Risk Management Hotline

"Standing Order" Medications

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Most surgeons develop preferences for instruments, sutures, viscoelastics, and medications. To facilitate efficient preparation and turnover in operating rooms, they inform the hospitals and ambulatory surgery centers where they have privileges of what they would like to have available for each type of surgery. OMIC claims experience shows that certain aspects of these standing orders, especially medications, need to be made part of the surgical briefing. Medication errors are among the most frequent types of mistakes, and three types of medications top the charts: antibiotics, steroids, and anticoagulants. Unfamiliarity and interruption in the preparation process, along with failure to label drugs and verify them when handing them to another provider to administer, all increase the likelihood of error.

Q My antibiotic standing order is not difficult to prepare. Do I really need to discuss it?

A It would be prudent. In one OMIC case, the standing order was for cefazolin (Ancef) IV. The ophthalmologist assumed it had been prepared as ordered, so when the certified registered nurse anesthetist (CRNA) asked him if he wanted her to "give this," he agreed without any safety check. The patient developed respiratory distress immediately after administration of what turned out to be polymixin sulfate IV, a medication that was not on his order, should not be given intravenously, and causes respiratory paralysis from neuromuscular blockage. The reversal agent given to counteract the neurotoxin was contraindicated with polymixin, and potentiated its action; the patient needed intubation and two days in the hospital to recover. In another case, the standing order was for gentamycin to be diluted in 500 cc basic saline solution. Two patients whose procedures were back-to-back presented in the office with signs of aminoglycoside toxicity of the retina the day following surgery. The investigation showed that the nurse had erroneously prepared a much higher concentration of the drug. Both patients ended up NLP. In all three cases, the ensuing lawsuits named the hospitals, nurses, anesthesia providers, and ophthalmologists as defendants.

Q Why am I as the surgeon held responsible for the errors of nurses and anesthesia providers?

A Diligent plaintiff attorneys initially name all possible defendants, though surgeons may at times be dismissed if no act or omission on their part contributed to the adverse outcome. In the above-mentioned cases, defense experts sympathized with the surgeons' reliance on the correct interpretation and execution of their standing orders, but felt that the physicians could have done more to protect the patient. Patient safety experts would say that they helped sustain a climate where errors not only went undetected but were likely to happen. Whether the surgeon is ultimately held liable depends upon the facts of the case, the venue, and the willingness of other parties to settle cases. The surgeon in the first case did not clarify the CRNA's question. Nonetheless, since his standing order did not contain polymixin, the case against him was dismissed, while the CRNA and hospital settled. The second surgeon was criticized for ordering a medication with known toxic side effects when safer medications were available (OMIC made a modest contribution to a settlement on his behalf). As surgeon, you can actively create safety twice: include a brief discussion of intraoperative medications you or the nurses will administer as part of the time out ["Let's review the antibiotic: cephazolin (Ancef) 1 gram IV."] and confirm the drug label one last time as it is handed to you if you will be administering it.

Q What steps can the surgical team take to increase the safety profile of higher-risk medications?

A Medication safety protocols can reduce many possible sources of errors by addressing known risk issues and building in redundancy and verification. Surgeons should review standing medication orders on a periodic basis to confirm choices. Ask for new, dated cards whenever you change orders. Instruct the hospital or ASC to remove former orders from patient care areas and store them where they can be accessed only by administrators. Include precise preparation steps, and appropriate warnings, in the standing order to ensure proper route and concentration. Ensure that the facility provides nurses with a quiet area to review orders and prepare drugs with access to medical records and without interruption. Require that every medication and fluid needed for the specific procedure be labeled with drug, dosage, dilution, route, etc., and consider having medication vials available in the OR to confirm drug choice. Insist that nurses who prepare medications regularly demonstrate adequate medication knowledge and competency in preparation. Create a culture of safety where everyone feels comfortable asking for assistance with unfamiliar medications or processes and questioning orders they do not understand.