



PHOTOTHERAPY, PHOTODYNAMIC THERAPY

SEQUENTIAL THERAPY WITH CRYOTHERAPY FOLLOWED BY PHOTODYNAMIC THERAPY FOR SENILE FACIAL PROLIFERATIVE DISEASES: A PROSPECTIVE STUDY

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Background: Studies have shown that Photodynamic therapy (PDT) results in superior cosmetic outcomes compared to surgical treatment. But nodular BCC and SCC have shown lower response rates with PDT in view of the penetration of PDT drugs and the limitation of the depth of light, recurrence rates are higher. The sequential therapy of PDT combined with cryotherapy perhaps supply a therapeutic option for patients who are not surgical candidates or who do not desire surgery.

Objective: To investigate the efficiency of photodynamic therapy combined with cryotherapy as sequential treatment for senile facial proliferative diseases.

Methods: A prospective study was conducted in 75 cases of aged patients with facial proliferative diseases were randomly selected from 2014-2018, of which 50 patients were treated with photodynamic therapy either 2 weeks (Treated Group I, 25 cases) or immediately (Treated Group II, 25 cases) after cryotherapy, and the remaining 25 patients were treated by ALA-PDT only as control group.

Results: The skin lesion clearance rate after first treatment in photodynamic therapy combined with cryotherapy group was significantly higher than that in the control group ($Z_1 = -3.942$, $p < 0.05$; $Z_2 = -3.823$, $p < 0.05$), and the treatment cycles for total removal of skin lesions was significantly lower than that of control group ($F = 30.298$, $p < 0.05$), and the satisfaction degree of patients in group I and treatment group II was significantly higher than that in the control group ($Z_1 = -4.911$, $p < 0.05$; $Z_2 = -4.751$, $p < 0.05$), the pain score was not significant difference in group II vs. group I (45.28 ± 13.04 vs. 41.84 ± 11.79 , $p = 0.254$). The group II pain score was significantly higher than the control group (45.28 ± 13.04 vs. 36.94 ± 15.56 , $p = 0.024$).

Conclusion: photodynamic therapy combined with cryotherapy as sequential treatment of senile facial proliferative diseases achieve a higher effects than single PDT treatment and a





lower total times of PDT required for completed clinical remission, with a cosmetic effect.

