The Case:

A middle-aged, obese male patient was scheduled for an elective surgical repair of an incisional hernia. The patient’s allergies to codeine and penicillin were well-documented in his medical record. The surgeon ordered the antibiotic, Ancef, for pre-operative prophylactic infusion.

The anesthesiologist infused Ancef according to the surgeon’s orders and inducted the patient with Fentanyl and Propofol. At that point, she turned the case over to the CRNA. Five minutes later, the CRNA called the anesthesiologist for assistance when it turned into a difficult intubation. There were multiple attempts with success after use of a fiber optic scope. Unfortunately, during the delay, the patient arrested. The anesthesiologist initiated CPR and administered Decadron, Benadryl, Epinephrine, and a Levophed drip to counter a possible anaphylactic reaction. The patient was eventually resuscitated and the procedure was terminated. He suffered a significant brain injury, resulting in an extended hospitalization, long-term rehabilitation, and permanent disability.

Allegation: The plaintiff alleged the anesthesiologist failed to consider the patient’s allergies prior to administering Ancef and anesthesia.

Disposition:
Both the hospital and the anesthesiologist were named in this case, settling for a combined large amount of money.

**Risk Management Commentary:**

This case is not as simple as it seems on first presentation. It is an excellent example of one that might have been defensible as a difficult intubation, if it had not been for prescribing Ancef. The patient had a well-documented sensitivity/allergy to penicillin. The expert reviewers opined that, in hindsight, the patient may have suffered an allergic reaction to Ancef (Cefazolin). Remember, Ancef is a first-generation cephalosporin antibiotic, falling into the category of beta-lactam antibiotics and related to penicillin. Although the extent of allergic cross-reactivity between penicillin and cephalosporins is unknown and appears to be low, about 4% of patients with a proven penicillin allergy (by skin testing) also react to cephalosporins. Since this patient had not been skin-tested, but had a positive history of penicillin sensitivity, the plaintiff argued that the selection of a non-beta lactam antibiotic probably would have been a better choice.

According to the case reviewers, the anesthesiologist’s overall approach to this patient’s care seemed careless. She should have documented an airway assessment, the strategy for dealing with a potentially difficult intubation, all allergies, and requested a medication change from Ancef before infusing it.

The American Society of Anesthesiology recommends an airway history be conducted, whenever feasible, before the initiation of anesthesia and airway management in all patients. The intent of the airway history is to detect medical, surgical and anesthesia factors that may indicate the presence of a difficult airway. Examination of previous anesthesia records, which apparently did not occur in this case, may have yielded useful information about the airway management of this patient.

The patient had had three previous surgeries in recent years at the same hospital; a laparoscopic cholecystectomy, an appendectomy, and an umbilical hernia with mesh. Ancef was given prophylactically in all three of these procedures. There was no notation in his medical records as to whether he had exhibited any signs of prior sensitivity to Ancef. It is very important that any sign of patient medication sensitivity be documented in the patient’s medical record and noted in the allergy section, along with the documented reaction type.

Allergies can be present despite previous negative screening tests and no patient’s care can be taken for granted. In other words, the previous history of any allergic event should increase the clinician’s concern.

**Test Your Patient Safety IQ**

What lesson does this case have for the clinician?

A. The patient’s previous history of allergies/sensitivities prompts increased concern.

B. Patient characteristics related to the difficult airway are obesity and a thick neck.

C. It is important for the anesthesia/surgical team to be prepared for an anaphylactic reaction at any moment.

**Answer:** A., B. and C. are all correct responses

1 Administration of cephalosporins to a patient with a history of penicillin allergy. [1] 9-24-2012

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