Diagnosis Treatment and Follow Up Care of Poison Ivy Contact Dermatitis

Posted on October 3, 2019

Dermatitis is a group of inflammatory lesions of the skin that develops under the influence of internal and external causes of chemical, physical or biological nature. Dermatitis from poisonous sumac (poison ivy, Rhus toxicodendron, Poison ivy, is family anacardia (Anacardiaceae) (The Poison Ivy, Poison Oak, Poison Sumac Site, n.d.).

The first mention of dermatitis from this plant is made by the botanist Smith (1579-1631). The incidence of dermatitis from sumac is particularly high in North America. In Canada, for example, there are about 350,000 cases of this dermatitis (Turner) every year. Experiments carried out with an alcoholic solution of poison ivy leaves showed that 60 to 80% of people are sensitive to its allergen, and in children up to one and a half years of age, there is usually no sensitivity to it (Prok, MSPH, & McGovern, 2017).

Pathophysiology

There are such varieties as coin-like eczema (lesions have the appearance of plaques of oval form and bubbles), dishydrotic (blisters on the palms, fingers and feet), eczema with augosensitisation (generalized rash, appearing after local dermatitis and associated with hypersensitivity to a particular allergen) and dry eczema (the skin in the affected area is dry, cracked, usually occurs in winter) (DermNet New Zealand Trust, 2014).

Epidemiology

Numerous individuals are sharpened to urushiol, the allergenic compound found in harm ivy, harm oak, and the toxic substance sumac. 50% of individuals will respond to harm ivy in nature, and roughly 75% will respond to fix testing with urushiol. Every year, an expected 25 to 40 million Americans require therapeutic treatment after introduction. Firefighters, ranger service specialists, and agriculturists constitute an extensive extent of the casualties influenced through the word-related introduction, and this can have essential word-related and financial effects (Hay et al., 2013).

Toxic substance ivy dermatitis influences all ethnicities and skin composes, and most land locales in the United States are at risk. Kids are additionally influenced; most youngsters beyond eight years old years are sharpened. Hypersensitive responsiveness to harm ivy seems to wind down with age, particularly in those with mellow responses and constrained sharpening exposures (Prok, MSPH, & McGovern, 2017).

Diagnosis And Management

The rash, as a rule, manifests itself 8-48 hours after contact with the plant. However, it can appear in 5 hours or 15 days. Usually, if the allergy is manifested for the first time, the rash appears within a week. It appears in new places for several days, but only where there was contact with the plant. The rash is not contagious. It cannot be transmitted after its manifestation, even with contact with blisters, as the oils have already been absorbed or washed off the skin. It may seem that the rash is spreading, but this can occur with early contact or in contact with objects that may contain oils (Burns et al., 2017). The more oil gets on the skin, the sharper the skin reaction. Acute reactions that occur in a small amount of oil may be in people who are very sensitive to this allergen.

Causes

Allergic dermatitis is a genetically conditioned process, and in different individuals, it is caused by various substances. The most common irritant is poisonous ivy and poisonous oak. In the US, allergic dermatitis is the most common manifestation of allergy, which is registered in almost every second inhabitant of the country. Flowers, herbs and vegetables can also affect the skin of some people. Sunburns and sunburn increase the risk of developing dermatitis.

Diagnostics

Diagnosis of rashes is usually carried out during physical examination. The doctor will examine the rash and ask about possible contact with the plant and its duration (Burns et al., 2017). If you are not sure that you have had contact with the plant, he will ask about your activities, work and hobbies.

Treatment

Most allergic reactions that occur due to contact with poison ivy, oak and bagpipe can be successfully treated at home. To relieve symptoms, use a cold compress and take a cool bath. Symptoms can also be removed with antihistamines that are dispensed without a prescription or a calamine lotion. Treatment of a moderate or severe reaction requires the involvement of a physician who can prescribe corticosteroids, creams, ointments and injections (Hay et al., 2013).

Prevention Of An Allergic Reaction

The best way to prevent a rash is to identify the plant and avoid it. If you cannot avoid contact with these plants, clothes with long sleeves and trousers, as well as creams and lotions that will protect against the action of oil, can help.

Reference

Burns, C. E., Dunn, A. M., Brady, M. A., Starr, N. B., Blosser, C. G., & Garzon, D. L. (2017). Pediatric Primary Care (6th ed.). St. Louis, MO: Elsevier. Plant dermatitis. (n.d.). Retrieved March 26, 2018, from http://www.dermnetnz.org/topics/plant-dermatitis/

Prok, L., MD, MSPH, FAAP, & McGovern, T., MD. (2017, April 6). Retrieved March 26, 2018, from https://www.uptodate.com/contents/poison-ivy-beyond-the-basics

The Poison Ivy, Poison Oak, Poison Sumac Site. (n.d.). Retrieved March 26, 2018, from http://www.poison-ivy.org/

DermNet New Zealand Trust. (2014). DermNet NZ. Retrieved from http://www.dermnetnz.org/
Dermnet.com. (2011). Dermnet Skin Disease Atlas. Retrieved from http://www.dermnet.com/

Hay, R. J., Johns, N. E., Williams, H. C., Bolliger, I. W., Dellavalle, R. P., Margolis, D. J., … Naghavi, M. (2013). The Global Burden of Skin Disease in 2010: An Analysis of the Prevalence and Impact of Skin Conditions. *The Journal of Investigative Dermatology*, *134*(6), 1–8. https://doi.org/10.1038/jid.2013.446