

CASE REPORT

Successful Treatment of Poison Oak Dermatitis Treated with *Grindelia* spp. (Gumweed)

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ABSTRACT

Poison oak and related hypersensitivity dermatitides are age-old problems that have historically been treated with herbal medicines before the availability of corticosteroids. Few of these historical therapies have been rigorously investigated. The case presented here provides some insight into the potential efficacy of certain herbs for relieving mild-to-moderate poison ivy dermatitis.

CASE REPORT

A 51-year-old, healthy, white woman presented with complaints of recent onset of rash on her right inner arm and left forearm consistent with toxicodendron dermatitis.¹ The diagnosis was made by direct inspection of the rash in alignment with the training and scope of practice of licensed naturopathic physicians in Oregon and Washington. A skin biopsy was decided against because of the highly typical appearance of the rash, relatively minor nature of the case, absence of complications, and lack of diagnostic specificity of this technique. No other laboratory monitoring appeared to be warranted, as the patient did not develop fever or any other signs that would suggest the need for testing. Also, because the case occurred in the midst of the national convention of the American Association of Naturopathic Physicians, photographs of the rash could not be obtained by the authors.

Four days before onset, the patient had been picking blackberries in a patch that later was found to be intermingled with poison oak. She attempted to wash the resin from her arms with a chlorine/water mix. This diminished the out-

break on the left forearm, but the right upper inner arm worsened with increased pruritus and heat. She was started on a topical combination of *Calendula officinalis* (marigold) flowers and *Ocimum tenuifolium* (holy basil) leaf and flower in an olive oil base and the homeopathic remedy rhus tox 30C.

The dermatitis continued to worsen and spread to patches on the suprapubic region, lower legs, and right forearm. Large areas of inflammation covered the entire right upper inner arm. The patient applied a friend's prescription cortisone cream (exact brand or type unknown) a few times, but the inflammation, itch, heat, and pain increased. She was given doses of the homeopathic remedies causticum 30C and arsenicum 30C with no beneficial effect.

At this point the patient was started on calendula cream with tincture of *Impatiens capensis* (jewelweed) leaf and flower. After several applications, the affected area continued to weep and ooze with no noticeable improvement. The patient had started using homeopathic sulfur 30C, which did not affect the rash but did decrease itch intensity and improved the patient's sleep. After approximately 24 hours,

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tincture (85% ethanol) of *Grindelia* spp. (gumweed) fresh flower buds was applied directly to the lesions, with an immediate effect on diminishing pruritus and decreasing transudation. This was then mixed into the calendula cream base and regularly applied, which caused further drying and symptomatic relief.

The gumweed/calendula cream was applied directly to the lesions and a cotton pad coated with cream was kept applied continuously. Within 48 hours, the dried area grew and the weeping area, conversely, shrank; along with the total area of redness and inflammation, the weeping and the itching almost completely subsided. Within 1 week the entire affected areas were resolved, with a small erythematous patch remaining for another week on the upper inner arm.

DISCUSSION

Several references on traditional herbal medicine discuss various treatments for poison ivy/oak dermatitis, including gumweed and jewelweed.²⁻⁴ One double-blind clinical trial used boiled fresh stems (presumably flowering tops) of *Impatiens biflora* in subjects who were patch tested with poison ivy/oak oleoresin extract. The jewelweed extract applied topically had no benefit compared to distilled water.⁵ This agrees with the current case in which jewelweed tincture (55% ethanol extract of fresh flowering tops) was not effective.

No clinical trials were located on gumweed, which is considered to be anti-inflammatory in traditional herbal medicine. One German study found preliminary evidence that the resinous fraction of *Grindelia robusta* was antimicrobial.⁶

It is possible that the ethanol contained in the gumweed tincture was at least partially responsible for the efficacy of the treatment. No clinical trials were located addressing this

issue. Various unreferenced sources on the Internet suggest that ethanol can either aggravate or improve poison ivy dermatitis, leaving the issue unresolved.

Even if the healing of the rash was the result of the natural waning of the condition, the immediate and sustained relief of symptoms that the patient experienced makes this a potentially valuable therapy. A rigorous clinical trial is warranted immediately after exposure to poison ivy and related plants to determine whether the traditional therapy of topical application of gumweed tincture or other extracts is an effective palliative and/or curative treatment.

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