



SKIN CANCER (OTHER THAN MELANOMA)

COMPARISON OF TREATMENT OUTCOME OF PHOTODYNAMIC THERAPY AND INGENOL MEBUTATE IN BOWEN'S DISEASE: A RETROSPECTIVE OBSERVATIONAL STUDY

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Introduction: Multiple non-invasive but effective treatment modalities are used to treat Bowen's disease. However, the effectiveness of treatment may vary with the treatment modalities and several factors.

Objective: This study aimed to assess the effectiveness of the treatment modalities in the treatment of Bowen's disease and to determine what factors affected the treatment outcome.

Materials and methods: In this study, patients diagnosed with Bowen's disease who were treated with photodynamic therapy or ingenol mebutate between 1 January 2006 and 31 December 2017 at Bundang CHA hospital were included. Data were collected regarding treatment options, clinical response at the first follow-up visit and other patient and tumor characteristics.

Results: In total, 68 Bowen's disease lesions were included. The most commonly applied treatment modalities were photodynamic therapy (64.7%, n=44) and ingenol mebutate (35.3%, n=24) in order. The response rate at the first follow-up visit was 66.7% for photodynamic therapy and 53.0% for ingenol mebutate. Recurrence rate was 11.5% and 11.1%, respectively. There was no significant difference between the two treatment modalities ($p=0.349$, 0.993). Pretreatment with fractional CO₂ laser showed a tendency to increase response rate in photodynamic therapy ($p=0.096$). Whereas, response rate decreased significantly with older patients in ingenol mebutate ($p=0.012$).

Conclusions: This study shows that both photodynamic therapy and ingenol mebutate are effective non-surgical treatment modalities for Bowen's disease. This also demonstrates that pretreatment with fractional CO₂ laser prior to photodynamic therapy can improve treatment efficacy and higher age is significant risk factor for unsuccessful treatment in ingenol mebutate.

