every year were significantly associated with peripheral eosinophilia in SSc patients (OR 3.46 (95%CI 1.11-10.73) and 1.16 (95%CI 1.03-1.30), respectively), while Raynaud's phenomenon had a significantly negative correlation with peripheral eosinophilia in SSc (OR 0.27: 95%CI 0.09-0.84). Other parameters—such as SSc subset, severity of skin tightness, serology, cytokines (transforming growth factor-β, interleukin-5)—were not correlated with peripheral eosinophilia.
Conclusion: Peripheral eosinophilia of unknown cause can be detected 1 in 5 SSc patients. The factors associated with peripheral eosinophilia are longer disease duration and being male while vasculopathy has a negative association.

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SAT0300 ABSTRACT WITHDRAWN

SAT0301 THE USE OF 16 GRIPS TEST TO EVALUATE HAND IMPAIRMENT IN SYSTEMIC SCLEROSIS (SSC): PRELIMINARY TO CONSTRUCTION OF PERSONALIZED DEVICES

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Background: Systemic sclerosis (SSc) is a progressive connective tissue disease of unknown etiology characterized by autoimmune response and changes in the microvascular system. Although skin fibrosis represents the primary element of this disease, patients may present muscular and/or joint damage. Hand impairment is a major cause of morbidity and disability in about 90% of SSc patients. The ADL difficulties are similar to those of patients with rheumatoid arthritis but SSc patients use a low number of assistive device. In our center an interdisciplinary research unit composed of rheumatologists, rehabilitators, occupational therapists, and design engineers, with the directly involvement of the SSc patients within the design team, are developing a design method to prototype ergonomic assistive device personalized for hands.
Objectives: Evaluate through the 16 grip test which were the most difficult grips for SSc patients in order to understand what particular changes we need to focus on more rehabilitative attention. Determine what ADL can be linked to difficult grips to understand how to work on it. Give advice and design appropriate customized ergonomic aids.
Methods: 92 patients (79 females and 13 males) with SSc followed by our tertiary Universitary based Rheumatologic Center have been specifically evaluated by Hand Rehabilitation Service. The average age of patients was 56y. The 16 grip test was used to evaluate patients. It includes 16 different pattern of grip divided into power grip and precision pinch - Moreover it tests basically two different grip and pinch modalities: static prehension and dynamic prehension. The score for each grip goes from 0 to 4 (0=impossible,1=realized with high difficulty, 2=medium difficulty, 3= low difficulty, 4=normal).
Results: 30 patients (32%) had no grip problem, 9 only on the left and 5 on the right hand; 4 patients presented grip difficulty in both hands with a reduction> 25%. 31 had difficulty in 2 or more grip pattern. The most interested grips are the monodigital and pluridigital pressure, the tip to tip pinch, the extension grip in both sexes; the teno-digital in males and the digito-palmar in females. Over 60% of the grips were normal; in particular in our patients only few deficiencies in the power and in the static prehension grips were reported. The most interested patterns of grips are in the group of precision handling related to the use of the pads; the extension grip to the difficulty in opening the first commissure.
Conclusion: Over 60% of the grips were normal.; in particular in our patients only few deficiencies in the power grips and in the static prehension grips were reported. The most interested patterns of grips are in the group of precision handling related to the use of the fingertips; the extension grip to the difficulty in opening the first commissure. The problems of hand impairment are restricted to a subset of patients around 10-15%. From these results we can obtain useful data to construct our personalized devices for SSc hands.

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SAT0302 SINGLE-PORT THORACOSCOPIC SYMPATHICOTOMY IS VERY EFFECTIVE FOR TREATMENT RESISTANT RAYNAUD'S PHENOMENON: A ONE MONTH FOLLOW-UP

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Background: In some patients, Raynaud's Phenomenon (RP) symptoms prove resistant to conventional vasodilatory treatment. Thoracic sympathectomy is shown to be effective as treatment of RP, but is associated with surgical burden. During this procedure, the sympathetic nerve traversing to the upper extremity is dissected, subsequently leading to vasodilatation. In our centre, single-port thoracoscopic sympathicotomy (SPTS) has been developed, a minimally invasive technique, extensively limiting surgical burden. [1]
Objectives: To evaluate SPTS feasibility and efficacy after one month in patients with treatment resistant RP.
Methods: In this study RP patients were their own controls, as they received an unilaterally left sided sympathicotomy. The effects of the SPTS was assessed at baseline and one month after the procedure. Perfusion of the hand was assessed using a cooling and recovery procedure, and laser speckle contrast analysis (LASCA) at room temperature of 23 degrees Celsius. The number and duration of RP attacks was reported over a two week period prior to reassessment by standard questionnaire.
Results: Eight patients were included in the study, 6 male/2 female, with a median (IQR) age of 45.2 (30.2–55.3) years, body mass index of 23.9 (23.4–26.8) kg/m², and RP duration of 7.0 (2.5–14.3) years. Five patients suffered from primary RP, and three patients had RP secondary to connective tissue disease (CTD) [mixed CTD (n=2) and limited cutaneous systemic sclerosis (n=1)]. All patients were very satisfied with the results and the number of attacks in the left hand decreased (p=0.018). After surgery an unilateral improvement in left hand perfusion was observed