Epiluminescence microscopy for port-wine stains: Pretreatment evaluation (Article)

Procaccini, E.M.^a, Argenziano, G.^a, Staibano, S.^b, Ferrara, G.^c, Monfrecola, G.^{ad}

^a Clinica Dermatologica, Pathology Section, University Federico II, Naples, Italy
^b Department of Biomorphological and Functional Sciences, Pathology Section, University
Federico II, Naples, Italy
^c Pathologic Anatomy Service, Gaetano Rummo General Hospital, Benevento, Italy

^d Clinica Dermatologica, Università Federico II, Via S. Pansini, 5, I-80131 Naples, Italy Dermatology

Volume 203, Issue 4, 2001, Pages 329-332

Abstract

Background: Port-wine stains (PWSs) are characterized by an increased number of ectatic vessels. The treatment of choice is the use of some lasers such as pulsed dye lasers. However, some lesions are nonresponsive to laser treatment. Perhaps the vessels' depth and diameter and the thickness of the vessel wall are important factors influencing the effectiveness of the laser treatment. Methods: To investigate whether epiluminescence microscopy (ELM) could be useful in determining the effectiveness of laser treatment of PWSs, we studied a group of patients with PWSs using both ELM and histological analysis. Results: A correlation existed between a gray-whitish veil seen by ELM and the vessel depth judged by histology: when the veil was absent, the vessels were always found to be located only in the upper third of the dermis. Conclusion: We think that the gray-whitish veil is a distinctive dermoscopic feature that is able to differentiate between superficial vessels (absence of veil) and deeper vessels (presence of veil).