

Where the White Coat Hangs

By Michelle Byrnes

“Good morning, Laurie! Today is October 23rd, it’s about 55 degrees outside, and yes, Donald Trump is still running for president.” I started most mornings in the Burn ICU this way, hanging my white coat at the door, and approaching Laurie’s bedside. Though she was often unresponsive, I talked her through my morning exam. “Ok, your vent settings look good... PEEP is back at 8.” I walked to the other side of the bed to examine the bags linked up to her IV’s. “Ok, Fentanyl still on for pain and rest, and also the heparin to prevent blood clots. Hmm, looks like Sasha the nutritionist switched your tube feed formula to help with that junk hanging out in your stomach.” I checked through the chart. “And hey! It looks like they had you breathing on your own for a while yesterday, that’s great! Let’s listen to those lungs.” I reached for the stethoscope and gently found a spot to place it without disrupting her wound dressings. As I listened to her rattling breaths, I glanced across the room at the posted pictures of Laurie with her family. In one photo she smiles big as she slings her arm around her daughter and the sun bounces off her blonde hair. There in the ICU bed, those blonde hairs were just beginning to sprout up again from her scalp which was shaved of what remained when she arrived at the hospital.

One of the attending physicians in the Burn Unit counseled us on our first day that every burn comes with a story. In Laurie’s case, the story was a nightmare. She had arrived home one evening to find an invader and was subsequently kidnapped, thrown in her own trunk, and driven out of the state to a secluded area. There she was assaulted, doused in gasoline, and set on fire. Somehow, she was able to get to her feet and run, still aflame, to a nearby convenience store where help was called. As one of the leading burn centers in the region, our hospital takes in the burns that others are unprepared to handle. Patients transferred to us have often endured burns that would be unsurvivable without the care of highly-skilled clinical teams like the experts in our unit. Laurie arrived to our emergency room fully alert and oriented, aware of what had happened to her and fighting fiercely for her life. Those who did her initial workup that night recall the urgency with which physicians from gynecology, ophthalmology and anesthesiology collaborated with the burn surgeons to provide her care. The FBI arrived the next morning to investigate.

Unfortunately, the horrors Laurie experienced did not end when she arrived at our doors. The treatment course for burn victims is known to be one of the most painful processes in human experience. Upon arrival, patients are taken to the “tub room” where they are stripped naked so the nursing team can debride their wounds, cutting and peeling off dead skin to expose the depth and severity of the burns. Laurie was taken immediately to the OR for surgical debridement followed by intensive fluid resuscitation. Days later, when her injuries had fully revealed their might, the next steps of her surgical treatment were planned.

When Laurie was assigned to me on my first day in the ICU, I spoke with the nurses about her early hospital course and set to work scouring her chart. As the student member of the team, I had fewer responsibilities which enabled me to spend more time with Laurie. I aimed to be by her side as much as possible during the litany of procedures that she endured on a daily basis. Dressing changes for burn wounds are a known horror of recovery, which many burn victims can recall vividly years after they are healed. Studies show that 45% of burn victims have developed what can be categorized as PTSD one year after their trauma (Ter Smitten, 2011).

Due to her weakened state, Laurie's wounds became chronically infected, and she spent many days on the "2 and 10" regimen. She was wrapped in highly potent anti-septic soaked gauze for two hours at a time, and then put back into her regular wound dressings for the other ten hours. The burn nurses are practiced at dressing changes, and swarmed around Laurie, rolling her body from one side to the other, switching out the garments with the ease of routine. Regardless of the normalcy of these procedures within the unit, pain is a significant problem for burn survivors, particularly during this early period of wound care when patients are subjected to important but excruciating therapies (Dalal, 2010). Prior to these dressing changes, patients are provided high levels of pain medication, and even sedatives. As a young medical mind, I was quickly warned not to apply the pain med dosing used in the Burn Unit to patients anywhere else in the hospital.

Though perhaps the most traumatic, dressing changes were only one of the procedures that Laurie knew well. The ophthalmologist came by daily to monitor the progress in her burned eyes and advise treatments. Nearly every week, Laurie underwent a tarsorrhaphy, in which her eyelids were sewn together to protect her corneas. Whenever possible, I stood by her side during the procedure, prompting the ophthalmologist to explain exactly what he was doing and why. I found throughout this month that even the kindest of physicians often neglected to speak directly to Laurie since she was unable to respond verbally, and was debatably sedated for most of the day. It was easy to see Laurie as a body from which to draw blood, place venous catheters, or obtain vitals without needing to interact with her as a human being. I soon realized that Laurie had learned my voice, and her body relaxed when I was there to narrate the events of her medical care.

Surgery was a vital part of Laurie's recovery process, and I assisted with all of the operations she underwent during my clerkship. Among the surgical specialties, burn surgeries can be some of the most gruesome. Most operations for burn patients include further debridement, in which scabbed, necrotic skin is removed from their body with comb-like razors, leaving openly bleeding wounds behind. Then, the team works to "establish hemostasis", meaning that open areas are sprayed with a substance that facilitates clotting. Finally, skin grafts are placed on the open wounds and bandaged tightly for healing. For attending physicians and residents who have participated in these surgeries many times, the initial shock and horror has worn off, but students witnessing this type of operation for the first time can have a difficult time taking the scene in.

One of my student jobs was to prepare Laurie for surgery by draping her body to create a sterile field, positioning the surgical lights, and propping up her limbs for better access. Merely transporting Laurie to the OR was a team effort, involving respiratory specialists, machines to monitor her vitals, and several staff members to help guide her hospital bed through the hallways and down the elevator. During our first walk to the OR, I was anxious about what I might witness, and about what questions the surgeon might ask me during the

traditional “pimping” of medical students. As we waited for clearance to enter, I sensed that Laurie was anxious, too. Several doctors passed by to ask questions about her medications and assess her vitals. She became agitated and writhed around in her bed, her muscles tense and stiff. Slipping my hand into hers, I bent down close to her ear to explain what was happening. Immediately I felt her muscles relax, except for her hand, which gripped mine tightly, pulling me out of my own concerns and back to the reason I was headed for the OR that day.

When the OR was ready, and Laurie slept peacefully under the anesthesiologist’s watch, I slipped out of the room to complete the scrubbing ritual. Though sometimes irked by its monotony, that day I was grateful for the chance to step away and mentally prepare. I put on a mask and eye shield, and placed covers over my shoes as protection from the blood I knew would soon cover them. As I scrubbed under my nails, between my fingers, over my hands, and up my forearms, I reminded myself to focus on the technical aspects of surgery and dissociate, for a while, from thoughts about Laurie’s painful experience. I rinsed and reentered the OR with my wet hands in the air. Once the gown was tied over my scrubs, I was covered head to toe in my surgical attire, which I quickly began to sweat through in the 100°+ heat. Burn patients often lack the skin they need to regulate their temperature, so we turn the OR into a sauna to prevent hypothermia.

Even the portions of Laurie’s body that evaded burns were destroyed during treatment. The skin that she lost needed to be replaced with skin grafts, and the best replacement is layers of skin from her own body, as external skin transplants often fail from immunologic rejection. The thigh is the most utilized graft site, as it provides the largest flat area from which to shave skin. Students rotating through surgery always hope to participate in the more interesting parts of surgery, so when I was offered the chance help harvest Laurie’s skin, I eagerly accepted. The machine we used reminded me of a meat slicer from a deli, and I was surprised at how easily I overcame my initial fears and mechanically completed such ghastly tasks.

Focusing on the surgical skill required for these operations helped, and it was during these hours with Laurie that I came to appreciate the art of surgery. During one operation, nearly her entire face was reconstructed using a new highly advanced technology. At its best, the operating room was a well-conducted symphony, with a sea of blue-gowned technicians and clinicians working in harmony to achieve amazing feats. Still, there were moments where I could not escape the horrors of Laurie’s story into the bliss of surgical mastery. Once morning, I watched the surgeon’s face fall solemn when he realized the only fresh area of skin left to harvest was low in Laurie’s pelvic region, a part of her that had already undergone unfathomable trauma. It was these times that the academic excitement of surgery failed to offset the raw human tragedy that had brought us into the OR.

These operations brought me face to face with one of the major tasks of a physician: handling difficult situations as a skilled clinician, while simultaneously maintaining focus on the humanity in front of you. The white coat hangs at the intersection of science and empathy, and to wear it is to accept the responsibility of holding in tension the roles of a competent professional and a compassionate caregiver. My time with Laurie will inevitably serve as an inflection point for my medical career. While I certainly learned a lot about medicine and surgery by her side, and as a critically ill patient, her medical problems were ripe with intellectual challenge and learning opportunities. Regardless, the role Laurie continues to play in my formation as a physician is far from academic—they have taught me that the true task of a physician is accompaniment.

Serving as a member of Laurie's care team developed my understanding of the immense privilege it is to share in the most powerful, personal, and difficult moments that people face. My relationship with Laurie included experiences more intimate than those I share with close friends. I was present when she was stripped naked, cut open, sedated, had her diaper changed, and her eyes sewn shut. I knew the sounds she made when she needed her lungs suctioned, the way she turned her hips when her back hurt, and each and every burn and graft site on her body. I regretted that this intimacy was afforded to me by my white coat, instead of gained through Laurie's consent. I tried to earn that privilege by giving her as much autonomy as possible, providing play by plays of her care to lessen the sense of violation I expect she felt.

Toward the end of my clerkship, Laurie was able to bear weight on her legs, to spend hours breathing on her own, and even to see. She began to require less pain medication, and became more alert and responsive, even shaking her head in response to questions. This change was welcomed, as it enabled our relationship to become slightly more reciprocal. Her regained ability to express her needs came with new frustrations, as I spent long periods playing what felt like a game of "20 questions" to figure out what exactly she wanted. It gave me great delight to grant her wishes when I finally sleuthed them out—sometimes it was merely to adjust her leg brace, or raise the bed. On hard days, it was to turn on her Friends DVD and let the episodes play. One afternoon, I returned to the ICU to find the physical and occupational therapists coaching Laurie through a task she had not performed in many weeks: sitting up. I jumped in to hold back her IV's as they moved her to the side of the bed, letting her sway until fighting to steady herself and hold up her weight. Tears ran down my cheeks as I witnessed her solemn but triumphant smile, as big as it could stretch with the braces and bandages still covering her face. I was grateful to be present for such tangible healing process, and reminded Laurie of her progress on tough days.

The Burn Unit is unique in that patients are cared for by a highly interdisciplinary team that includes a pharmacist, social worker, and nutritionist, as well as physical, occupational and respiratory therapists in addition to doctors and nurses. I learned from the social worker that Laurie's awareness of her trauma and condition likely waxed and waned, and it was important to reassure her without triggering stressful memories that could hinder healing, especially while she was unable to communicate. It became my custom to reassure her with the same five statements every day, in an attempt to provide stability where there was so little. My surgery rotation ended several months ago, but I still go back to see Laurie as often as my schedule permits. On my last visit, I was shocked when Laurie greeted me at the occupational therapist's prompting with a crackly "Hi" through her trachea collar. Now off her ventilator most of the time, she was able to vocalize words and we took turns leaning close to try to understand her. On this particular afternoon, her words were "I'm... scared." We probed to assess her understanding of where she was and what had happened, carefully treading through this unknown territory with her. In subsequent visits, she expressed her desire to leave, her sadness at being in a hospital for Thanksgiving, and her confusion about pieces of her hospital course. At one point she asked another student whether "they had caught him." I battled constantly with the delicate dance of honoring her right to know the situation with my responsibility to keep her safe and promote healing with a peaceful state of mind. When the waters were murky, I fell back to my routine of reassurance which sometimes seemed to calm Laurie, but always served to calm me.

Laurie's strength continues to improve, and despite frequent infections and other complications, we are hopeful that she will be able to leave the hospital soon. Though her body is healing, the road ahead continues to be long and grueling. She will require months of rehab to regain normal function. Her skin, though astoundingly improved from her baseline injury, will never look, feel, or work exactly how it used to. Evidence also suggests that patients like Laurie who endure prolonged painful treatment of burn injuries will likely have chronic PTSD (Van Loey, 2003). I admit that on her worst days, I sometimes wondered to myself whether she would escape her kidnapper and evade death again, if given the chance.

"Ok Laur, I'm leaving for class, but let me remind you of the five things I always tell you, ok?" I remove the foam balls in Laurie's hands, which keep her muscles relaxed. "First, you are safe. You are in the hospital and I am here with you." I look out the window at the unit, where health workers attend to the sickest patients in the hospital. "Second, you are being very well cared for by our team. Even when they aren't in the room, they're watching your vitals and making sure you're ok." I gently rub Laurie's forearm, noting once again how it remains one of the few unscathed areas of her body. "Third, you are getting better! I can't believe how amazing your face looks, and how long you sat up yesterday." I look up at her monitors and smile with relief that she is afebrile for the third day in a row. "Number four, you *will* get out of here. You're not going to live in a hospital forever." I look out the window, wishing Laurie could appreciate the view from this high point in the hospital. "And finally, you are loved. I heard your daughter brought you some other visitors this week, and you know that we are all cheering you on." I squeeze her hands tightly and squat down to ear level. "Do you believe me, Laurie? Can you hang in there and keep fighting?" Her response to this varies day to day, leaving me to wonder whether her days of silence are due to sedation or something deeper. But today she nods fiercely, and I smile as I slip my white coat back on to head downstairs. "Glad to know it, Laur. I'll be back soon."

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