The Case of the Mistaken Injection

Julie Thao, a very experienced and dedicated nurse had worked a double shift on July 3rd, the day before the adverse event, and volunteered to stay when someone called in sick for the 4th of July (July 4 is an important American holiday – Independence Day). Julie had 15 years of experience and this obstetric unit was the only place she had ever worked. She was clearly an “A” player with a spotless work record. Julie slept for a few hours and resumed caring for patients. The ethos of the unit rewarded this model, as the unit did not use floats or travel RNs (locums), the theory being that experienced RNs who knew the floor would deliver better care than any others. In fact, hospital management motivated this behavior of volunteering to do extra. Each year, the nurse who worked the most extra hours received a free trip to an educational conference of her choice.

Two week prior, the obstetric unit had added a bar coding system for IV fluids. In-servicing had been done in the prior few weeks. The technology did not work well on translucent IV bags. It failed to register the bags at least 30% of the time, and sometimes as much as 70% of the time. As a result, an RN had a dual medication administration process for intravenous antibiotics and epidural medications. If the bar coding did not work, they manually entered the information, and worked around the system. Julie Thao found the bar coding system frustrating and had decided that until it was more reliable she was not going to use it. Other RNs were also struggling.

The unit secretary printed a patient identification wrist band for Jasmine Grant and placed it in the pocket of Jasmine’s medical chart, which was taken to Jasmine’s birthing room. The policy at the hospital stated that wrist bands are to be fastened to the patient’s wrist as soon as possible. Prior to performing any treatment or providing any medication, a nurse is to check the wrist band to make certain it is the correct patient. It was Julie’s responsibility to fasten the wrist band on Ms. Grant’s wrist, but, in this case, the wrist band was never placed on the patient.

Julie was multitasking between two complicated patients. One was in labor to deliver a full-term but deceased baby, a profound emotional experience. Julie was given this patient because she had founded, and ran, the hospital’s bereavement program.

Her other patient was Jasmine Grant. Jasmine had little prenatal care and little preparation for labor. She was terrified, unmarried and her boyfriend was a
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gang member present with some of his buddies, as well as family members. The result was a complicated environment filled with lots of commotion.

Julie met with Jasmine and her family in the birthing room and spent almost an hour explaining the process and answering questions. Julie’s focus was on alleviating Jasmine’s anxiety. They had a discussion about the possibility of Jasmine receiving an epidural. Her mother insisted that Jasmine wanted an epidural only as a last resort.

Julie was convinced that Jasmine would do better with, and needed, an epidural, but one had not yet been ordered. Prior to obtaining approval for an epidural, Julie removed the local anesthetic pain medication, bupivacaine, from the automated medication-dispensing machine to show it to the 16-year-old patient and to describe the epidural and help allay her anxiety. This was also consistent with the protocol developed in conjunction with the anesthesia department – “before you call us for an epidural, get the epidural kit, have the drugs ready and prepare the patient, so everything is ready when we get there.” In reality, the protocol was little more than a checklist; it had not gone through a formal process of approval.

One of Julie’s fellow nurses, at Julie’s request for assistance, brought into the room and placed on the bedside table a 100 ml bag containing antibiotics, identified by a yellow dot. The other 100 ml bag in the room, identified by an orange dot, contained bupivacaine, the epidural local anesthetic.

Julie picked up the incorrect bag and accidentally hung the bupivacaine into the intravenous line thinking it was an antibiotic. As a result, Jasmine had a seizure and her heart stopped; the team started CPR and made a quick decision to emergently deliver the baby by C-section. The baby appeared on time, and continues, to be OK. The local anesthetic induced cardiac arrest that was not reversible with cardiopulmonary resuscitation alone and Jasmine did not survive.