CASE AND COMMENTARY
Should One Kind of Freedom Be Restricted to Promote Another?
Katherine J. Feder, MS, Janice I. Firn, PhD, LMSW, and Ryan Stork, MD

Abstract
Due to restraints’ consequences for personal liberty and dignity, the threshold to apply restraints is understandably high and heavily regulated. However, there can be clinical scenarios in which restraint use can facilitate a patient’s freedom. This article considers such a case and examines conditions under which using restraints offers therapeutic benefit for patients with traumatic brain injuries.

Case
Albert is a 33-year-old man who was recently the unrestrained driver in a motor vehicle accident. He was found unresponsive by emergency medical services with a Glasgow Coma Scale of 4, which indicates minimal response to defined stimuli. He was intubated and brought to the nearest hospital, where his workup revealed traumatic brain injury (TBI) consistent with severe diffuse axonal injury. Like many patients who suffer from TBI, Albert began to progress through the typical stages of recovery consistent with the Rancho Los Amigos Levels of Cognitive Functioning, a clinical tool used to describe the behaviors and cognitive deficits of patients who have experienced TBI. It is a 10-level scale wherein level I indicates no response (coma) with total assistance required and level X indicates purposeful and appropriate response with modified independence (i.e., able to function independently with compensatory devices or cognitive strategies), with a spectrum of progression in-between. After 2 weeks in the intensive care unit, Albert stabilized and was transferred to a small inpatient rehabilitation unit for rehabilitation of his cognitive deficits, poor coordination, and right-sided hemiparesis.

During this time, Albert became agitated, restless, hyperactive, confused, and engaged in nonpurposeful behavior, consistent with level IV of the Rancho scale. The care team discussed activities on the unit that would allow Albert to channel his restlessness, thereby aiding his recovery. Permitting Albert to engage in activities outside of his room would provide an outlet for his restlessness and theoretically prevent an escalation of his agitation due to his lying in bed for long periods of time. However, given his disorientation (i.e., his inability to remember that he cannot ambulate safely without assistance), increased fall risk due to poor balance and right-sided hemiparesis, and motor restlessness, he would require the use of a lap-belt and wheelchair to minimize potential harms to himself when moving around outside of his room. The staff felt
uncomfortable using any type of restraint for an indication other than that with which they were familiar due to the scrutiny applied to restraint use. They wondered how to balance Albert’s rehabilitation goals and safety needs within the existing regulatory framework.

Commentary
All individuals have a fundamental right to control their own bodies. Use of physical restraints is controversial, as restraints inhibit physical movement. The use of restraints is a reactive measure, permitted only in the absence of any effective alternative to protect patients from harming themselves or others. Restraint use in health care settings is governed by federal law, state law, and the Joint Commission and is influenced by hospital policy, American Medical Association guidelines, and the Centers for Medicare and Medicaid Services. These regulations specify that the least restrictive effective restraint is to be used for the least amount of time and that its use to restrain a particular patient must be regularly evaluated. In order to receive federal funding through Medicare and Medicaid, hospitals must comply with these guidelines and laws. Any locally developed policies must consider both national and state codes.

Although these regulations apply the same evaluation to all restraints, in effect there is a range of restraint modalities that limit liberty to varying degrees and that might have alternate uses in the clinical space. Here, we consider how a one-size-fits-all approach can be a disservice to patients and to caregivers when trying to optimize treatment of specific clinical conditions. Specifically, patients with TBI have predictable progressions over the course of recovery. Although progression through all 10 levels of the Rancho scale is variable and patient specific, each level is marked by clear characteristics that are readily assessed via physical and neurological exam by trained clinicians. Many patients with TBI progress through level IV, which is characterized by confusion and agitation; patients who make it to this stage will likely progress through it, but the length of time spent at each level will vary depending on the severity of the injury. It is not unusual for a patient with TBI to spend 1 to 2 weeks in a state of confusion and agitation, the treatment of which includes having outlets for restless energy. To provide these outlets safely, many rehabilitation hospitals with specialized TBI rehabilitation programs employ the use of lap-belts, enabling patients with TBI at level IV of the Rancho scale to leave their rooms and engage in group or physical activities in a manner that reduces fall risk. While this topic is empirically underexplored and relies heavily on expert opinion, in the experience of the third author (R.S.), which is consistent with the literature, these patients have shorter length of stay, greater likelihood of discharge to less restrictive environments, and improved clinical outcomes. This commentary considers ways in which restraints can be viewed as tools to support interdisciplinary best practices for patients with certain clinical conditions like Albert’s, what factors can make clinical benefits of restraints outweigh their harms, and how restraints can be effectively and ethically regulated and applied.

Context-Specific Reframing of How We Use Restraints
When approaching any given medical intervention, health care professionals weigh the risks and benefits of that intervention and the likelihood of it achieving the intended outcome in relation to their patient’s condition. Rather than continuing to view all restraints as restrictive and reactive measures to restrain and limit patient movement, we suggest thinking more holistically about how certain types of restraint may facilitate greater physical freedom in some ways while limiting it in others. The Joint Commission already recognizes how a clinician’s intended use of equipment, such as bed rails,
affects whether it is considered as a restraint. Specifically, the Accreditation Manual for Hospitals states: “if the intent of raising the side rails is to prevent a patient from voluntarily getting out of bed or attempting to exit the bed, the side rails would be considered a restraint” but that “if the intent of raising the rails is to prevent the patient from inadvertently falling out of bed, then it is not considered a restraint.”3 We propose that lap-belts be evaluated over the range of their uses similarly to bed rails, based on their intended purpose as well as the patient’s best interests. Lap-belts would be used to prevent patients with TBI like Albert, who have progressed to level IV of the Rancho scale, from accidentally falling out of their wheelchairs or injuring themselves due to their disorientation and significant fall risk.

While the use of a lap-belt restricts patients’ freedom of movement by preventing them from getting up from their wheelchair and effectively restrains them in some ways, it facilitates patients’ freedom of movement by enabling them to safely navigate their environment and engage in activities to expel restless energy. Consider Albert’s scenario in which he is in a state of posttraumatic confusion (ie, unable to remember that he cannot get out of bed), restless, and has the potential for aggressive behavior. He does not have the ability to leave his room whenever he would like. His motor impairments are severe enough that staff (such as a bedside attendant) cannot safely ambulate the patient when he attempts to get out of his bed. This creates a scenario wherein Albert may be encouraged to stay in his bed, resulting in increased isolation and immobility, further escalating his restlessness. Utilizing a lap-belt, however, would allow him to leave his room when he would like with only near supervision of the patient attendant. He would be able to self-propel the wheelchair with his feet and explore his environment, effectively expanding his ability to interact with his surroundings as he so chooses. This can reasonably be seen as compassionate, so we suggest that a decision to use lap-belts based on balancing freedoms facilitated against freedoms curtailed is one that looks to motivate compassion.

**Autonomy and Dignity**

While some may argue that restraint use violates patient autonomy, patients suffering from symptoms of TBI are not acting with intention, nor do they possess meaningful understanding of their environment.9,10 While they may be able to express preferences through their actions, they do not have the ability to truly act autonomously or provide informed consent. As they do for other clinical interventions for patients who lack decision-making capacity, physicians should obtain informed consent from the patient’s surrogate decision maker. This process would include explaining why the lap-belt is recommended, the benefits and risks associated with its use, alternative options, and the scope of activity and duration for which it will be used.10,11,12

The other critique of restraint use often falls into the category of dignitary harms—specifically, that the use of any restraint limits physical movement and therefore restricts a basic human right and liberty. However, when one weighs patients’ ability to leave their room and engage in activity while secured with a lap-belt against their remaining in bed, the latter can be seen as posing a greater harm by effectively environmentally restraining patients with TBI to their rooms all day, hindering recovery.12 Thus, lap-belt use in specific contexts with the consent of the patient’s surrogate addresses suffering and promotes recovery, making it the more compassionate choice.
Regulation and Application
Like other medical interventions, lap-belt use would be limited to specific clinical indications in which it might confer benefit with authorization of the surrogate. It would be helpful to have a predefined set of criteria to help identify when using a lap-belt might be appropriate. A specialized clinician would evaluate whether the patient meets these criteria—and, if at any point the risks outweigh the benefits, the use of the lap-belt should be discontinued.

In rehabilitation hospitals, removal of restraints is typically a multidisciplinary decision based on observations from nurses, the therapy team, and neuropsychologists who are closely monitoring the patient’s motor and cognitive recovery.\(^{13,14}\) Open communication among members of the interdisciplinary care team, access to advanced care clinicians, and correct application and positioning and frequent monitoring of lap-belts would be imperative to ensure that the lap-belts are used as intended, thus minimizing or preventing physical harms such as asphyxiation, increased agitation, or discomfort.\(^{15}\) If, at any point, the burden of the lap-belt outweighed its benefit, it could be discontinued. As patients with TBI would be engaging in activities that require supervision, such as moving around the hospital in a wheelchair or engaging in group activities, health care professionals would be readily available to identify if the lap-belt needs to be removed. Consistent with medication administration or services rendered, clinicians would document all use of the lap-belts.

Conclusion
By reframing lap-belts as a type of restraint that can facilitate freedom rather than purely restrict it for patients with TBI, we have an additional way to promote patient interests and well-being.

References
2. 42 CFR §482.13(e) (2021).


Katherine J. Feder, MS is a fourth-year medical student at the University of Michigan Medical School in Ann Arbor, where she is also a predoctoral ethics fellow at Center for Bioethics and Social Sciences in Medicine. She received a BA in English literature from Williams College and an MS in bioethics from Columbia University. She is interested in applied ethics as well as ethics education.

Janice I. Firn, PhD, LMSW is a social worker and clinical ethicist in the Department of Learning Health Sciences and the Center for Bioethics and Social Sciences in Medicine at the University of Michigan Medical School in Ann Arbor. In her roles, she responds to ethics consultation requests, facilitates proactive ethics rounds, and participates in interprofessional ethics education at the undergraduate, graduate, and professional levels across the medical and academic campuses. She is also involved in a number of ethics-related research, caregiver wellness, and quality improvement and assurance initiatives.

Ryan Stork, MD is an assistant professor of physical medicine and rehabilitation at the McGovern Medical School at the University of Texas Health Science Center at Houston. In his role, he provides consultation services for the rehabilitation needs of patients with traumatic brain injury at Memorial Hermann-Texas Medical Center. He is also an attending physician at TIRR Memorial Hermann, where he focuses primarily on brain injury rehabilitation.