



FIRE ANT BITES

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Fire ants are aggressive, venomous insects that have pinching mandibles on the head and a sharp stinger on the rear of the body, which is connected to an internal venom sac. They were first imported accidentally into Alabama from South America in the 1930's and have continuously been expanding across the United States, even into Puerto Rico. Fire ant stings usually occur on the feet or legs after accidentally stepping on a fire ant mound. It is important to be aware that during the summer fire ants obtain the largest amount of venom and therefore the stings are largest and most painful.

There are three types of skin manifestations that can occur after a fire ant sting:

- A local reaction is the most common reaction to fire ant stings and is characterized by an instant sense of burning that is followed by itching and a raised, red welt on the skin that lasts for approximately four to six hours. After the welt subsides, the following day a pustule usually forms with blistering, and resolves over a week. Victims are often prone to scratching these lesions as they are intensely itchy, however it is recommended that you refrain from doing so as an infection in the skin might occur.
- A small percentage of people who are stung develop a large local reaction. This is where a large welt appears on the skin at the site of the bite, and over 6 to 12 hours swelling occurs with extreme itching that later becomes painful. Usually in one to two days the swelling becomes increasingly large and reaches its maximum size becoming hot and painful.
- In a rare group, anaphylaxis can occur from a fire ant bite. This is a severe allergic reaction that usually coincides with a previous fire ant or wasp bite history. The signs of anaphylaxis present within 30-40 minutes of the bite and are life threatening if not treated immediately and properly. The entire body will itch and the patient will develop difficulty breathing in addition to weakness. Patients who develop anaphylaxis and have a significant history of systemic reactions to fire ant stings should be checked for a venom allergy antibody called V-IgE by doing a skin test at an allergist's office.

There are many toxic reactions that have been associated with fire ant stings and one must be wary of these systemic reactions. They are: serum sickness, seizures, mononeuritis, nephrotic syndrome, and worsening of preexisting cardiopulmonary disease.

When you first identify the fire ant you should kill it by slapping it off your body and consequently washing the sting site with soap and cold water. In regards to the itching, it can last for hours and an oral **antihistamine** can be taken or a **topical steroid** ointment applied such as hydrocortisone. This same treatment is effective for a local reaction and a large local reaction. The hydrocortisone ointment can be covered with first aid tape to increase absorption of the steroid. Very large local reactions are treated with a prescription steroid ointment and/or an **oral corticosteroid** such as prednisone. If the patient develops anaphylaxis they should be treated emergently and also evaluated by an allergist. The allergist can administer desensitizing injections in the event the patient is stung again by a fire ant.

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