



AUTOIMMUNE CONNECTIVE TISSUE DISEASES

## **BOTULINUM TOXIN A IN THE TREATMENT OF RAYNAUD PHENOMENON IN SYSTEMIC SCLEROSIS AND THE USE OF DERMATOSCOPY IN ASSESSMENT**

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**Background:** Over 90% of systemic sclerosis (SSc) patients present with Raynaud's phenomenon (RP). Current conservative therapy, medical or surgical treatments are not fully effective while causing side effects.

**Objective:** We aimed to evaluation of local injection of Botulinum toxin A (BTX-A) in the treatment of RP in SSc and objective analysis by using dermatoscopy.

**Methods:** We recruited 20 patients of RP in SSc (8 in lcSSc group and 12 in dcSSc group) and conducted a randomized controlled trial, to use a variety of evaluation methods to study the effectiveness and safety of BTX-A in the treatment of SSc with RP, and explore the role of dermatoscopy in evaluating disease.

**Results:** Reynolds score, skin temperature recovery after cold water stimulation were improved in both dcSSc and lcSSc groups after injection treatment. Baseline skin temperature of fingers in dcSSc group increased significantly. Upper limb function score in lcSSc group decreased significantly. Qualitative stage of dermoscopy in lcSSc group improved significantly. The sum of six parameters of dermoscopic semi-quantitative staging in both groups decreased significantly.

**Limitations:** Lack of large sample randomized control.

**Conclusion:** Local injection of BTX-A is a safe and effective treatment option for RP secondary to SSc.

