

Polymorphous Light Eruption: Phototherapy-Based Desensitization Versus Intramuscular Steroids – Who Is Right, Who Is Wrong?

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Polymorphous light eruption (PLE) is an immunological mediated photo-dermatosis occurring in temperate regions that affects around 10–20% of the population, particularly between the second and third decades of life [1–3]. Women are more often affected than men. The photo-distributed maculopapular eruption appears relatively rapidly after exposure to UV radiation and lasts for several days. Severe pruritus and general malaise may be observed. PLE has a serious impact on quality of life and patients are often afraid of being severely bothered during their holidays or leisure activities [3].

The episodic treatment of eruptive PLE relies on topical potent steroids and oral steroids, according to extension and severity [1–4]. The prophylactic treatment of PLE involves external photoprotection using adequate clothing and 50+ SPF sunscreens [4–6]. More severe cases of PLE benefit from desensitization with UVB or PUVA therapy, 2–3 times a week for 4–6 weeks. UV phototesting is required prior to light desensitization for dosing and reimbursement issues [1–4]. This treatment is usually performed in the spring and repeated for 3–4 years, followed by a progressive relief of the propensity to PLE.

Some PLE patients relate that for the management of PLE their general practitioner simply administers a single intramuscular injection of methylprednisolone (Depo-Medrol, 40 mg/1 mL, 80 mg/1 mL) 1 or 2 days before departure to their holiday destination, with surprisingly good clinical efficacy and no adverse effects. The classic UV-based desensitization for the prophylactic treatment of PLE is cumbersome and time-consuming for both the patient and the dermatologist. Furthermore, the risk of photoaging and photocarcinogenesis is increased. Unfortunately, there are no data on corticosteroid-based prophylactic treatment of PLE and no comparative data, but by analyzing Table 1, one serious question emerges: for the management of PLE, who is right, the dermatologist or the general practitioner? Indeed, one single injection of corticosteroids is a highly patient-friendly, efficacious, cheap, simple, and rapid preventive treatment for PLE. In addition, a single injection in this young patient category is only exceptionally associated with serious adverse effects.

Although not published, one should probably rethink the impact of costs, simplicity, patient friendliness, safety, and efficacy of a single injection of intramuscular corticosteroids for PLE prophylaxis compared to UV desensitization.

Table 1. Comparison of preventive treatment options for PLE

	Light desensitization	Intramuscular steroids
Visits	1. Diagnosis 2. Phototesting: UVB/UVA 3. Evaluation of phototests 4. 8–18 sessions of phototherapy, UVB or PUVA	1. Diagnosis and IM injection
Long-term risk skin cancer	Contributes to the risk	Risk probably not significant
Photoaging	Contributes to photoaging	Probably not significant
Clinical efficacy	Good to very good	Very good
Compliance	Less than 100%	100%
Treatment complexity	+++++	+
Costs	3 visits 1 phototest: UVA/UVB 8–18 sessions of phototherapy Chest X-ray prior to phototherapy Blood sample prior to phototherapy	1 visit and cost of injection

Key Message

Can a single dose of methylprednisolone compete with light desensitization for the prophylactic management of polymorphous light eruption?

Statement of Ethics

This work was approved by the local ethical committee.

Disclosure Statement

The authors have no conflicts of interest to disclose.

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