Intense pulsed light source for the treatment of dye laser resistant port-wine stains.

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OBJECTIVE: The purpose of this clinical study was to evaluate the efficacy of an intense pulsed light (IPL) irradiator system for the treatment of port-wine stains (PWS) resistant to multiple pulsed dye laser (PDL) treatments. MATERIALS AND METHODS: Fifteen PWS patients, who were previously found to be resistant to multiple PDL treatments, were treated four times with a second generation IPL system. The clinical efficacy was evaluated on close-up photographs 2 months after the last treatment. RESULTS: Patients with dye laser resistant PWS could be divided into two groups: responders to IPL treatments (46.7%) and non-responders (53.3%). All responders obtained more than 50% reduction, and 85.7% of the responders obtained between 75% and 100% reduction of their lesions. The group of non-responders was defined as patients who obtained less than 25% clearance. CONCLUSIONS: Approximately half of a group of PWS patients, who did not respond to previous PDL treatments, obtained good or excellent clinical effect after four treatments with the IPL system. All PWS, except those located in the V2 area of the face, responded to the treatments. The IPL treatment modality was found to be safe and efficient for the treatment of PWS, except for those located in the V2 area.