

## ON THE BRAIN

**Sanjana Salwi, MD**  
Department of  
Neurosurgery,  
University of  
Pennsylvania,  
Philadelphia.

## Between “Nonsurvivable” and “Brain Death”

**The mother's eyes** are clamped shut. Her nails dig into her husband's forearm. The room is silent except for the quiet creaking of the conference room chair as she rocks back and forth. There is no way to soften the blow. So, I speak directly. I tell them that their child had sustained a devastating head trauma. No chance of survival. Their masks start to dampen under silent tears. The parents want to know—is their child dead?

I flash back to the patient's arrival to the trauma bay—pulseless. Is pulseless dead? We push down on the chest, pump epinephrine, check for a pulse. Nothing. Repeat—push, pump, and pulse check. This time, faint heartbeats echo from the Doppler. The team takes a collective breath and then is off again. I examine the pupils—dilated and unmoving. The patient's arms are pulled out wide. One nurse is stationed at each extremity, drawing blood out for laboratory tests on one arm and placing catheters to push blood into the other. The arm does not even flinch as we drill a catheter into the humerus. Up at the head, I furiously rip open packets and packets of combat gauze. My bloody gloves slip on the slick foil packaging. The first swab of the wound sends clumps of thick clot and brain matter onto my shoes. I pack and pack into the head wound. The gauze saturates with blood before I can open another pack. The computed tomography scanner reveals what my examination portends. Left parietal calvaria, right frontal calvaria—blown to pieces. Metal fragments line the tract. Blood flow to brain—absent. We convene as a team and the ruling is unanimous—nonsurvivable. Is nonsurvivable dead?

Back in the conference room, the parents want to know again if their child is dead. My silence looms heavily. I want to say anything hopeful to stop the raw agony burning on their faces. I sharply bite my lip to stop the urge to add something unrealistically optimistic. We look through the computed tomography scan together, and I explain the poor prognosis as well as I can in between their body-wracking sobs. Now, I need some decisions. I carefully detail all the risks of cardiopulmonary resuscitation and explain its limited benefit in this situation. They nod along and say they understand.

Then, I ask if they want us to do chest compressions. They blink blankly at me. Their confusion transforms to anger. They scream they want anything and everything to be done to keep their baby alive.

The situation feels absurd. I almost want to laugh. How can I ask them about bringing their child back to life when I've already told them death is inevitable? What is the utility of a code status discussion in patients with nonsurvivable head trauma? I lead the parents back to the room to say goodbye.

As we walk into the intensive care unit (ICU) room, I try to imagine the scene from their perspective: multiple medications and blood in pressure bags flow into

the intravenous catheters. Monitors and machines beep their findings incessantly. The experienced ICU team moves flawlessly like choreographed dancers performing the familiar steps of administering medications and drawing blood for laboratory tests. It looks like a scene in *Grey's Anatomy* that culminates in a heroic recovery.

I see the lines of grief on their faces soften to hope. They survey the scene. Their child is not dead—I see them conclude. But the parents don't notice that the unit of blood we're transfusing is leaking right back out around the intravenous sites. They don't feel the absence of shouted updates and the frantic reassessments that usually accompany high-acuity resuscitations. I see a silent team pulled like marionettes by legal obligation to continue invasive care on a person we know is going to die. I know how it hurts us. They see a child in the ICU. They know that physicians save lives. Why else would we be doing this?

I explain that we're stabilizing so we can do formal brain death testing. Again, I offer the option to stop this invasive care and let their child pass naturally. Their eyes narrow in distrust. I've lost them. Do everything—comes the unshakeable directive. It feels like an ocean of misunderstanding lies between us, and my words cannot paddle hard enough to cross.

Over the next 5 hours, the patient slowly dies. We titrate pressors and transfuse 6 units of blood until we inevitably lose the pulse. We start cardiopulmonary resuscitation. Blood spurts around the breathing tube with each compression. The parents start to look nauseous again and leave the room. After a few rounds, I announce time of death. The team finds a moment of silence. I am disgusted by the additional physical trauma we put the patient's body through when we knew the brain was gone. I am disappointed that this end was chosen and that the decision-makers left when it was too hard to watch. We followed the rules and sought guidance from loved ones, but I can't shake the visceral feeling that I've done something wrong.

The aftermath ripples through the hospital. The team scatters dejectedly to catch up on their other critically ill patients. I collapse in front of my computer and wipe down my shoes. There are 32 notifications on my cell phone, and I start to triage my responses. Our charge nurse tells us that another trauma required the massive transfusion protocol; for the rest of the night, no more blood products are available.

As I run to the emergency department to see a new consult, I catch the parents embracing tightly in an empty hallway. They wipe tears from each other's eyes and find comfort in having given their child every chance. I think about how this is a trauma their family will feel for a lifetime. I imagine how, years from now, they will still cling to the sole solace of “doing everything” like to a buoy in a storm of tragedy.

### Corresponding

**Author:** Sanjana Salwi, MD, Hospital of the University of Pennsylvania, 3400 Spruce St, Philadelphia, PA 19104 ([sanjana03@yahoo.com](mailto:sanjana03@yahoo.com)).

My frustration dissipates, and I'm left with a sea of profound grief. I can't help imagining my own parents in that moment, and my throat tightens. There is no wrong way for a parent to react after the sudden and violent death of their child. It is only human to want every superhuman effort made. The difference between a "nonsur-

vivable" injury and true brain death on examination means nothing to a parent. These are the semantics and legal lines we draw. Ultimately, we must find a way to balance giving families agency while limiting decisions that may inflict more violence and prolong suffering.

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