ECZEMA HERPETICUM

http://www.aocd.org

Eczema herpeticum (EH) is a painful, blistering rash caused by the herpes simplex virus. EH is also called Kaposi varicelliform eruption, as the person who first described it believed it to resemble chicken pox, which is caused by the varicella zoster virus. EH is more common in young children and particularly in individuals who have atopic dermatitis (AD). The skin acts as a barrier to hold in moisture and keep out environmental elements including bacteria and viruses. In those with AD, the barrier is weakened by the alteration in a protein that helps bind the outer layer of the skin together. People with AD have dry, sensitive skin and are at a greater risk for developing EH. The infection is usually caused by HSV 1, the common culprit of cold sores, and can be spread from close contacts like parents or siblings. However, it may occur with the strain that typically causes genital herpes, HSV 2.

EH presents as a sudden appearance of pruritic, painful lesions filled with fluid or pus. Patients may also have a fever in addition to local swelling and enlargement of lymph nodes. The small blisters may break open and reveal erosions or ulcerations, eventually forming crusts. The lesions are usually concentrated in the areas of active dermatitis, although it may present in uninvolved skin. The distribution of AD in young children is often on the face and neck, so EH is common in these locations. Secondary infections with Staphylococcus aureus or molluscum contagiosum may be potential complications.

This condition is usually mild and self-limited in healthy individuals. It is not uncommon to have additional episodes throughout life. Some cases may only present with just a few vesicles in a small, localized area, and it is likely that the majority of these cases go undiagnosed. More severe cases require antiviral medications to be taken orally or intravenously. It is important to recognize that EH can be fatal in those with a weak immune system. Those individuals are at an increased risk to have the virus spread to the blood stream and to other parts of the body. If the lesions become secondarily infected with bacteria, such as Staphylococcus aureus, this can potentially spread to the blood stream and be life threatening as well.

When EH is suspected, a biopsy with viral culture is advised. Polymerase chain reaction (PCR) is an alternate test that can be used for diagnosis by detecting HSV DNA. Treatment should be started immediately while cultures are pending. If the tissue culture grows bacteria, that does not rule out an HSV infection. It is possible to have a bacterial and viral infection at the same time. If lesions are near the eyes, an ophthalmologic evaluation is recommended. HSV can infect the eyes causing a condition called herpes simplex keratitis. This can lead to scarring of the cornea.

Other risk factors for the development of EH include hot tub exposure and the use of topical creams that alter the immune system in the skin, such as tacrolimus and pimecrolimus. Other skin conditions associated with EH include Darier's disease, Hailey-Hailey disease, cutaneous T cell lymphoma, severe seborrheic dermatitis, scabies, Wiskott-Aldrich syndrome, allergic contact dermatitis, and burns. Rarely, EH has occurred in psoriasis patients treated with immunosuppressive medications.