

Successful Treatment of Hailey-Hailey Disease with Aminolevulinic Acid Photodynamic Therapy

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Dear Editor:

A 40-year-old man presented with a 3-year history of

Hailey-Hailey disease (HHD). Painful axillary and inguinal vesicles, erosions, and plaques existed (Fig. 1A, B). There

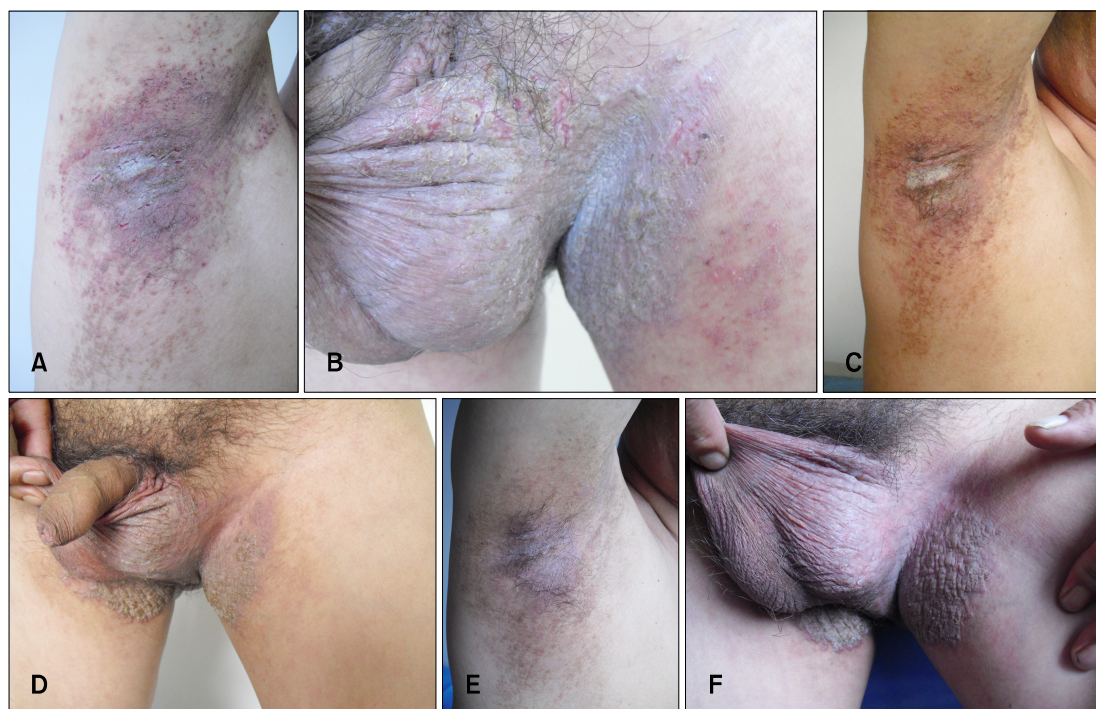


Fig. 1. (A, B) Erythema and erosions in the axillary area and inguinal area. (C, D) The clinical situation after three treatments of aminolevulinic acid photodynamic therapy (ALA-PDT) therapy every 2 wk. (E, F) The clinical situation after five treatments of ALA-PDT therapy every 2 wk.

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was no family history of HHD. The diagnosis was confirmed by histopathologic examination. He had been treated with topical steroids, vitamin D analogs, and oral antibiotics, and short-term remission had been achieved. As soon as he discontinued the treatment, the lesions relapsed. The patient requested other treatments; thus, aminolevulinic acid photodynamic therapy (ALA-PDT) was offered.

After informed consent was obtained, we initiated a course of ALA-PDT, which consisted of five treatment sessions over 2-wk intervals. The patient did not use any topical or systemic therapy during the ALA-PDT treatment. At each visit, 10% ALA cream was applied to the axillae and groin for 3 h, followed by irradiation with red light (623 ~ 643 nm). A non-coherent light-emitting diode light source was used with a fluence rate of 20~40 mW/cm² and a light dose of 37 J/cm² for 20 min. The patient had mild burning in the lesions during light irradiation, but it was tolerable and did not require local anesthetics or sedatives; the discomfort generally resolved after 2 days. No other side effects were noted. After three sessions of ALA-PDT therapy, the patient was clinically improved with flattening of the keratotic papules and a reduction in erythema and erosions (Fig. 1C, D). There was a gradual improvement in the signs and symptoms during the treatment period. A marked decrease in erythema and erosions in the axillary and inguinal regions was achieved after five

treatments (Fig. 1E, F). The patient had no relapse in the treated areas during a 12-month follow-up period.

There have been five reported cases of HHD effectively treated with PDT^{1,2}. Indeed, these reports served as the impetus for treating our patient with ALA-PDT. However, a different outcome was reported as previous studies. Because HHD is characterized by vesicular lesions, painful erosions and plaques occur at the sites of friction; therefore, treatment should be different from that used for condylomata acuminata or thick skin tumors. In an effort to prevent patient discomfort and improve efficacy, we selected a treatment for HHD with a lower concentration of ALA intensity and more than one PDT cycle compared with previous studies^{1,2}. Our results were good-the patient had mild discomfort during the light exposure and for the first 2 days post-treatment, otherwise the treatment was well tolerated.

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