

# Temporary fix helps patients around drug allergy

April 12 2010, By LAURAN NEERGAARD , AP Medical Writer

---

(AP) -- Having a bad reaction to penicillin as a child doesn't guarantee you're still allergic decades later. And if the oncologist says you have to switch chemotherapies because of an allergic reaction, well, maybe not.

More medical centers are recommending a lesser known choice: Drug desensitization, a carefully controlled method of helping patients temporarily tolerate medications - from aspirin to antibiotics to chemo - that their bodies once rejected.

Not everyone's a candidate. But for those who are, the process can mean the difference between getting the best treatment or a runner-up that may not do the job, says Dr. Mariana Castells, an allergist at Harvard and Brigham and Women's Hospital who helped pioneer the care.

"You don't know how lucky I feel" to have been desensitized, says Vanessa Greenleaf of Marblehead, Mass.

Greenleaf developed a severe allergy to a mainstay of [ovarian cancer](#) treatment, carboplatin. Even as a burning sensation engulfed her body during the allergic attack, Greenleaf's chief fear was that doctors at Massachusetts General Hospital would take her off the chemo combination she believed her best shot.

"I kept mumbling, 'I want to stay on,'" recalls Greenleaf, 52, who eventually got her wish. "All the nurses kept telling me, 'You can, we'll get the drug into you safely.'"

Allergies make up 5 percent to 10 percent of all adverse reactions to medications, according to the American Academy of Allergy, Asthma and Immunology. Sometimes drug allergies kill. So anyone who's ever reported an allergic reaction to a medicine, even decades earlier, is told never to take that drug.

Penicillin and related antibiotics are a leading trigger, as are anti-inflammatory [painkillers](#) like aspirin. But increasingly, severe reactions to some leading cancer therapies are being reported, including allergies developed by more than a quarter of patients who take widely used platinum-based chemos.

You've probably heard of allergy shots, where hay-fever sufferers get small doses of the problem allergen for a few years until they build up tolerance to it. More recently, allergists have begun testing similar therapy for children with life-threatening food allergies.

Desensitization for drug allergies is the same concept. It was first started for penicillin allergies and expanded to chemo in recent years: Tiny, diluted amounts of the problem drug, sometimes with anti-allergy medicines, are given in slowly escalating doses over hours to a day - usually in the hospital or even intensive care unit for safety - until reaching the optimal dose.

But desensitization's effects last only as long as the patient is taking a daily dose of that medication. That means chemo patients, for instance, must get desensitized all over again before each new treatment cycle.

First step: Prove the allergy. About 30 percent of penicillin allergies can disappear in a decade or so as immune cells age and are replaced, but only testing can tell, says Dr. Elina Jerschow, who directs a newly opened drug desensitization program at New York's Montefiore Medical Center.

A skin test for [penicillin](#) allergy returned to the market last fall after a several-year absence. Castells' office in Boston is working through a waiting list of people eager to be tested. Many other drugs lack a skin test and may require a "challenge," in which a small amount of the drug is administered to the patient in the doctor's office or hospital to be sure of the diagnosis.

The culprit isn't always obvious. Montefiore's Jerschow is testing a man whose open-heart surgery was aborted after he had a reaction to either the anesthesia - three drugs were used - or a precautionary antibiotic. His surgery can't be rescheduled until she finds the cause.

When patients don't have a good alternative, customized desensitization can calm the immune cells, called mast cells, that control this allergic response. Small amounts of the drug can bind to the cells in a way that prevents them from overreacting to the bigger dose.

The team - an allergist and specially trained nurses - must know how to respond in case the desensitization is enough to spark a life-threatening reaction. In 2008, Castells published a series of 413 desensitizations to cancer drugs, in 98 patients undergoing repeated treatments with medicines including [carboplatin](#), Taxol and the monoclonal antibody Rituxan - and found 94 percent had a mild or no reaction.

There's no count of how many hospitals have formal desensitization programs. Castells' program desensitizes three to five people a day, including many patients who travel to Boston because their own doctors are unfamiliar with desensitization.

It can be scary for patients, too, says Mass General gynecologic oncology nurse Elizabeth Johnson.

"Anxiety itself can be a sign of a reaction so it gets tricky," she says. But,

"I'm betting this is going to become a larger and larger treatment phenomenon because other disciplines are catching on."

©2010 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: Temporary fix helps patients around drug allergy (2010, April 12) retrieved 15 May 2024 from <https://medicalxpress.com/news/2010-04-temporary-patients-drug-allergy.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.