TREATMENT OF ACNE VULGARIS USING 1,565 NM NON-ABLATIVE FRACTIONAL LASER IN COMBINATION WITH ISOTRETINOIN AND TRADITIONAL CHINESE PRICKING BLOOD THERAPY

L Gao(1) - G Wang(1)

The Fourth Military Medical University, Department Of Dermatology, Xijing Hospital, Xian, China(1)

Introduction: Isotretinoin is one of the first line medications for moderate-to-severe acne vulgaris (AV) but its side effect is a big concern for Asian patients.

Objective: To evaluate the efficacy and safety of the 1,565 nm non-ablative fractional laser (NAFL) in combination with isotretinoin and traditional Chinese pricking blood therapy (TCPBT) for treatment of AV.

Materials and Methods: A retrospective analysis of 60 patients with moderate-to-severe AV who were treated at our hospital from 2015 to 2017 was performed. Four treatments were evaluated (n=15 subjects per group): 1,565nm NAFL alone, oral isotretinoin alone, double therapy (1,565nm NAFL+isotretinoin) and triple therapy (1,565nm NAFL+isotretinoin+TCPBT).

Results: The improvement rates of inflammatory papules and boxcar atrophic scars ranged from 60.0% to 93.3% in four groups, among which the triple therapy showed the highest improvement rates. The patients receiving oral isotretinoin alone, double or triple therapies showed a significant decrease in volume of boxcar atrophic scars as compared to baseline. The 1,565nm NAFL only, double or triple therapy significantly decreased index of hemoglobin as compared to baseline. All four treatments significantly decreased indexes of pore sizes and wrinkles on AV lesions as compared to baseline. Furthermore, the triple therapy significantly decreased indexes of hemoglobin and red areas as compared to the other three treatments.

Conclusions: This study showed that the triple therapy with a combination of isotretinoin, 1,565nm NAFL and TCPBT is more effective for treatment of AV as compared to isotretinoin, 1,565nm NAFL alone or two therapies combined. It is recommended for further clinical evaluations.