

**LASERS** 

## THE ROLE OF LASERS IN CONNECTIVE TISSUE AND INFLAMMATORY DERMATOSES: A 10 YEAR RETROSPECTIVE REVIEW OF 52 PATIENTS IN A UK TERTIARY LASER CLINIC

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Introduction: The role of lasers in the treatment of standard therapy resistant inflammatory dermatoses and connective tissue disorders has been controversial and evidence to support the role of lasers in this setting is scarce.

Objective: To assess the efficacy of lasers in the management of sarcoidosis, lupus erythematosus, scleroderma, dermatomyositis, granuloma faciale, Jessner's lymphocytic infiltrate, pyoderma vegetans, and hypertrophic lichen planus.

Materials and Methods: A retrospective review of all inflammatory dermatoses connective tissue diseases treated in our tertiary laser clinic between December 2010 and July 2018 was undertaken. We recorded patient demographics, and response to laser treatment.

Results: A total of 52 cases of which 30 were female were included. The average age was 51 years (range 21 to 74). Limited and systemic sclerosis (17), granuloma faciale (9), and discoid lupus (7), were the most commonly managed inflammatory dermatoses. Pulsed Dye Laser (PDL) was most frequently used laser (67%), followed by Carbon dioxide (CO2) laser 15%. 10% received laser treatment with both PDL and CO2 laser and 6% were treated with Alexandrite and PDL laser.

The most common site treated was the face. On average, patients required 5 PDL sessions (range 1 to 21) and 3 CO2 laser sessions. A good response with marked reduction of signs was seen in 60% patients whilst 8% patients did not respond to laser treatment. Self-limiting complications included purpura and hyperpigmentation. One in 3 patients noted a relapse in their condition within 3 months to two years of laser treatment.

Conclusions: This, to our knowledge is the largest cohort of patients to have undergone laser treatment for inflammatory dermatoses or connective tissue disease. Based on this retrospective review we conclude that lasers can be a useful adjunct in the management of otherwise difficult to treat selected inflammatory and connective tissue diseases.





