

# **Erbium:YAG laser pretreatment accelerates the response of Bowen's disease treated by topical 5-fluorouracil**

李婉若

Wang KH;Fang JY;Hu CH;Lee WR

摘要

## **Abstract**

**BACKGROUND:** Topical 5-fluorouracil (5-FU) is a standard treatment for Bowen's disease. However, its efficacy may be limited by the presence of stratum corneum. The Er:YAG laser has shown a dramatic enhancement effect on the delivery of 5-FU in vitro by ablation of the stratum corneum. The efficacy of laser-assisted delivery of 5-FU has not been tested in human. **OBJECTIVE:** To see whether Er:YAG laser pretreatment can improve the efficacy of topical 5-FU in the treatment of Bowen's disease. **METHODS:** Three target lesions from a patient with multiple Bowen's disease were selected for a half-side comparison study. The Er:YAG laser was used to remove the cornified layer on one side of each lesion, followed by twice-daily application of 5-FU cream to both sides. Clinical and histologic responses were compared. **RESULTS:** Lesions pretreated with the Er:YAG laser showed more rapid clinical and histologic responses to topical 5-FU than those treated with 5-FU alone. Evaluation at 9 months after treatment showed no recurrences of lesions on both sides. **CONCLUSIONS:** Our preliminary study demonstrates that this Er:YAG laser-assisted modality is effective and shows accelerated clinical response and shortened treatment time compared with topical 5-FU as a single treatment.