

Pulsed dye laser as an adjunctive treatment for therapy-resistant pityriasis rubra pilaris



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Abbreviations used:

PDL: pulsed dye laser
PRP: pityriasis rubra pilaris

THERAPEUTIC CHALLENGE

Pityriasis rubra pilaris (PRP) is a heterogeneous papulosquamous disorder characterized by follicular papules and palmoplantar hyperkeratosis. Particular subtypes of the disease can be resistant to first-line treatments, such as isotretinoin and methotrexate. The off-label use of biologics for PRP has been effective but carries the risk of immunosuppression.¹ Pulsed dye laser (PDL) is used to treat many vascular disorders and has been reported as a treatment for keratosis rubra pilaris.² We report successful management of therapy-resistant PRP with PDL.

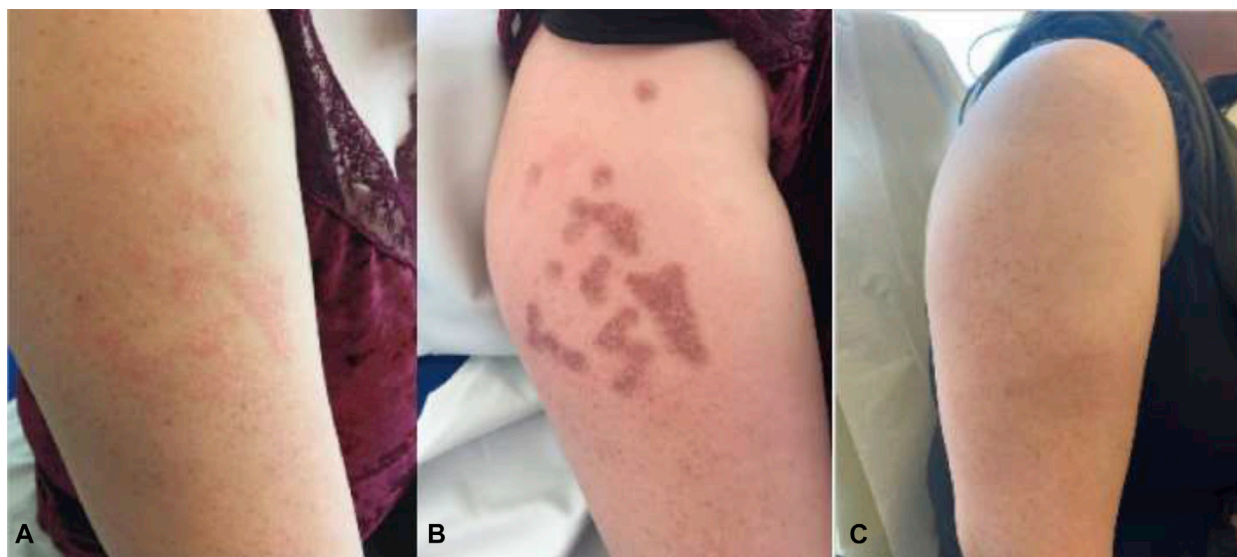


Fig 1. Pityriasis rubra pilaris. Pulsed dye laser therapy was performed at a wavelength of 595 nm, spot size of 10 mm, pulse duration of 0.45 ms, and fluence of 5.50 J/cm² for 30 pulses. **A**, Right arm before treatment. **B**, Right arm immediately after treatment. **C**, Right arm 1 month after treatment.

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Fig 2. Pityriasis rubra pilaris. Pulsed dye laser therapy was performed at a wavelength of 595 nm, spot size of 10 mm, pulse duration of 1.5 ms, and fluence 7.00 J/cm² for 180 pulses. **A**, Left cheek before treatment. **B**, Left cheek 4 months after treatment.

SOLUTION

Over an 8-month period, a 17-year-old girl with type IV PRP was treated with topical betamethasone dipropionate 0.05% cream, oral isotretinoin 80 mg daily, and methotrexate 12.5 mg once weekly. Despite the use of first-line treatments, the patient had minimal improvement and had to decrease her dose of isotretinoin because of hypertriglyceridemia. The initiation of adjunctive PDL was then performed on her arm ([Fig 1A](#) and [1B](#)), with complete resolution of the rash 1 month later ([Fig 1C](#)). Given the patient's improvement, PDL was then performed on her face ([Fig 2A](#)), which led to complete clearance as well ([Fig 2B](#)). The use of PDL seems to be a safe and effective adjunctive treatment for therapy-resistant PRP.

REFERENCES

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