



LASERS

IS DOUBLE PASS PULSED DYE LASER (PDL), LONG AND SHORT PULSE DURATION, MORE EFFECTIVE THAN SINGLE SHORT PULSE DURATION PDL IN TREATING PORT WINE STAINS (PWS)?

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Background: Although PDL has been a gold standard treatment for PWS for a long time, the degree of clearing the lesion after several sessions of treatment with PDL laser is variable and unpredictable. In order to increase the efficacy of PDL in clearing PWS, a few studies comparing double pass to single pass PDL with incongruent data are already available.

Objective: This study aims to compare the efficacy and safety of double pass PDL, long pulse duration followed by short pulse duration PDL within 20 min interval, in vanishing virgin PWS.

Material and methods: Twenty-five patients with virgin PWS underwent 3 sessions every month PDL treatment. Each patients PWS divided randomly into two portions. PDL parameters for the first site of PWS were: 595nm wavelength, 7mm spot size, 20ms pulse duration, and 13 J/cm² fluence. After 20 min of cooling the treated area with an ice pack, the second part of the PWS was treated with PDL laser: 595nm wavelength, 7mm spot size, 1.5ms pulse duration, and 11 J/cm² fluence. Visual, Visioface and dermoscopic evaluation of the efficacy and side effects done one month after final treatment.

Results: Visual, visioface and dermoscopic assessment suggested that treatment PWS with double pass PDL is significantly more effective than single pass PDL. No permanent side effect found after treatment.

Conclusions: Double pass PDL at the chosen setting with 20 min interval considerably enhances clearing PWS in this study.

