

## Photodynamic therapy with topical aminolevulinic acid for the treatment of plantar warts

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**Aim.** treatment currently employed for plantar warts (PW) are often painful and poorly effective. This study evaluates the effect of photodynamic therapy (PDT) with  $\delta$ -aminolevulinic acid (ALA) on PW.

**Methods.** Before treatment, the superficial hyperkeratotic layer of warts was removed by the application, for 7 days, of an ointment containing 10% urea and 10% salicylic acid. Then, after gentle curettage, a cream containing 20% ALA was applied under occlusive dressing for 3h on 3 patients with 84 warts, while 30 patients with 62 warts (controls) received only base cream. Both groups were irradiated using a visible light lamp (range 400-700 nm, peaking at 630 nm). The light dose was 50 J/cm<sup>2</sup> each session. Patients were followed-up for 12 months. During the treatment some patients referred mild burning sensation or slight pain. The absorption of ALA in warts was investigated and demonstrated by in vivo fluorescence spectroscopy.

**Results.** Two months after the last irradiative session, 84.5% of the ALA-PDT treated lesions and 22.5% of controls had resolved.

**Conclusions.** The results of this study suggest that topical ALA-PDT can be considered as alternative treatment for PW.