

## ETHICS CASE

### How Should Trauma Patients' Informed Consent or Refusal Be Regarded in a Trauma Bay or Other Emergency Settings?

Commentary by Ashley Suah, MD, and Peter Angelos, MD, PhD

#### Abstract

The precipitous and unexpected nature of trauma requires training health care practitioners to think and act quickly, according to the best medical interest of the patient. The urgency of treatment for trauma patients, who frequently have temporary alterations in their abilities to make autonomous and competent decisions, often results in *presumed* consent for medically necessary treatment. Academic trauma centers use protocol-based management of injuries to facilitate their simultaneous evaluation by multiple clinicians and to avoid delays in treatment, ensuring that trauma patients receive the best possible care. In this article, we will discuss the issues of deferred informed consent and surgical education as they relate to trainees' graduated responsibility in the trauma bay.

#### Case

Mr. X is a 39-year-old man rushed to a North Carolina teaching hospital after a motor vehicle collision. He was the unrestrained driver of a semi that collided with a utility pole. First responders at the scene found him approximately 50 feet away from the vehicle lying in a ditch.

On initial presentation to the trauma bay, Mr. X has a blood pressure of 90/52, heart rate of 123, and an oxygen saturation of 87 percent despite receiving 100 percent oxygen via facemask—the maximum concentration of supplemental oxygen that can be delivered. He is in obvious respiratory distress. Physical exam is notable for flaccid paralysis, which might suggest that Mr. X has a spinal cord injury. The senior surgical resident, Dr. S, performs the primary and secondary survey, standardized exams used to identify and manage life-threatening injuries in the trauma bay. Mr. X's respiratory distress and oxygen saturation levels become worse, so Dr. S prepares the trauma team for emergent intubation and mechanical ventilation. Although an intubation would normally be performed by the in-house attending trauma surgeon, Dr. F, she is currently unavailable as she is responding to another patient's cardiac arrest. Dr. S is comfortable intubating Mr. X, and the team prepares to assist her. As Dr. S quickly explains this plan to Mr. X,

who appears frightened and does not seem to agree, he states, “Don’t intubate me,” and his comment is heard by the entire trauma team.

The respiratory therapist continues to prepare the ventilator and obtain tools for intubation. She points toward the monitor at Mr. X’s diminishing oxygen saturation level, now 85 percent. “He’s hypoxic—we can’t *not* intubate. He’ll die if we don’t.” She passes the laryngoscope to Dr. S, who wonders what to do.

### **Commentary**

The practice of informed consent is a legal concept based on the belief that adults of sound mind have the right to bodily self-determination [1, 2]. Outside of emergent circumstances, it is the physician’s responsibility to provide a medical recommendation, explain the nature of the recommended intervention, and discuss its risks and benefits as well as possible alternatives to treatment [1-3]. Patients must have been offered an explanation of the recommended treatment and its associated risks for patients to be considered informed; they should be provided enough information to agree to or refuse a procedure [2, 3]. The process of obtaining informed consent should be a meaningful conversation between a physician and patient rather than simply have as its goal a signature on a document.

Patient understanding relies upon adequacy of physician disclosure, the patient’s mental status and [decision-making capacity](#) at the time of the discussion, and social determinants of health such as education. Given the realities of providing emergency care to patients, it is not surprising that informed consent discussions are often rushed, abbreviated, or completely removed from acute settings in order to expedite medical treatment [4].

There are very few exceptions to the need for consent to medical treatment. One of the well-known reasons *not* to obtain informed consent is a [medical emergency](#). In the setting of acute or traumatic injury, patient understanding is easily jeopardized by fear, anxiety, pain, medications, and physiological derangement, resulting in unreliable decision making. Delirious or unconscious patients lack capacity and cannot provide consent. In these cases, it is a physician’s duty to seek consent from a suitable surrogate. However, in some cases, even getting consent from a surrogate is excused if the surrogate is not immediately available and waiting to find the surrogate would cause harm to the patient by delaying care [3]. Thus, responsibility is placed upon the physician in these cases to act in the patient’s best interest and proceed with the appropriate medical interventions. It is important to recognize that physicians’ personal beliefs and possible concerns related to litigation can influence the decisions they make for their patients. However, in emergency situations, when there might be no available surrogate decision makers, the physician must act in a manner that will provide the maximum possible benefit and the best outcome for the patient.

### **Should Mr. X Be Intubated?**

Mr. X arrives in the trauma bay in shock. His injuries and poor clinical status upon arrival are concerning and appropriately alert the trauma team that he has likely sustained multiple life-threatening injuries. However, based on his age and profession, we can assume that he was likely an independent, fully functional person prior to this injury. Considering functional outcomes, we can expect him to make a full recovery following resuscitation, operative intervention, and post-operative physical therapy. With consistent social support and posttraumatic counseling, we can hope for meaningful emotional and mental restoration as well.

Following her initial evaluation, Dr. S quickly recognizes that Mr. X is demonstrating signs of impending respiratory failure. Securing an adequate airway is one of the most essential skills a trauma surgeon can master, as without the ability to reliably ventilate or oxygenate patients, severe disability and death are inevitable. Progressive hypoxia despite receiving the highest dose of supplemental oxygen, accompanied by hypotension, tachycardia, and signs of a possible spinal cord injury, provide Dr. S with enough clinical substantiation to intubate Mr. X.

Dr. S is confident in her decision to proceed with intubation until Mr. X declares that he does not want to be intubated. There is no time to explore Mr. X's refusal of this intervention and, unfortunately, there are no accompanying family members or other surrogate decision makers present to speak on the patient's behalf. Dr. S is conflicted, as she wishes to respect Mr. X's autonomy but also feels a responsibility to save his life.

In this specific instance, the patient's understanding of his critical clinical status must be called into question. Based on his blood pressure and heart rate, he is in stage III shock, meaning that he has likely lost 30-40 percent of his total blood volume. His respiratory status is seriously compromised, and it has been well established that at this stage of shock patients are anxious and confused [4-6]. If Dr. S believes that the complexity of Mr. X's current injuries have left him without decisional capacity, she should proceed with intubation in order to save his life.

In situations in which there is uncertainty or disagreement among trauma team members, as in this case, progression in care should be guided by trauma protocols. Application of trauma protocols can streamline decision making in highly stressful patient encounters. These protocols are implemented in an effort to standardize the evaluation and treatment of severely injured patients. The goal is to avoid errors in diagnosis while facilitating efficient, yet thorough, assessment. These protocols are learned and practiced by all members of the trauma team (e.g., respiratory therapists, physicians, and nurses) in order to allow concurrent evaluation by multiple care professionals upon a patient's arrival in the trauma bay. The collaborative goal of the

interdisciplinary trauma team should always be to provide the patient with the best possible outcome.

### **Challenges in Training Surgeons to Become Competent Decision Makers**

Victims of trauma represent a physically, emotionally, and mentally vulnerable population whose life-threatening conditions jeopardize self-determination. Providing quality care for patients who have sustained traumatic injuries, specifically in the setting of academic trauma centers where junior and senior surgical residents are trained to become confident and competent decision makers, poses special ethical challenges. Trauma surgery affords [surgical trainees](#) unique opportunities to develop clinical reasoning skills and technical proficiency in stressful, time-sensitive situations. Academic medical programs mandate that attending physician supervision is required at all resident levels, while acknowledging the significance of practicing graduated responsibility [7, 8].

At our institution, when critically ill patients arrive in the trauma bay, the residents are responsible for conducting the examination, ordering tests, resuscitating the patient, and performing any necessary immediate procedures, such as chest tube or central line placement. Typically, a senior resident who has previously demonstrated proficiency in these areas will serve as the “team leader” by directing the other members of the trauma team through resuscitation and performance of procedures. Opportunities to make independent decisions are imperative to the development of surgical residents; however, adult level I trauma centers require that an attending trauma surgeon actively participate in all major therapeutic decisions and in management of all critically injured patients [9]. Thus, as trainees are running the trauma codes, an attending trauma surgeon is also present in the trauma bay, overseeing all of the resident’s instructions as well as performance of all of the procedures. Having an attending physician present to provide direct supervision ensures patient safety and facilitates opportunities for immediate feedback for trainees. Attending physicians might step in to take over a procedure or offer an additional option for medical management to ensure the best outcome for the patient. As surgical residents demonstrate acquisition of sound surgical judgment, the extent of attending physician supervision decreases, fostering resident autonomy.

Despite the 24-hour presence of attending trauma surgeons at academic trauma centers, there are often circumstances when the attending trauma surgeon cannot be physically available to supervise residents as they provide care for critically ill patients. In Illinois, for example, senior surgical residents are permitted to initiate resuscitation of patients while awaiting the arrival of the attending surgeon; however, they cannot act independently from the attending surgeon [10]. In our experience, inability to provide direct supervision is usually due to an attending surgeon’s commitment to caring for another critically injured patient. This recognized dilemma in academic trauma centers has been somewhat remedied with the use of electronic communication devices such as

paggers and hospital-issued cellular phones. Residents can call in to the operating room from the trauma bay or call the designated “attending-on-call” phone to notify the attending surgeon about critical patients that require immediate intervention. This protocol allows the attending surgeon to provide indirect supervision and to counsel the resident remotely. In this case, Dr. S should instruct one of her team members to try to contact Dr. F to notify her of the need to intubate Mr. X. Regardless of whether Dr. F can be reached, Dr. S must decide whether she can proceed with intubation confidently without direct supervision. Her thought process demonstrates that she is capable from a clinical and technical standpoint. Realizing that Mr. X is disoriented secondary to his severe injuries, she should be confident from an ethical standpoint that she is acting in her patient’s best interest by proceeding with intubation.

### References

1. *Schloendorff v Society of New York Hospital*, 211 NY 125, 105 NE 92 (1914).
2. Loke PCW. Informed consent in trauma. In: Papadakos PJ, Gestring ML, eds. *Encyclopedia of Trauma Care*. Berlin, Germany: Springer-Verlag Berlin Heidelberg; 2015:841-845.
3. Hartman KM, Liang BA. Exceptions to informed consent in emergency medicine. *Hosp Physician*. 1999;35:53-59.
4. Zubovic E, Kodner IJ, Brown D, Kleiber GM, Tung TH, Yu J. Ethical challenges of reconsidered informed consent in trauma. *Surgery*. 2016;159(6):1684-1688.
5. Siegler M. Critical illness: the limits of autonomy. *Hastings Cent Rep*. 1977;7(5):12-15.
6. Gutierrez G, Reines HD, Wulf-Gutierrez ME. Clinical review: hemorrhagic shock. *Crit Care*. 2004;8(5):373-381.
7. Kennedy TJ, Regehr G, Baker GR, Lingard L. Preserving professional credibility: grounded theory study of medical trainees’ requests for clinical support. *BMJ*. 2009;338(91):b128.
8. Kennedy TJT, Regehr G, Baker GR, Lingard LA. It’s a cultural expectation: the pressure on medical trainees to work independently in clinical practice. *Med Educ*. 2009;43(7):645-653.
9. American College of Surgeons Committee on Trauma. *Resources for the Optimal Care of the Injured Patient*. Chicago, IL: American College of Surgeons; 2014. <https://www.facs.org/~media/files/quality%20programs/trauma/vrc%20resources/resources%20for%20optimal%20care.ashx>. Accessed March 29, 2018.
10. Illinois Emergency Medical Services (EMS) Systems Act, 210 Ill Comp Stat 50/1.

**Ashley Suah, MD**, is a general surgery resident at the University of Chicago. Her main interest related to surgical ethics involves the relationship between the trauma surgeon and the patient who has been subjected to violence. Specifically, she seeks to gain a deeper understanding of the stance surgeons take regarding the pathogenesis of urban trauma beyond the operating room and intensive care unit.

**Peter Angelos, MD, PhD**, is the Linda Kohler Anderson Professor of Surgery and the chief of endocrine surgery at the University of Chicago. Recognized expert in medical ethics, he serves as the associate director of the MacLean Center for Clinical Medical Ethics at the University of Chicago. He has written widely on ethical issues in surgical practice and on how to best teach medical ethics to surgical residents.

**Related in the *AMA Journal of Ethics***

[The AMA \*Code of Medical Ethics\*' Opinions on Patient Decision-Making Capacity and Competence and Surrogate Decision Making](#), July 2017

[Defining "Community" and "Consultation" for Emergency Research that Requires an Exception from Informed Consent](#), May 2018

[How Should Complex Communication Responsibilities Be Distributed in Surgical Education Settings?](#), May 2018

[How Should Trainee Autonomy and Oversight Be Managed in the Setting of Overlapping Surgery?](#), April 2018

[Informed Refusal in the Emergency Department...Is It Really Informed?](#), August 2008

The people and events in this case are fictional. Resemblance to real events or to names of people, living or dead, is entirely coincidental.

The viewpoints expressed in this article are those of the author(s) and do not necessarily reflect the views and policies of the AMA.

**Copyright 2018 American Medical Association. All rights reserved.  
ISSN 2376-6980**