

# Acne gel linked to rare side effect, doctors warn

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Teen developed blood disorder after using Aczone for a week.

(HealthDay)—For certain people, the acne treatment Aczone may be linked to a rare blood disorder, a new case study contends.

A 19-year-old woman who had used Aczone—the skin gel version of the drug dapsone—for a week developed a serious condition called methemoglobinemia.

The patient showed up at a Pittsburgh emergency room with a headache, shortness of breath, and blue lips and fingers. Her symptoms initially confounded her doctors.

Although she had applied a "pea-sized" amount of Aczone to her skin twice daily for seven days before seeking care, she never mentioned that when asked if was using any medications.

"We went over all her meds and herbal supplements," said Dr. Greg Swartzentruber, a medical toxicology fellow at the University of Pittsburgh Medical Center. "And we couldn't come up with a cause, even after interviewing her and her family. Aczone was just never mentioned."

The young woman didn't realize that "topical medicines can have systemic adverse effects, and she didn't realize the importance of telling your doctor about everything you might be taking, including topicals," he added.

The study authors noted that prior research has shown that dapsons pills, in very rare instances, can trigger methemoglobinemia, the abnormal production of a red blood cell protein that delivers oxygen throughout the body.

But the current case appears to be the first time that this condition has been associated with Aczone, the skin gel version of dapsons, they said.

Swartzentruber and his colleagues described the case in a letter in the Jan. 29 issue of the *New England Journal of Medicine*.

Dapsons pills, which were also used to treat leprosy, have been available for decades. The topical 5 percent gel version known as Aczone was approved by the U.S. Food and Drug Administration in 2005.

"It's a very effective first- or second-line treatment for acne," said Dr. Darrell Rigel, a clinical professor of dermatology with New York University Medical Center in New York City. "The medicine has actually been around since before World War II. It works, and anything you can apply topically to the skin is going to, by definition, be more locally targeted than an ingestible. So that's good."

The problem with this drug "is that whether taken orally or topically it can cause a serious reaction among certain people with a rare genetic defect that makes it impossible to metabolize properly," he explained.

"The blood cells blow up, basically," Rigel added. "The prevalence of this deficiency is very low. Maybe it affects less than 1 percent of the population, but those that have it can end up with serious problems."

Rigel said the dermatologist who prescribes Aczone has a responsibility to always screen patients for this issue. "And patients have to know that when they're asked to give their drug history they can't forget their topicals," he said.

On both points, Swartzentruber agreed. It wasn't until the results of a urine test came back that doctors saw indications of dapsone, he said.

This case shows that even a skin product is absorbed, "and can still produce a serious reaction," he added.

The young woman was successfully treated and released from the hospital after two days, he said.

Allergan, the maker of Aczone, commented on the findings in the same journal issue.

"Acquired methemoglobinemia is a rare complication after exposure to certain topical anesthetic agents and oral antibiotic agents, including oral dapsone, but was not seen in clinical trials of topical dapsone," the company said.

"Although methemoglobinemia appears to be rarely associated with Aczone 5 percent gel, it has been listed as an [adverse drug reaction](#) in the Allergan reference safety materials in order to create awareness among

patients and prescribers," the drug maker continued.

A company spokeswoman declined further comment.

**More information:** There's more on acne at the [U.S. National Institutes of Health](#).

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