

## Drug for Rheumatoid Arthritis May Also Help Ease Vitiligo

Case study showed tofacitinib cleared up skin pigmentation loss in woman after just 2 months



Patient's hands before and after treatment Photo: Dr. Brett King

WEDNESDAY, June 24, 2015 (HealthDay News) -- It's only been tested in one patient so far, but researchers report that a drug for rheumatoid arthritis may be a promising treatment for the discoloring skin condition known as vitiligo.

Vitiligo is characterized by a disfiguring loss of pigmentation in skin. Most notably, pop star Michael Jackson suffered from the disorder much of his adult life. According to the Yale University researchers, current treatments are limited to steroid creams and light therapy, neither of which is reliably effective.

"Current treatments for vitiligo can be cumbersome, expensive and have side effects, besides being less than optimal in results," said Dr. Doris Day, a dermatologist at Lenox Hill Hospital in New York City.

She added that the downsides of vitiligo go beyond the cosmetic.

"We know that appearance has a powerful impact on self esteem, and having white blotches that are very difficult to cover with makeup -- in very visible areas such as the face and hands -- can have a powerful negative impact on both social and professional activities," Day said.

The new study was led by Dr. Brett King, an assistant professor of dermatology at Yale School of Medicine, in New Haven, Conn. His team had heard of recent research suggesting that an existing class of FDA-approved medications, known as JAK inhibitors, were effective in treating hair loss caused by alopecia areata.

So, they reasoned that the JAK inhibitor tofacitinib (Xeljanz) -- currently approved to treat rheumatoid arthritis -- might also help ease vitiligo.

The researchers tested their theory by giving the drug to a 53-year-old patient with noticeable white spots on her face, hands and body.

After taking the drug for two months, the woman experienced a marked improvement in the pigmentation on her face, arms and hands. After three more months on the medication, the white spots on her face and hands were almost entirely gone and just a few spots remained on her body.

The woman did not have any negative side effects from the treatment, according to the study published June 24 in the journal *JAMA Dermatology*.

King's team is hopeful that the treatment may perform well in other patients, but they stressed that more research is necessary to confirm that.

"It's a first, and it could revolutionize treatment of an awful disease," King said in a Yale news release. "This may be a huge step forward in the treatment of patients with this condition. While it's one case, we anticipated the successful treatment of this patient based on our current understanding of the disease and how the drug works."

Day agreed that tofacitinib could offer people with vitiligo new hope.

"This drug has had a very impressive impact in hair loss," she said, "and [based on the new study] I'm optimistic it will have a similar reliable effect for those suffering from vitiligo. Of course, clinical trials are needed to help evaluate dosing and results, but it's very exciting to have a drug to work with that shows so much promise."

Dr. Gary Goldenberg is an assistant professor of dermatology at the Icahn School of Medicine at Mount Sinai, in New York City. He noted that tofacitinib is also being considered for approval by the U.S. Food and Drug Administration for the treatment of psoriasis.

"Since this medication suppresses the immune system, it's possible that it may be efficacious in other autoimmune conditions, such as alopecia areata and vitiligo," he reasoned. "This is great news for patients with these conditions, since not many effective treatments are currently available."