in which they felt unable to meet what they considered adequate professional standards related to fully informing the patient or family. Some expressed considerable uncertainty about what the legal and ethical requirements were relative to informed consent and described feeling uneasy or unprofessional in their conduct. In this case, a patient and his family asked the anesthesiologist to refrain from discussing details about the risk of anesthesia for his coronary artery bypass graft.

The patient was an alert and oriented man, who seemed to have good judgment of his condition. He was wishing to simply sign the consent and preferred not knowing much about what will be done to him. His family was at the bedside, and fully approved his wishes. The above scenario put me at a dilemma regarding my requirement and obligation to fully discuss whatever I am obtaining an informed consent for, and at the same time respecting the patient's wishes.

This anesthesiologist was concerned that pain affected the parturient's ability to actively engage in the informed consent process.

The patient said she would try natural birth. Later that evening, when the patient's labor had progressed, she asked to have an epidural. At that time, I went over the consent with her which she signed . . . I felt that it was definitely not the ideal situation for the consent . . . by the time the patient actually signed the consent, I think that she was in too much pain to really pay attention to what I was explaining to her about the consent, risks of the procedure.

### *Practical Challenges*

In 56% of their narratives (22 of 39), anesthesiologists identified practical challenges during the informed con-

sent process, such as the amount of information to provide, communication barriers, and time limitations.

**Amount of Information.** Many respondents described uncertainty about the amount of information that should be provided during the informed consent process. In many cases, anesthesiologists were uncertain how much information should be given and believed that the patient and family wanted too little or too much information. These practical challenges about the amount of information to provide were often associated with ethical concerns about respecting the patient wishes and upholding professional standards, of which the trainees were also unclear.

Whenever I mentioned the possible risk of anesthesia they would raise their eyebrows and say "nausea???" or "sore throat???" and then I would have to explain the side effects of the drugs and breathing tube and then they would say "drugs?? what kind of drugs??" and "breathing tube??" In a sense I kept digging myself deeper and deeper. I felt obligated to really inform them well but at the same time, this probably made the experience worse for both the patient and me as the patient probably would have been better off knowing less rather than more.

[The little girl's] mother, a pediatrician, wanted me to give her exact statistics on the complication rate of general anesthesia in children, the incidence of permanent complications from thoracic epidurals placed in children while asleep as well as the incidence of wet taps and how the complication rates of these procedures at [our hospital] compared to the national average. I told her I couldn't give her exact numbers, *etc.* . . . it was a painful discussion. Should I be able to quote these numbers?

**Communication Barriers.** Anesthesiologists described practical barriers to communication that affected the ability to obtain informed consent, such as patient somnolence and language differences. Sometimes the problem was as simple as a patient receiving medication before the informed consent discussion. Other times, it was more complicated, as in the following case of a Russian-speaking patient and her daughter who disagreed about the need for a lumbar epidural steroid injection.

The patient was Russian speaking only, and she was accompanied by her daughter (who spoke English as well) and the hospital interpreter. In discussing with the patient the procedure and whether or not her pain would benefit, the daughter became very intrusive in the conversation. The patient seemed unsure whether or not her pain was severe enough to undergo a procedure . . . The interpreter was fairly quiet throughout the incident. I found it very challenging to be dealing with 2 people with somewhat different agendas, especially when there is a language barrier involved. We ended up getting the interpreter more involved and really working out the patient's symptoms.

The limited availability of medical translators also posed challenges to gaining informed consent and providing patient care.

The woman was in labor and was in pain. Her husband spoke a little English and was insisting that I place an epidural to relieve his wife's pain. Since I was unable to explain the risks and benefits of the procedure, I refused to place an epidural until I was able to get in touch with a Hmong translator. By the time we had the interpreter on the phone, the woman started pushing and deliv-

ered the baby. I felt bad that we were unable to relieve her pain but without informed consent it would have been inappropriate to place the epidural.

**Time Limitations.** Anesthesiologists frequently described time pressure when obtaining informed consent, as in this case of the mother whose sons had sustained injuries in a motorcycle accident.

Because I knew that this was an emergency situation, I briefly explained to her [the mother] the risks for anesthesia and gave her the consent forms for both patients [her two sons]. I knew that she had already signed the consent for surgery and the OR was waiting for the patients. Instead of signing the consent she went into a lengthy discussion of what might happen to her sons because of complications related to anesthesia and why they cannot be kept awake during surgery. She went on and on for at least 20 minutes and I felt very uncomfortable that she could not understand that each minute that she wasted diminished her sons' chances of survival. When I told her that this is an emergency and that they cannot be kept awake, she signed the consent forms but seemed very angry.

Other times, anesthesiologists described frustration with time being wasted and the consent process simply taking too long.

After about 30 minutes of attempting to get more information from the patient about his previous experience . . . I finally resolved to leaving a note in the patient's chart about his concerns and letting the morning anesthesia team obtain informed consent.

### *Relational Challenges*

In 41% of the narratives (16 of 39), anesthesiologists described relational challenges, such as questions about the anesthesiologist's competence, mistrust associated with previous negative experiences, and misunderstandings between physician and patient/family.

**Anesthesiologist's Competence Questioned.** Anesthesiologists described informed consent situations where their competence was questioned both by their patients and by other medical staff. Often times, anesthesiologists noted their young age and entry level of professional training as associated with immediate patient perceptions of incompetence.

During a preoperative interview, I was talking to an inpatient and he asked me if I had ever done a consent before. I said, "Yes" and he told me that it seemed like I didn't know what I was talking about. I was quite surprised because I . . . thought my explanation was straightforward and easy to understand.

I greet the patient who then remarks how young I look at which point I explain that I am a resident—here we go. She then states that she does not want any fresh med school grads . . . because some "newbee" screwed up last time and caused a lot of nausea and vomiting at the end of the case.

**Mistrust.** Some participants described challenging situations where the physician-patient relationship was compromised because of previous negative healthcare experiences and mistrust toward healthcare professionals. As a result, some anesthesiologists described the need for patients and families to "test" the anesthesiologist's presence and competence.

Immediately after I had introduced myself, he [the patient] asked if I was the anesthesiologist who would be administering the anesthesia. He stated that he had a "very bad experience" with the last operation and did not "trust the anesthesiologist." When I replied that I wasn't going to be administering the anesthetic, he immediately refused to further speak with me. He wanted to speak only to the anesthesiologist who would be performing on his case.

In another narrative, a father worked on his laptop as the anesthesiologist performed the preoperative interview, including informed consent, with his son and wife. The father began to participate only when the anesthesiologist sought to have the anesthesia consent document signed.

At this point, the father asked me a series of questions regarding anesthesia-related statistics . . . Though reasonable questions to ask, I felt a bit disturbed by his questions. Was he challenging our plan? Was he questioning our fund of knowledge? When my answers did not seem to satisfy him, I offered to have my attending speak to him further. He quickly refused my offer, making me wonder the true reason for his questions.

**Misunderstandings.** In several narratives, anesthesiologists described situations in which they and the patient or family were not "on the same page" during the informed consent discussion. These interactions generated confusion, anger, and frustration for patients, families, and anesthesiologists.

I went to the CCU [coronary care unit] to preop a gentleman for a cardiac procedure. I introduced myself and he was agreeable to chatting with me. I asked our usual questions for a quick H&P [history and physical], and then was explaining the anesthetic. As I was speaking about the risks of anesthesia, he began saying repeatedly, "Thank you very much, thank you very much . . ." His tone became more belligerent and he appeared angry. I'm not sure what I had said that offended him. He wouldn't let me finish going over the consent or explain why I was talking about risks and benefits of anesthesia by repeatedly saying "thank you very much" over and over again. I just had him sign the consent and left his room quickly.

Recently I had a patient who was scheduled to have a breast bx [biopsy] under MAC [monitored anesthesia care], and when I introduced myself as a resident she requested that my attending perform anything that is "hands on." I replied by explaining the anesthetic that was planned for her, and also assured her that our attending physicians are routinely present for the induction of all anesthetics, and she accepted this but firmly repeated her request that anything "hands on" be performed by my attending. I asked if she would prefer to have him place the IV [intravenous catheter], and she said, "Oh, no you can do that." In my mind, I'm thinking that for this simple MAC case, the IV is the most invasive thing we will do, so I was confused by what she meant by "hands on," and I also wanted to confirm that she understood my explanation of the anesthetic plan. When I again tried to clarify what she meant, she became very irritated with me, and continued to repeat the same statement. By this time, my attending arrived, and after he basically reiterated what I had told her, she calmed down . . . The case went smoothly, but I felt like we were never quite on the same page during the informed consent.

**Expression of Negative Emotions.** Anesthesiologists explicitly described negative emotions expressed by either the patient/family or the physician in 51% of the narratives (20 of 39). Patients and family members were described as exhibiting irritation, anxiety, frustration,

and anger. Anesthesiologists reported feelings of discomfort, uneasiness, frustration, and being challenged.

## Discussion

Ethical, practical, and relational challenges in informed consent color anesthesiologists' views of current and future patients, their practice, their profession, and themselves. Understanding these perceptions may help anesthesiologists to interact with their patients.

Because the informed consent conversation rarely occurs in front of others, and because the signed consent is often considered an indicator that the process has been a success, difficulties with informed consent may be unrecognized or ignored, to the detriment of patient and physicians.<sup>20</sup> Training programs may wish to offer guidance about identification and management of potential ethical challenges. A particularly relevant area is balancing professional standards with patient and family preferences for the extent of information about the risks and benefits of anesthesia. Brainstorming solutions for practical challenges, such as time limitations and communication barriers, may also be fruitful. By inviting trainees to bring forth their own cases for discussion, training programs not only identify those areas in need of further education, but also generate learner-centered motivation to study the problems.<sup>12,21</sup>

Informed consent difficulties may lead to patient dissatisfaction. While patient dissatisfaction is undesirable in and of itself, patient dissatisfaction with caregivers is a risk factor for litigation.<sup>22</sup> Improved competence in the process of obtaining informed consent will likely increase patient satisfaction. In one study, physicians who had lower patient satisfaction scores were more likely to have patient complaints and legal action filed against them.<sup>22</sup>

The angst associated with these narratives is concerning. One reason this article includes such extensive narratives is to help convey the participants' disquiet. Being unable or unsure how to handle situations increases stress on physicians, as does unpleasant interactions and "quarrels" with patients. Frequently feeling ill-equipped can lead to burnout, which is understood as "a prolonged response to chronic emotional and interpersonal stressors on the job, and is defined by the three dimensions of exhaustion, cynicism, and inefficacy."<sup>23</sup> Burnout engenders behaviors that decrease patient safety and satisfaction.<sup>24</sup> Educational experiences that address these concerns can bring these concerns to light and may increase competence and mindfulness that may mitigate stress, forestalling the burnout process.

Several limitations of the study need to be acknowledged. Participants were anesthesiology trainees from one geographical area, albeit from different institutions. The qualitative methodology of the study sheds light on the identification of the range of challenges and issues facing anesthesiology trainees, but did not elucidate the

severity of the problems. Although these narratives were provided by trainees ranging from CA-1 to fellows, the recognition of our own experiences in the trainee narratives suggests to us that many of these problems also plague attending anesthesiologists. Another concern may be the validity of the narratives. More specifically, did the events happen the way the participants described? We see little reason for participants to invent narratives. Although they certainly might have misunderstood the situation, the narratives impressed us with their face validity. Even if some of the narratives were based on misunderstood situations, the misunderstanding offers an opportunity for self-reflection and learning that might help the anesthesiologist better manage future situations.

We suspect that some readers have ready answers to the concerns posed in these narratives. In hindsight, perhaps, the answers are easy, but it takes forethought, skill, and readily available solutions to be able to manage these problems in the moment, in the same way that it takes forethought, skill, and readily available solutions to manage an airway crisis. These challenges are simultaneously emotional, interpersonal, practical, and educational. Their solutions, then, are a matter of insight, manner, factual knowledge, and practice.

Kopp and Shafer<sup>25</sup> wrote, "The quality and quantity of anesthesiologists' communications has a bearing on the values, outcomes and standards of their professional work." A training program that encourages thoughtful reflection on interactions and on perceptions of those interactions should lead to decreased conflict, improved communication, happier anesthesiologists, more satisfied patients, and better care.

## References

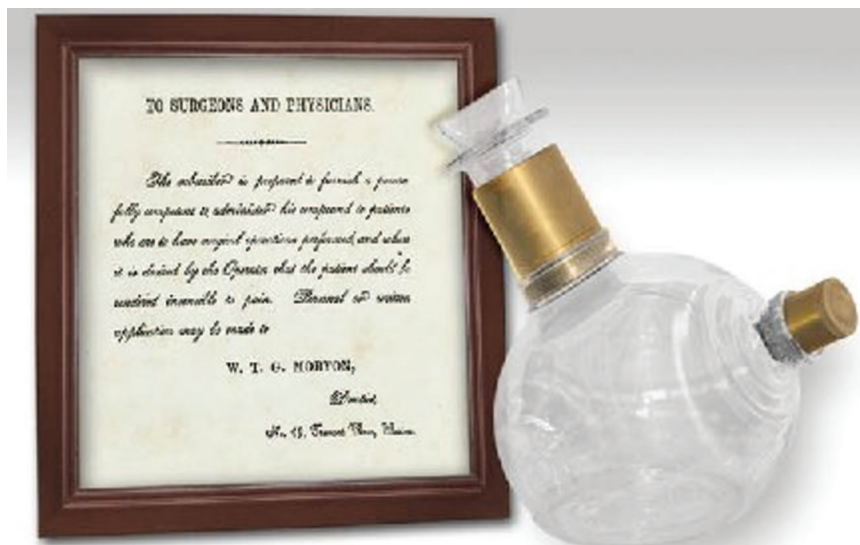
1. Waisel DB, Truog RD: Ethical and legal aspects of anesthesia care, Miller's Anesthesia, 6th edition. Edited by Miller RD. Philadelphia, Elsevier Churchill Livingstone, 2005, pp 3175-98
2. Kelly GD, Blunt C, Moore PA, Lewis M: Consent for regional anaesthesia in the United Kingdom: What is material risk? *Int J Obstet Anesth* 2004; 13:71-4
3. Liang BA, Lagasse RS: Listening to the patient: Potential medical battery in oral intubation. *J Clin Anesth* 2005; 17:75-7
4. Benbassat J, Pilpel D, Tidhar M: Patients' preferences for participation in clinical decision making: A review of published surveys. *Behav Med* 1998; 24:81-8
5. Deber RB, Kraetschmer N, Irvine J: What role do patients wish to play in treatment decision making? *Arch Intern Med* 1996; 156:1414-20
6. Kain ZN, Kosarussavadi B, Hernandez-Conte A, Hofstadter MB, Mayes LC: Desire for perioperative information in adult patients: A cross-sectional study. *J Clin Anesth* 1997; 9:467-72
7. Kain ZN, Wang SM, Caramico LA, Hofstadter M, Mayes LC: Parental desire for perioperative information and informed consent: A two-phase study. *Anesth Analg* 1997; 84:299-306
8. Litman RS, Perkins FM, Dawson SC: Parental knowledge and attitudes toward discussing the risk of death from anesthesia. *Anesth Analg* 1993; 77:256-60
9. Deber RB, Kraetschmer N, Urowitz S, Sharpe N: Do people want to be autonomous patients? Preferred roles in treatment decision-making in several patient populations. *Health Expect* 2007; 10:248-58
10. Levinson W, Kao A, Kuby A, Thisted RA: Not all patients want to participate in decision making: A national study of public preferences. *J Gen Intern Med* 2005; 20:531-5
11. Brull R, McCartney CJ, Chan VW, Liguori GA, Hargett MJ, Xu D, Abbas S, El-Beheiry H: Disclosure of risks associated with regional anesthesia: A survey of academic regional anesthesiologists. *Reg Anesth Pain Med* 2007; 32:7-11



12. Fiscella K, Roman-Diaz M, Lue BH, Botelho R, Frankel R: "Being a foreigner, I may be punished if I make a small mistake": Assessing transcultural experiences in caring for patients. *Fam Pract* 1997; 14:112-6
13. Epstein RM: Mindful practice. *JAMA* 1999; 282:833-9
14. Levine RB, Kern DE, Wright SM: The impact of prompted narrative writing during internship on reflective practice: A qualitative study. *Adv Health Sci Educ Theory Pract* 2008; 13:723-33
15. Browning DM, Meyer EC, Truog RD, Solomon MZ: Difficult conversations in health care: Cultivating relational learning to address the hidden curriculum. *Acad Med* 2007; 82:905-13
16. Pope C, Ziebland S, Mays N: Qualitative research in health care: Analysing qualitative data. *BMJ* 2000; 320:114-6
17. Strauss AL, Corbin JM: *Basics of Qualitative Research: Grounded Theory Procedures and Techniques*. Newbury Park, California, Sage, 1990
18. Lamiani G, Meyer EC, Rider EA, Browning DM, Vegni E, Mauri E, Moja EA, Truog RD: Assumptions and blind spots in patient-centredness: Action research between American and Italian health care professionals. *Med Educ* 2008; 42:712-20
19. Meyer EC, Ritholz MD, Burns JP, Truog RD: Improving the quality of end-of-life care in the pediatric intensive care unit: Parents' priorities and recommendations. *Pediatrics* 2006; 117:649-57
20. Steinemann S, Furoy D, Yost F, Furumoto N, Lam G, Murayama K: Marriage of professional and technical tasks: A strategy to improve obtaining informed consent. *Am J Surg* 2006; 191:696-700
21. Newman P, Peile E: Valuing learners' experience and supporting further growth: Educational models to help experienced adult learners in medicine. *BMJ* 2002; 325:200-2
22. Stelfox HT, Gandhi TK, Orav EJ, Gustafson ML: The relation of patient satisfaction with complaints against physicians and malpractice lawsuits. *Am J Med* 2005; 118:1126-33
23. Maslach C, Schaufeli WB, Leiter MP: Job burnout. *Annu Rev Psychol* 2001; 52:397-422
24. Leiter MP, Maslach C: Six areas of worklife: A model of the organizational context of burnout. *J Health Hum Serv Adm* 1999; 21:472-89
25. Kopp VJ, Shafer A: Anesthesiologists and perioperative communication. *ANESTHESIOLOGY* 2000; 93:548-55

## ■ ANESTHESIOLOGY REFLECTIONS

### W. T. G. Morton's "Letheon" Advertisement



After successfully demonstrating in 1846 the use of diethyl ether for surgical anesthesia, William T. G. Morton (1819–1868) adulterated his anesthetic agent with oil of orange, branded the mixture "Letheon," and dreamed of collecting royalties from future etherizers. In this advertisement, Morton notes that the "subscriber is prepared to furnish a person fully competent to administer his compound to patients who are to have surgical operations performed, and when it is desired by the Operator that the patient should be rendered insensible to pain. Personal or written application may be made to W. T. G. Morton, Dentist . . ." (Copyright © the American Society of Anesthesiologists, Inc. This image appears in the *Anesthesiology Reflections* online collection available at [www.anesthesiology.org](http://www.anesthesiology.org).)

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