



Successful treatment of two pediatric port wine stains in darker skin types using 595 nm laser.

Bae YS^{1,2}, Ng E², Geronemus RG^{1,2}.

⊕ Author information

Abstract

BACKGROUND AND OBJECTIVE: Port wine stain (PWS) is a congenital vascular malformation of skin involving post-capillary venules, which commonly occurs on the face. While successful treatment has been reported with Caucasian, Hispanic, and Asian skin, physicians have battled treating these progressive lesions in patients of darker skin color, as the targeted chromophore (hemoglobin) shares a similar absorption coefficient as melanin. There are no reports of favorable outcomes in African-American children or adults. Although treatment in darker skin types has been previously discouraged we present a case series of patients of African descent with port wine stains treated using a pulsed-dye laser (Vbeam Perfecta, Candela Laser, Wayland, Mass) with significant improvement and no complications.

STUDY DESIGN/MATERIAL AND METHODS: Presentation of two pediatric patients of African descent (skin types 4 and 5) ages 1 month and 4 years old seen and treated in our office using a pulsed-dye laser until resolution. Laser parameters were spot size 10 mm; fluence 7-8.25 J/cm²; wavelength 595 nm; pulse duration 1.5 Millisecond with dynamic cooling.

RESULTS: Resolution of the port wine stain without complication.

CONCLUSION: This early approach represents a new and safe therapeutic option for treating port wine stains in this patient population. To our knowledge, the successful use of pulsed dye laser for the treatment of port wine stain in patients of African descent without complications has not yet been reported.

© 2016 Wiley Periodicals, Inc.

KEYWORDS: congenital vascular malformation; port wine stain; pulsed dye laser; skin of color

PMID: 26749116 DOI: [10.1002/lsm.22467](https://doi.org/10.1002/lsm.22467)

[Indexed for MEDLINE]

