

Contact Buzz: Allergic Contact Dermatitis to Cannabis

Erin Foster, MD, PhD, Christina Nguyen, BA,
and Patricia Norris, MD

PRECÍS

We discuss a case of previously undescribed allergic contact dermatitis to cannabis.

DISCUSSION

A 67-year-old woman was referred for a rash that she developed in November 2015. She experienced chronic back pain and had found that cannabis controlled her pain better than the Vicodin prescribed to her. Under Oregon law, it is legal to grow a limited amount of cannabis for personal use, so the patient and her husband grow and harvest cannabis, both sativa and indica varieties.¹ She used marijuana with a vaporizer and in food cooked at home. On the year of the first harvest, she noticed red, patchy, pruritic lesions that were confined to her arms after trimming fresh marijuana. She was treated by her primary care physician with an antifungal cream, which did not help. She then tried topical steroids, which improved the rash but did not clear it completely. She had a flare of the rash on her arms in 2017 during harvest of cannabis, and the rash spread to involve the perioral area, posterior auricular, neck, and chest. The rash was eczematous with nummular-like plaques and vesicles that lasted for weeks.

The patient had a history of pruritic rashes associated with some costume jewelry. She also had a history of hand dermatitis that she associated with wearing rubber gloves for several hours at a time.

Her history was suspicious for allergic contact dermatitis. She was patch tested to the North American Contact Dermatitis Group 2016 standard and our supplemental patch test tray, as well as wet and dry samples of plain untreated cannabis that she grows at her home (strain: lemon hybrid, indica dominant). No pesticides or chemicals were used to grow the cannabis, and she was patch tested to the entire flower. She had 2 positive patch test reactions in both samples of cannabis (Figs. 1–3). We then patch tested 10 control subjects to the same dry untreated cannabis that the patient grows



Figure 1. Forty-eight-hour dry cannabis patch test reading.

at home, and all 10 subjects had negative patch tests after 7 days. No irritant reactions were noted in any of the controls.

In summary, our patient experienced type IV allergic contact dermatitis due to cannabis exposure. She had several years of contact with the cannabis before becoming sensitized. Her main areas of exposure were on the arms, but her recent outbreak involved the head and neck, possibly from airborne exposure. Her delayed type IV reaction was classic for allergic contact dermatitis, with both positive patch tests and morphology consistent with the diagnosis. She and her husband have stopped smoking cannabis. Interestingly, she has no skin problems when she ingests cannabis. After the patch testing, she made edibles out of both the sativa and indica varieties and gets the same pain relief without skin symptoms.

Twenty-six states and the District of Columbia have legalized marijuana use in some form. Seven states, including Oregon, have



Figure 2. Two-day dry cannabis patch test reading.

From the Oregon Health & Science University, Portland.

Address reprint requests to Erin Foster, MD, PhD, OHSU Department of Dermatology, 3303 SW Bond Ave, Portland, OR 97239. E-mail: fitche@ohsu.edu.

The authors have no funding or conflicts of interest to declare.

DOI: 10.1097/DER.0000000000000378

© 2018 American Contact Dermatitis Society. All Rights Reserved.

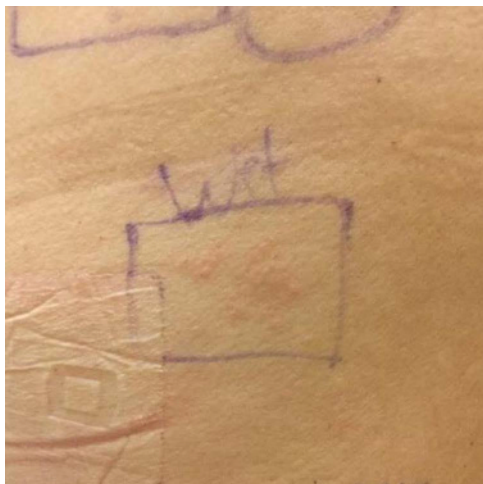


Figure 3. Two-day wet cannabis patch testing.

approved recreational use and growth. Two recent articles hail the beneficial aspects of cannabis for a multitude of dermatologic conditions.^{2,3} Although this may be true, it is clear from our patient's case that there are also hazards associated with cannabis exposure.

ZEBRA

This case informs on a previously unrecognized condition that will likely increase in incidence as more states legalize marijuana.

REFERENCES

1. Oregon Ballot Measure 91, passed in 2014. Available at: <http://www.oregon.gov/olcc/marijuana/Documents/Measure91.pdf>. Accessed September 15, 2017.
2. Theroux Z, Cropley T. Cannabis and Dr. Piffard—a century ahead of the curve. *JAMA Dermatol* 2016;152(9):972.
3. Mounessa JS, Siegel JA, Dunnick CA, et al. The role of cannabinoids in dermatology. *J Am Acad Dermatol* 2017;77(1):188–190.