Hand dysfunction in scleroderma patients

Disfunção da mão em pacientes com esclerodermia

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To the editor

Scleroderma is a disease characterized by functional and structural abnormalities in blood vessels and fibrous involvement of skin and internal organs.[1] Although the treatment effort is directed mostly against visceral lesions that can diminish life expectancy, scleroderma patients may also experience difficulties with less serious organ damage. Scleroderma patients may present hand dysfunctions that cause difficulties in performing daily activities. Hand dysfunction in scleroderma cases may be caused by RP (Raynaud phenomenon) with finger ulcers,[1] arthralgia, arthritis, tendonitis,[1] weakness[2] and skin thickening, which cause loss of dexterity.[1,2] Nacci et al.[1] observed that the most limiting determinant was joint involvement. Others[3] observed that rigidity, RP and weakness were the major contributors.

We studied hand dysfunction in 46 patients with scleroderma (four males and 42 females; mean age of 50.5 years; mean disease duration of 7.4 years). Twenty-nine presented the limited form, 11 presented the diffuse form and six cases overlapped with other connective tissue diseases. In this sample, 28.2% were employed workers; 10.8% were homemakers; 36.9% had retired due to health problems; and 15.2% had retired because of age. The patients were asked about the presence of hand symptoms and answered the Dreiser index questionnaire.[4] This questionnaire contains 11 questions about activities of daily living. It is measured through a Likert scale (0 = no difficulty; 1 = slight difficulty; 2 = moderate difficulty; 3 = impossible to perform) and ranges from 0 (no dysfunction) to 33 (maximum dysfunction). It was initially created to evaluate hand osteoarthritis but has also been used in scleroderma cases.[1] Patients with pain and stiffness were asked to grade their symptoms through a visual analogue scale (VAS) on which 0 corresponded to no symptoms and 10 to the maximum symptoms.

We found the following: RP in 93.5%; arthritis (present or previous) in 73.9%; hand stiffness in 73.9%; pain in the hand (overall) in 71.73%; arthralgia in 65.2%; skin ulcerations (present or previous) in 58.6%; and calcinosis in 26.6%. The Dreiser index results ranged from 0 to 25 (mean: 8.69 ± 8.02). The association between the Dreiser index and hand symptoms is shown in **Table 1**.

The mean VAS obtained for pain in the hand was 7.12 ± 2.26 and for stiffness, it was 6.17 ± 2.05. There were positive correlations between the Dreiser index values and the VAS for pain ($r = 0.47$; $P = 0.006$) and between the index and the VAS for stiffness ($r = 0.69$; $P < 0.0001$).

Hand dysfunction is not always taken into account in scleroderma cases, but Roberts-Thomson et al.[5] showed that it can be as incapacitating as in rheumatoid arthritis.

We found that pain and stiffness were the symptoms that most affected functionality. Every effort should be directed towards treating these symptoms, in order to improve scleroderma patients' wellbeing.

Table 1. Associations between Dreiser index and presence of hand signs and symptoms and autoantibody profile for scleroderma

	With the symptom (mean Dreiser ± SD)	Without the symptom (mean Dreiser ± SD)	P
Raynaud	9.0 ± 8.1	4.3 ± 5.1	0.35
Ulcerations	9.6 ± 8.14	7.3 ± 7.8	0.35
Arthralgia	11.8 ± 7.8	2.1 ± 2.7	< 0.0001
Arthritis	9.9 ± 8.0	6.3 ± 7.6	0.15
Calcinosis	10.5 ± 9.3	8.0 ± 7.5	0.34
Stiffness	10.2 ± 7.3	4.3 ± 8.6	0.003
Pain in the hand	11.5 ± 7.6	1.3 ± 2.1	< 0.0001

SD = standard deviation.

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Confidential unit exclusion and blood safety

Exclusão confidencial da unidade e segurança do sangue

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Dear Editor,

I read with interest the article by Kasraian et al., recently published in your journal.[1] They concluded that because of the higher prevalence of HBS, HCV and HIV positivity among blood donors who chose the confidential unit exclusion (CUE) option, offering CUE to blood donors could be a potentially useful method for improving blood safety, since it could increase the detection of infected blood during the window period.

I would like to open the issue for further discussion. Iran is an area of low endemicity for HCV infection, and the most common risk factors are histories of blood transfusion and intravenous addiction.[2,3] However, for HBV infection, the most common risk factor is transmission during childhood, and most HBV-infected patients are unaware of their infection.[4] Donor selection is an important strategy for blood safety, but it is not enough! CUE, in which the physician asks the donor whether he or she wants his/her blood to be used for transfusion or not, has been added in order to obtain safer blood and blood products. The donor is asked to choose "*Use my blood*" if he/she has given truthful answers to the questions and, if the questions have not been answered truthfully, is asked to choose "*Do not use my blood*". Although applying additional policies to maintain safety may lead to more donor rejection and to the exclusion of more blood for transfusion, these policies may vary for each region. Donor screening through physician assessment is still one of the most important components contributing towards providing healthy blood and blood products. The effectiveness of this CUE policy has been unclear. In a study performed by Kean et al. in the United States, 50% of the donors who chose *"Do not use my blood"* had made this choice mistakenly or due to lack of knowledge about this choice.[5]

Finally, I think that the effectiveness of confidential self-exclusion (CSE) systems depends on the risk factors for transfusion-transmitted infections and the educational level of blood donors in each country.

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