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PATIENT INFORMATION: TOPICAL PUVA TREATMENT OF PSORIASIS AND OTHER DISORDERS

A treatment for psoriasis, vitiligo, eczema, dermatitis, etc. called topical photo-chemotherapy involves the application of lotion containing 8-methoxypsoralen (also known as methoxsalen or 8-MOP), followed by exposure to a special kind of ultraviolet (UV) light known as “UVA” or “long-wave” ultraviolet radiation from an artificial light source.

In 1974, 8-MOP was isolated from a plant; the drug appears to have no activity unless it is first activated by UV light of the UVA type. This acronym “PUVA” refers to the combination therapy of Psoralen plus UVA.

Topical psoralen in conjunction with artificial UVA irradiation has been used since the 1940s for the treatment of vitiligo, psoriasis, eczema or dermatitis. .

The advantage of topical PUVA over oral PUVA is that only localized areas of psoriasis or vitiligo that are treated with the psoralen lotion will be sensitized to UVA. The remaining uninvolved, untreated areas are not at risk for side effects of PUVA. Topical PUVA is ideal for treatment of localized psoriasis such as on the palms and soles or for resistant plaques on the body. Precisely how PUVA works is not known. Its mechanism of action probably relates to the activation of psoralen by UV light, which inhibits the abnormally rapid multiplication of the cells in the psoriasis skin.

Typically, the 1% Oxsoralen lotion is further diluted by the pharmacist in an ointment, cream or lotion for application to localized areas of psoriasis prior to UVA exposure. The medication is to be applied 30-60 minutes before the visit.

The psoralen molecule is absorbed into the skin reaching an optimum concentration about 20 minutes to 1 hour after application. If it is activated at the same time by UVA light, it will have its maximum possible effect. During the day of psoralen application, treated exposed skin will still be sensitive to UV light—artificial or natural (sunlight). You must therefore (1) avoid direct sunlight during the day of treatment (even sunlight coming through window glass) and apply to treated exposed skin areas the recommended sunscreen in order to avoid a sunburn-like reaction.

There is substantial epidemiologic evidence that sunlight, especially UV light, causes skin cancer and “aging” of the skin. The potential exists for such changes to occur in PUVA-treated patients. It has been shown that animals given large doses of psoralen plus UV light develop skin tumors. Furthermore, treatment with oral PUVA for psoriasis and other disorders has been associated with an increased risk of skin cancer. The risk of skin cancer following PUVA therapy is related to the total cumulative dose over time. Uneven pigmentation and freckling are other side effects that may result from topical PUVA.

Topical PUVA treatment of psoriasis, vitiligo, and dermatitis/eczema appears to be effective in most individuals. Some patients, however, are resistant to this therapy. Others who are sensitive to PUVA treatments can develop a temporary sunburn-like reaction. Please remember that PUVA therapy is not by any means a cure. Treatments given 2 or 3 times a week over a several month period are required for clearing, following which maintenance therapy at less frequent intervals (once a week tapering to every third week or less) are given. PUVA is eventually discontinued. The length of remission following clearing by PUVA therapy and the dependence of such remissions on maintenance is variable.

During the course of PUVA, other forms of topical therapy may be prescribed by your physician. Please use a moisturizer such as CeraVe, Aquaphor etc.

Other forms of phototherapy including sunlamp treatment with UVB or exposure to sunlight should be avoided during the course of PUVA therapy. You risk a sunburn reaction if you use the other light sources while being treated with PUVA, which may limit further treatment. Do not exposure yourself to these light sources. Topical psoralen is never to be applied before sun exposure as a severe sunburn-like reaction may result.

Since other medications either taken internally or applied to the skin can adversely interact with UV light and increase your sensitivity, please consult with your physician regarding the use of other medications, which you are taking, even if only irregularly. These comments also pertain to non-prescription over-the-counter preparations.

Your physician/provider would be pleased to answer any further questions you may have regarding the topical PUVA therapy.