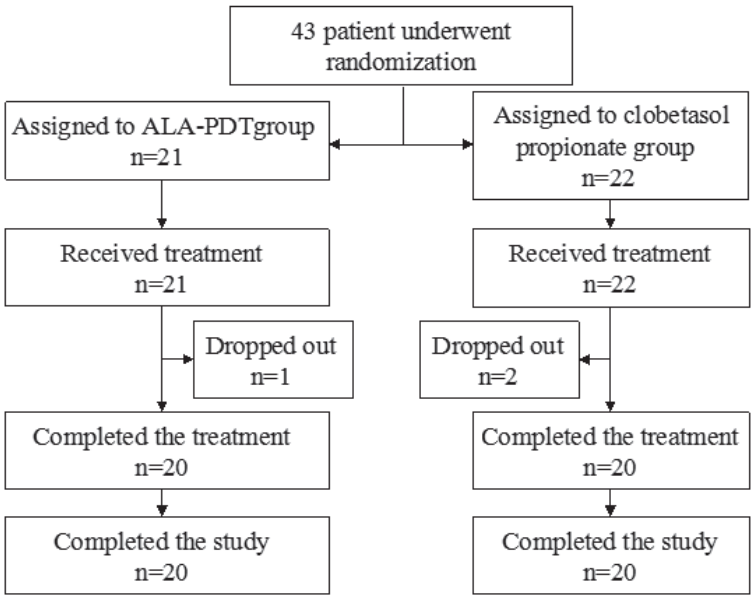

Fig. S1. Randomization and allocation of patients in the study.

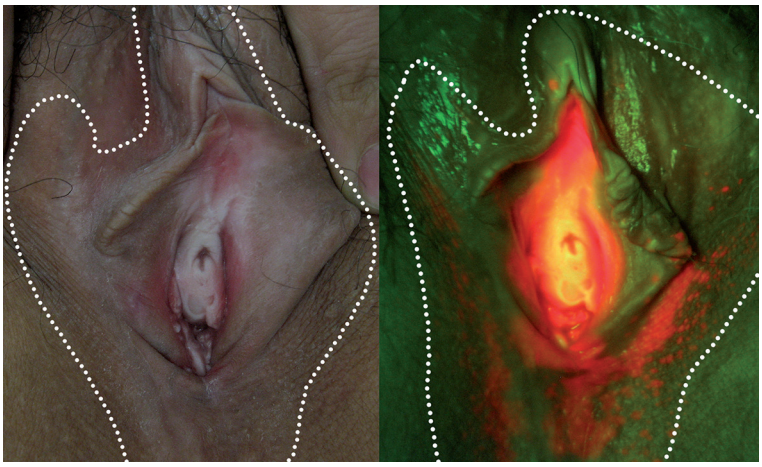

Fig. S2. Gross and fluorescence images of a typical vulvar lichen sclerosus (VLS) lesion. Dotted lines indicate the distribution of the VLS lesion prior to treatment.

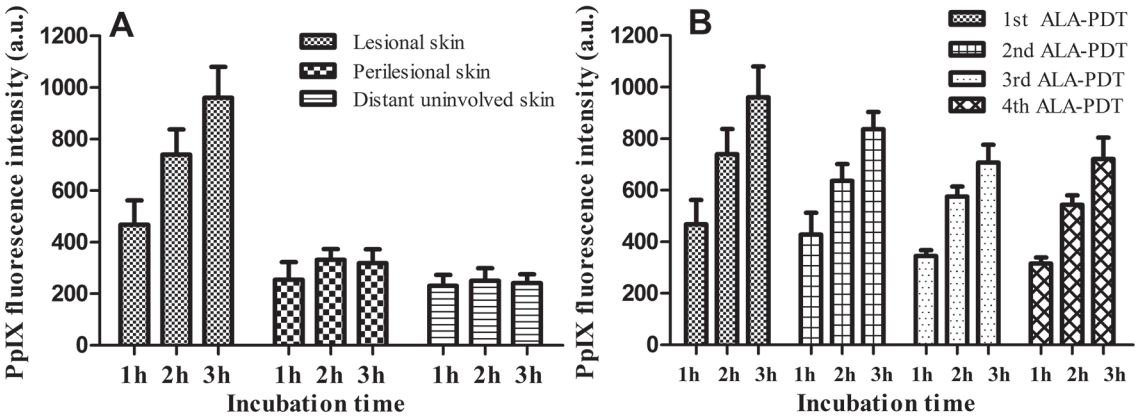

Fig. S3. (A) Protoporphyrin IX (PpIX) production between lesional skin, perilesional skin (0.5 cm from lesions) and adjacent normal skin (2 cm from lesions). (B) PpIX production in lesional skin during each session of photodynamic therapy (PDT).

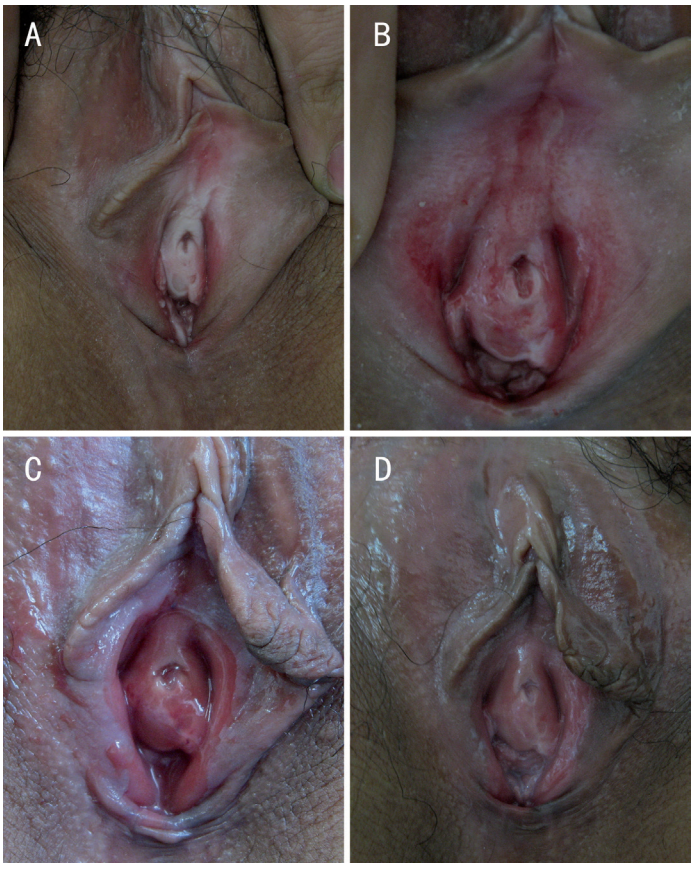

Fig. S4. Representative photographs of lichen sclerosis lesions before and after 5-aminolevulinic acid photodynamic therapy (ALA-PDT). (A) Before treatment, showing signs of hyperkeratosis, atrophy, sclerosis, and depigmentation. (B) Two weeks after the 1st session, showing improvement, but telangiectasia is still visible. (C) Two weeks after the 4th session, showing complete response. (D) Six-month follow-up, showing no sign of recurrence.

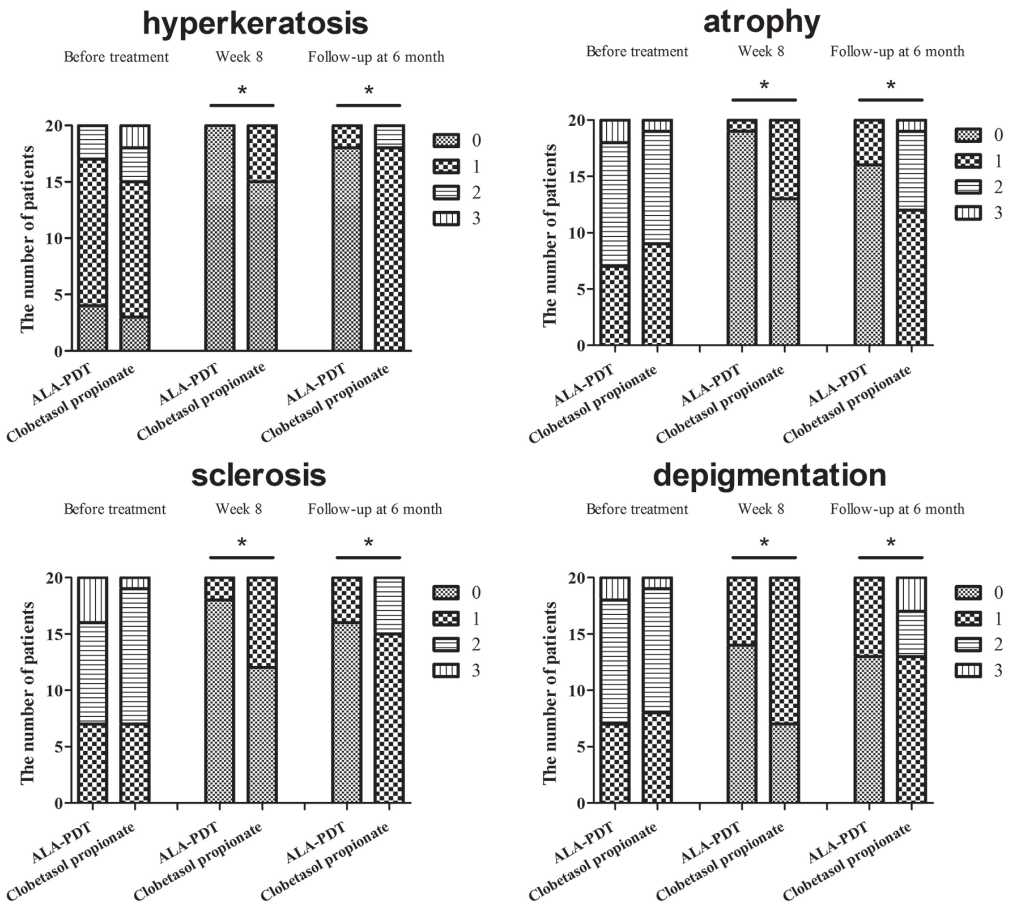

Fig. S5. Distribution of horizontal visual analogue values of signs of the 5-aminolevulinic acid photodynamic therapy (ALA-PDT) and clobetasol propionate groups before treatment, at the end of treatment (week 8), and 6 months after the end of treatment. The severity of clinical signs (hyperkeratosis, atrophy, sclerosis, and depigmentation) were each graded as: 0 = absent, 1 = mild, 2 = moderate, or 3 = severe. *$p < 0.05$.