

# Poison Ivy: Relieving Ivan's Itch

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## Ivan's Itch

- Age: 30
- Presents with a four-day history of an itchy rash.
- The rash began with a couple of erythematous papular lesions near his left knee.
- Ivan thought the lesions were insect bites, having been bitten by some mosquitoes the day prior to the rash's appearance. However, over the next few days, the rash appeared to spread and cover large parts of both lower extremities.
- The papular lesions grew larger, developed vesicles and eventually bullae.
- Both lower extremities became edematous and intensely pruritic.
- Ivan has no history of allergies and is not on any medication.



**What is Ivan's diagnosis?**

**For the answer, go to page 48.**



Figure 1. *Toxicodendron radicans*.

Poison ivy, or *toxicodendron radicans* (Figure 1), is very common in Southern Ontario (particularly near Lake Erie, Lake Ontario and the Ottawa valley), as well as Southern Quebec.<sup>1</sup> Although thought to be limited to these areas, poison ivy is actually present in all Canadian provinces except Newfoundland.<sup>2</sup>

The clinical features of the poison ivy rash are caused by the oil (the urushiol) within the leaf's roots and vines.

### What are the symptoms?

The allergic contact dermatitis occurring from contact with poison ivy usually presents as itchy papules that develop into vesicles or blisters (Figure 2). The first exposure usually causes sensitization to the oil resin and a subsequent exposure will result in an allergic reaction.

The rash may start within eight hours of the second exposure, but can be delayed up to 10 days after contact with the plant. New lesions may appear up to three weeks after exposure.

It is important to note that the fluid from the vesicles is not contagious. Sensitivity to the urushiol varies considerably between individuals, with 10% to 15% of people having no reaction.<sup>3</sup> Children begin to react at about three to five years of age.<sup>4</sup>

### What about management?

There are several treatment methods for contact dermatitis resulting from exposure to poison ivy. Mild cases of poison ivy may be treated by topical methods. Cold compresses, calamine lotion or an oatmeal bath may be helpful to reduce the pruritis.

## More on Ivan

Ivan is referred to a dermatologist.

It is revealed that he recently travelled to Eastern Ontario, where he had been working outside.

The diagnosis of contact dermatitis due to poison ivy is made.



Figure 2. Poison ivy rash.



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Unfortunately, many of these treatments provide only temporary relief. Topical antihistamines were once recommended, but are now avoided due to the possibility of sensitization or exacerbation of the reaction. Oral antihistamines are more effective, including hydroxyzine or diphenhydramine.

Often, mild cases benefit from topical corticosteroids to improve symptoms and speed up healing of the affected area. Widespread or more severe eruptions require systemic steroids at a dose of 1 mg/kg per day until symptoms are controlled and then tapered over a two- or three-week period. Topical corticosteroids, used in conjunction with oral steroids, will help prevent a rebound eruption that often occurs with poison ivy if the course of systemic steroids is too low or too short.<sup>5</sup>

While in the woods, there are several treatment options available for individuals who inadvertently touch the poison ivy plant and recognize the problem right away:

- **Jewelweed:** A natural remedy for poison ivy exposure. The plant is a low shrub with waxy green leaves and orange flowers. This remedy is usually located near the poison ivy plant. You can crush a few leaves and stems and rub them on the exposed area.
- **Alcohol:** Can be used to decrease the chance of a reaction since urushiol is alcohol-soluble. Keeping rubbing alcohol in a first-aid kit is a good idea. Beverages containing alcohol may also help to decrease the chances of an eruption.
- **Water:** Rinsing the area with water before washing with soap will help prevent spreading the oil to other areas.<sup>6</sup>

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### References

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