

ROLE: **PHARMACIST** IN PIPERACILLIN/TAZOBACTAM (ZOSYN) CASE

BACKGROUND

ALBERT JONES, 92 y.o. male or female patient, admitted to ED from local skilled nursing facility (SNF) around 1800. Patient had SOB with yellow-greenish sputum and febrile to 38.5 with pulse oximetry = 88. SNF staff were concerned about pneumonia and, after receiving permission from patient's DPAHC, called ambulance for transport to ED.

ADMISSION STATUS

Patient received chest x-ray, labs and physical exam in ED confirming diagnosis of healthcare-associated pneumonia. Started on Zosyn (piperacillin sodium/ tazobactam sodium) IV every 6 hours. His first dose was given at 2200 and the patient experienced an anaphylactic reaction within 20 minutes involving flushing, itching, difficulty swallowing, coughing, wheezing, hypotension and difficulty breathing. He was intubated and treated with epinephrine IM.

The patient was transferred to the ICU for close observation around 2330 with orders for additional epinephrine as needed, discontinue piperacillin/tazobactam, and start vancomycin and levofloxacin IV.

CURRENT

Patient: Patient was extubated from ventilator early in AM without incident. Currently is afebrile, vital signs stable, rash resolving. He is following commands, but remains confused to person, place and time.

Pharmacist: When you get to work this morning, you learn from the pharmacist covering the ICU that there was a penicillin allergy noted in Albert Jones's chart that was apparently missed by the team. Piperacillin/tazobactam is contra-indicated in patients with a known penicillin allergy. You do not remember looking at the records that accompanied the patient but did carefully review the patient's computerized hospital record and the only allergy listed was a codeine allergy.

You went to the ICU to look at the record yourself. There was a notation about a penicillin allergy from one year prior when the patient received oral penicillin in the SNF (he developed hives and abdominal cramping). Albert's last hospitalization was two years prior. You do not know why the rest of the team did not see this and now regret that you did not review these records.

You also read that the patient has lived in the SNF for over three years due to increased confusion and need for assistance with activities of daily living (showering, feeding, etc.) He has had a progressive decline. He has a family member who is his durable power of attorney for health care decisions. From the chart, this person appears to be very involved in the patient's care and visits frequently.

SITUATION

Albert's family member is here visiting. The physician and nurse from the ED who admitted Albert are also in the ICU, apparently also having learned of the penicillin allergy and were also reviewing the medical record. You learn that the family has asked to talk with the team about the events of the evening and why Albert is in the ICU.