

Resseguier Method as a novel tool to improve quality of life and pain in Systemic Sclerosis patients: preliminary results

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BACKGROUND

In Systemic Sclerosis (SSc), tissue sclerosis of hands and face, is very frequent and can lead to important loss in mobility and functionality with a decrease in quality of life (HRQoL) and it represents one of SSc patients greatest complaints [1], with concern about disfigurement [2] and personal self-esteem [3]. In SSc, skin deformities are a core stressor of the disease, only preceded by fatigue [3]. Moreover, depression[4] and anxiety, also related to pain, and involvement of internal organs contribute to impairment of HRQoL in SSc patients [5].

For all these reasons, in SSc patients may be useful a multidisciplinary approach also comprising global rehabilitation methods aiming to reduce pain, to improve (HRQoL) and to cope with the disease.

However, only few rehabilitation program with global rehabilitation methods were tried in SSc patients. Aerobic and Cardiopulmonary exercises were tried in little groups of SSc patients and gave conflicting results[6-7].

In a recent study, our group found that a rehabilitative approach specifically conceived for SSc patients, combining hand and face treatment and global rehabilitation techniques (hydrokinesytherapy or land-based kinesytherapy) improved hand and face handicap and global HRQoL [8].

AIM

to evaluate the efficacy of a rehabilitation approach based on Ressaiguer Method (RM) in a group of SSc patients.

METHODS

Twenty SSc patients (18 women, 2 men; age and disease duration: 54.10 ± 8.2, 11,20±3,88, respectively) were enrolled and randomly assigned to Interventional (10 pts) and Observational (10 pts) Group.

Ten Patients of Interventional Group were treated once a week (each session lasting 1 hour) with RM and ten patients of Observational Group were asked to maintain their lifestyle for the duration of the study.

During the study, all patients had to be on stable therapy and were allowed only to introduce, if necessary, analgesics or NSAIDs.

RESSEGUIER'S METHOD

RM was applied to Patients of Interventional Group once a week (each session lasting 1 hour).

RM is a global rehabilitation technique aiming to obtain patient awareness and control of bodily perceptions, thus reaching a modulation of responses to pain.

During RM session, the therapist controls attention and perception of the patient by verbal and manual contacts and leads the patient to perform active and conscious bodily exercises and respiratory movements, respectful of pain threshold, in different positions (supine, sitting and standing)

The therapist also teaches home exercises tailored on the patients needs.

The instruments of RM are:

1. **Verbal contact of the therapist.** The therapist asks the patient about his perception of specific body segments, particularly of painful areas. Guided by the therapist, the patient describes the perceived characteristics of these areas in terms of dimensions, weight, consistency and symmetry (fig 1a-c,d);

2. **Manual contacts** of the therapist on the patient, essential to promote patient perception of specific areas (fig 1b);

3. **"Petite gymnastique"**, consisting in exercises performed during the sessions:

a) Exercises of conscious respiration (fig e);

b) active and active guided conscious movements of head, trunk, upper and lower limbs, firstly in supine position, then sitting and standing. The therapist chooses the movements and exercises, more appropriate to the patient (fig f);

4. **Home exercises**, consisting in low impact movements ("Petite gymnastique") chosen by the therapist and appropriate to the patient, to be performed 30 minutes/day during the treatment period.

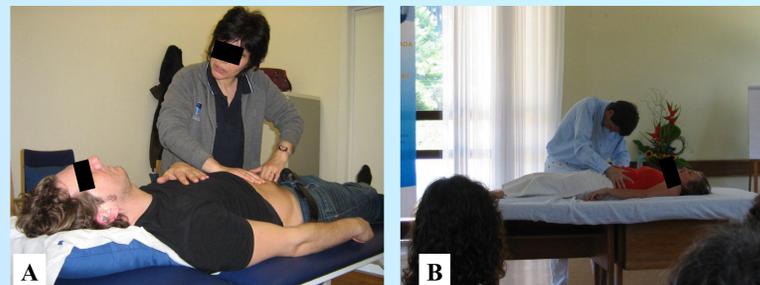


Fig. 1 manual and verbal contact in supine position (a); manual contact in supine position(b).

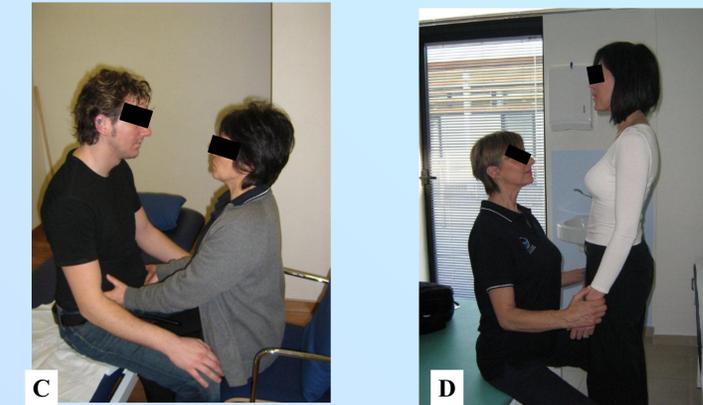


Fig. 1 manual and verbal contact in sitting (c) and standing position (d);



Fig. 1 guided respiratory movement in standing position (e); guided active bodily exercises in standing position (f).

ASSESSMENT

Patients were assessed at baseline (T0) and after an 8 week rehabilitation period (T1) with SF-36 Physical (PSI) and Mental Synthetic Index (MSI), and with a questionnaire evaluating the number of analgesics/NSAIDs assumed in the previous week, and, by 5 number rating scales 0-10 (NRS): 1) the interference of pain in daily activities; 2) the benefit obtained by the actual therapies; 3) the quality of sleep; 4) the quality of movement, 5) the capability to relax, all referred to the previous week.

CONCLUSIONS

In patients with SSc, the rehabilitation with RM improves HRQoL, sleep, movement quality and pain, and reduces the assumption of analgesics.

For its characteristics, RM may be an useful rehabilitative tool in SSc patients and may be potentially used also when other physiotherapeutic techniques are difficult to be utilized. These preliminary data should be confirmed on a larger cohort of patients and on a longer period of follow-up.

RESULTS

• SSc Patients of Interventional and Control Group were similar in their baseline values. No patient dropped out from the study.

In patients of **Interventional Group**, after the 8 week rehabilitation period with RM (T1), PSI and MSI of SF-36 were significantly improved in respect to baseline values (T0); concordantly, the number of analgesics/NSAIDs assumed in the previous week was reduced and, 4/5 items assessed by NRS (interference of pain in daily activities; benefit obtained by the actual therapies; quality of sleep and movement, were improved. Only the capability to relax was unchanged in respect to T0 [Table 1].

In **Control Group**, all the items assessed at T1 were unchanged in respect to T0.

Table 1. Items assessed at baseline (T0) and at the end of treatment (T1) in Interventional Group

	T0	T1	T0 -T1
	Mean± SD	Mean± SD	P
Interference of pain in daily activities *	4,86 ± 2,3	3,14 ± 2,5	0,0003
Benefit from therapies *	4,69 ± 2,5	5,95 ± 2,4	0,04
Sleep quality *	4,45 ± 2,1	5,65 ± 1,9	0,04
Movement quality *	4,59 ± 2,2	7,140 ± 1,60	0,0012
Capability to relax*	3,98 ± 1,7	5,73 ± 2,0	NS
Number of analgesics/NSAIDs assumed*	1,0± 1,0	0,10± 0,3	0.003
PSI of SF-36	37,6 ± 8,1	43,7± 8,15	0,0008
MSI of SF36	41,70 ± 10,3	47,00 ± 12,3	0,04

Legend: * = assessed by number rating scales (NRS) 0-10; PSI= Physical Synthetic Index of SF36; MSI= Mental Synthetic Index of SF36

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The authors thanks ASSMAF (Italian Association for the study of Systemic Sclerosis and Fibrotic Diseases) for its continuous support

