



Title	Pulsed Dye Laser Therapy for Port Wine Stains
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Aim

To examine the evidence regarding the clinical and cost effectiveness of pulse dye laser (PDL) therapy for port wine stains (PWS), and determine if the effectiveness of PDL therapy varies according to clinical situations or patient groups.

Conclusions and results

The literature suggests that PDL therapy is beneficial, particularly when compared with the alternatives. Success is greater when patients are treated during childhood or adolescence, and when visible PWS are targeted to limit stigmatization. Patients vary in their response to PDL depending on factors such as skin and lesion types. The focus of therapy is to lighten the color of a lesion, but its texture, height, and area may be unaffected. All patients require multiple PDL sessions, although studies vary in terms of optimal numbers of sessions and length of treatment, and determination of the point at which to cease therapy. Although most evidence supports PDL for initial therapy, other devices may be required in addition to PDL to treat residual or resistant PWS. It may be difficult to define treatment parameters given the variable characteristics of lesions and potential for recurrence. Cost effectiveness is unknown.

Methods

A literature search encompassed key health technology assessment resources, international health technology agencies, and a focused Internet search. Due to the large volume of literature, the search was limited to articles published in English between 2000 and November 2006. The draft report was internally reviewed and then externally reviewed by peer reviewers.

Further research/reviews required

Long-term studies of PDL for PWS are needed.