Published on *American Council on Science and Health* (https://www.acsh.org)

Feared penicillin reaction: less frequent than we thought

By ACSH Staff — September 10, 2013

[1]

In her *N.Y.Times* column in today s Science section, Dr. Abigail Zuger offers a comprehensive overview of the problem of penicillin allergy in most of its complexity, given her three-column space.

Penicillin came into use initially, like DDT, at the tail end of World War Two, and its widespread use saved literally hundreds of thousands of lives from a variety of bacterial scourges, including strep, staph and syphilis. But its gross overuse during the next thirty years led to a high degree of resistance, which pharmaceutical researchers countered by developing a host of new antibiotics some similar, based on the penicillin (pen) structure, some quite different. At the same time, adverse reactions were noted in sensitive individuals, ranging from itchy rashes to more serious blistering lesions, to the dreaded life-threatening allergic hyper-reaction known as anaphylaxis.

Dr. Zugers column, The Penicillin Superstition [2], brings the problem of pen allergy into perspective. While certainly not downplaying the severity of true allergy, she points out that the large majority of people who believe they are pen-allergic are actually not; and among those who are, the majority have the mild form. She discusses the decision-analysis conscientious physicians must perform when deciding whether to administer the drug to a patient with a severe infection who claims, or whose family claims, or whose medical record indicates, a problem with pen.

Fortunately, nowadays it is quite rare for a patient to suffer from an infection whose indicated treatment focuses on penicillin. Quite the opposite: as we said earlier, pen has largely lost its place in therapy due to the high degree of bacterial resistance. But when such a situation arises, the problem is acute: should pen be given with crossed fingers, knowing the odds are highly in favor of no severe reaction? Or should an alternative be given, if one exists? If none does rarely a delicate de-sensitization must be performed under strict observation over the course of several hours. Even so, anaphylaxis an outpouring of immune-reaction chemicals causing a dramatic drop in blood pressure and constriction of the breathing passages may occur, requiring immediate treatment with epinephrine/adrenaline and respiratory and blood pressure support.

ACSH s Dr. Gilbert Ross, who had some experience with this problem when he was in practice last century, was particularly moved by Dr. Zuger s final paragraphs outlining the real plight. I agree with her: it s just so easy to say, Heck with it, let s not take any chances, we ll use a different, broad-spectrum antibiotic. No harm will occur. Sure not to ***your*** patient, here, now. But such decisions made in many hospital ERs and ICUs will encourage the development of resistant organisms, which will come back and bite other patients when they are most vulnerable. That s how MRSA and C-dif and VRE came into being, causing many thousands of deaths from previously-treatable infections. Sometimes the right thing to do is not the easy thing.
