



POLYMORPHOUS LIGHT ERUPTION

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Polymorphous light (PML) eruption is the most common light-induced skin disease. Individual patients tend to develop the same type and pattern of outbreak each year. Lesions usually heal without scarring. The eruption appears first on limited areas, but becomes more extensive during subsequent summers. Most people with PML eruption have flares each summer for many years; a few have temporary remissions. The disease may begin at any age. The amount of light exposure needed to elicit an eruption varies greatly from one patient to another. Patients can tolerate a certain minimum exposure time, such as 30 minutes, after which the eruption appears. Light sensitivity decreases with repeated sun exposure; this is referred to as hardening. The eruption may cease to appear after days or weeks of repeated sun exposure. Those exposed to sunlight year round rarely acquire PML eruption. Most patients have symptoms two hours after exposure.

Hereditary PML eruption occurs in Native Americans of North, Central, and South America. In northern latitudes, the eruption appears on sun-exposed areas of the body from the spring and persists until fall. The most common initial symptoms are burning, itching, and redness. The eruption usually lasts for 2 or 3 days, but in some cases it does not clear until the end of summer. Many patients experience lethargy, chills, headache, and nausea starting approximately 4 hours after exposure but lasting only 1 or 2 hours. The most commonly involved areas are the V of the chest (the area exposed by open-necked shirts), the backs of the hands, outer portion of the forearms, and the lower legs of women. Women are affected more often than men 2 to 1. Family history may be associated in up to 50% of the time.

There are a number of clinical types of PML eruption. The papular type is the most common form. Small papules (bumps) are all over the body or densely clumped together. The plaque type is the second most common pattern. Plaques may be superficial or urticarial (hives). It occurs primarily on the arms, lower limbs, and V area of the chest and usually begins with raised plaques from which groups of vesicles may arise. Itching is very common.

Treatment options include topical steroids in short, intermittent 3 to 14 day courses, with mild to moderate strength topical steroids being effective. Protection from sun exposure during times of maximum intensity (between 11 a.m. and 3 p.m.) should be avoided. Sunscreens with maximum sun-protecting factors should be used (ex. titanium based). **Oral steroids** are sometimes used in severe cases to reduce the itching and hasten resolution. Desensitization with phototherapy is performed with repeated exposures to sunlight; this hardening is safe with controlled exposure to sunlight or **artificial ultraviolet light** sources under a dermatologist care. (**PUVA**) an oral medicine and natural sunlight treatment is simple and effective for patients who do not improve with the above routine measures and for those who have significant eruptions each summer. Antimalarials pills may be effective and should be considered for patients who are not protected by sunscreens and do not respond to UVB or PUVA phototherapy.

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