
Intense pulsed light therapy for aberrant Mongolian spots.
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Abstract

BACKGROUND: Aberrant Mongolian spots (AMS) distal to the lumbosacral region are thought to be more likely to persist than typical sacral Mongolian spots. So far, Q-switched ruby laser (QSRL) has been the treatment of choice for AMS. Intense pulsed light (IPL) is obtained from flashlamp devices that emit wavelengths between 515 and 1200 nm. IPL has documented efficacy for the treatment of irregular pigmentation, telangiectasia, rough skin texture, rhytids, hair removal, and vascular lesions, with several filters being available that can be used to block shorter wavelengths from the skin. As far as we could determine, there have been no clinical and histological studies on the treatment of AMS with IPL. Accordingly, the aim of this study was to assess the clinical and histological efficacy of IPL for AMS.

METHODS: Seven patients (4 males and 3 females) presenting from September 2008 to July 2009 were assessed. Their mean age was 2.0 years, ranging from 0 to 7 years. The IPL device used in this study was a Natulight (Lumenis Ltd., Tokyo, Japan). Photographs were taken of all patients with a high-resolution digital camera at baseline and 6 months after treatment. Skin biopsy specimens were taken from 1 patient (case 4) before, immediately after, and 6 months after treatment.

RESULTS: According to the 7 family members of the patients, the outcome of IPL was graded as follows: excellent improvement in 1 (14%), good improvement in 4 (57%), and slight improvement in 2 (29%). All families would have liked to continue IPL treatment. Evaluation of the effect of treatment by a physician was less favorable, with excellent improvement in 1 (14%), good improvement in 2 (29%), and slight improvement in 4 (57%). Histopathologic examination of the pigmented region revealed the typical features of a Mongolian spot in the hematoxylin-eosin stained section. Immediately after IPL, there were no changes in the dermis. At 6 months after treatment, however, the number of melanocytes in the middle and upper dermis was obviously decreased.

CONCLUSIONS: IPL is an effective method for the treatment of AMS.

PMID: 23610848 [PubMed - indexed for MEDLINE]