Code Blue June 14 Transport to OR for hemorrhage

Dr. Stevens and one of his partners Dr. Jane Adams were making fine progress with the implantation of the kidney into Claudia Walters' son Ryan. They had finished connecting the major blood supply artery and vein and were in the process of implanting the ureter into Ryan's bladder.

Code Blue (cardiac or respiratory arrest) was loudly and clearly announced audibly for a patient room located in the small unit where Ryan's mother Claudia had been sent from the PACU.

Dr. Stevens' face flushed beet red and he immediately tensed and began to sweat. Had he correctly assumed that the Code Blue had been called for Claudia Walters? Suddenly he turned away from the operating table and stripped off his surgical gown and gloves so he could leave the OR. The nurses summoned a transplant fellow to finish up Ryan's operation with Dr. Adams.

Dr. Stevens pleaded with the anesthesia team and operating room nurses to find him any operating room that had been set up for another procedure: to commandeer the operating room and staff for him to emergently explore Claudia's abdomen for bleeding.

He asked the anesthesia service to set up for IV solution warmers in the new room and for the blood bank to be called to bring a half dozen units of un-crossmatched type O negative blood (Universal Donor type blood) to the operating room for Claudia.

He asked about a cell saver but none had been set up standby and getting one primed from off mode to ready would likely take too long.

The floor nurses flew into action to resuscitate Claudia. Their patient was pulseless; her skin had a blue cast. They immediately turned Claudia's IV to maximum infusion and they started second large bore IV through which they began a fast infusion of another liter of saline IV fluid. The Code Blue team arrived as the floor nurses started CPR chest compressions. Dr. Stevens entered the room as one of the Code Blue team members from the anesthesia service placed a face mask attached to an Ambu bag on Claudia's face to breathe for her.

Dr. Stevens' pager went off. He looked at the pager and said, "We have an operating room ready for us to explore her abdomen. Roll it, ASAP. "

A nurse slapped on the leads hooked up for a portable monitor that she attached to an IV pole on the gurney. Another nurse hopped onto the gurney with Claudia to continue chest compressions while they moved her gurney to the elevator.

Additional floor nurses cleared the way to move Claudia's gurney down the hall to the elevator that they had captured with doors open.

The operating room nurses waited downstairs at the elevator door to the OR floor. They expertly

relieved the floor nurses with the speed and accuracy of a pit crew.

The moment that Claudia's bed was aligned with the operating room table, the anesthesia and nursing teams rapidly lifted Claudia on to the operating room table. The anesthesia team took charge of her airway and used the mask and Ambu bag with oxygen attached to the Ambu bag to oxygenate Claudia while they prepared to insert an endotracheal tube to secure her airway. They attached the tube to their anesthesia machine to breathe for her.

The anesthesia doctors, technician, and nurses busily attended to transfusion related issues and carefully monitored Claudia for brain and organ damage due to shock from blood loss.

OR Emergency Ex Lap

Operating Room

Noon, June 14

Claudia's abdomen was obviously distended. Dr. Stevens exposed the outside of her abdomen and quickly splashed antiseptic solution on her abdominal skin. He applied sterile surgical drapes, then removed sutures from Claudia's abdominal wound.

As quickly as Dr. Stevens cut the sutures blood poured out of her abdomen, and fell off of the surgical field onto the floor. Dr. Stevens immediately carefully reached into her abdomen to feel her aorta near her diaphragm. He compressed her aorta against her spine. He intended this move to keep her heart full of blood to pump to her brain and to her lungs.

Dr. Stevens replaced his hand on her an aorta with a bumper at the end of a long handled tool. He gave an assistant the job of maintaining aortic compression against her spine. He identified her distal aorta below where they had removed her right kidney and compressed it against her spine. He could now see the artery to her right kidney, flaccid and uncontrolled by the clips that he had placed across it. He had applied three metal clips that looked like miniature straight metal bobbie pins across the renal artery. The clips were nowhere in sight.

Once Dr. Stevens had obtained emergency control of the hemorrhage, the anesthesia team asked for time to transfuse blood and catch up with her blood loss.

Dr. Stevens psyche, seized by fear of possibly losing the life of the mother of his transplant recipient, filtered out non-essential information. The well-known rarity of death among living related donors had fueled the growth and acceptance of LRD transplantation. A donor death—or even the suggestion of one—would not remain confined to this operating room or even this hospital. The transplant community was small, professionally incestuous, and bad news traveled with the speed of wildfire. It would move quietly at first, by phone call and whispered conversation, then by word of mouth at professional meetings around the world.

“Okay to proceed, Dr. Stevens,” the anesthesia team leader said.

The words snapped him back to the moment. There would be time later to manage the consequences. For now, there was only bleeding to stop.

Still, the outline of a countermeasure had already formed. He would take control of the narrative.

He would publish the case, present it at a national meeting, and speak before rumor hardened into dogma. His attorneys would tell him to wait, to say nothing, to keep his head down. He already knew he would override that advice.

Dr. Stevens applied a special vascular clamp designed to partially occlude the aorta at the right renal artery. This allowed blood flow through the un-occluded portion of the aorta. He then securely closed the right renal artery with traditional suture ligatures. He used blue suture material that looked like blue fishing line on a curved surgical needle. He removed the clamp to allow the flow of blood to the right renal artery that he had just sutured closed. He inspected the new closure for leaks. There were none.

Dr. Stevens caught his breath. The transplant crew that had done Ryan's kidney implantation stopped by to report that they had successfully completed the kidney implantation. The graft was making urine and had good color.

He asked his partner Dr. Jane Adams, "Please find Mr. Walters and give him an update about Claudia's current condition. He may be in his son's hospital room." Dr. Adams and one of the transplant fellows immediately departed to find Mr. Walters.

Dr. Stevens thoroughly inspected the bowel and abdominal organs to make sure that they had not unintentionally injured anything else during the control of the bleeding. The operative field was now dry and he was ready to close her abdomen. The surgical team closed Claudia's abdomen,

applied dressings, and transferred her by gurney directly to a surgical ICU bed.