

# The effect of physical activity interventions on the course of systemic sclerosis

|                                        |                                                                  |                                                      |
|----------------------------------------|------------------------------------------------------------------|------------------------------------------------------|
| <b>Submission date</b><br>04/05/2020   | <b>Recruitment status</b><br>No longer recruiting                | <input type="checkbox"/> Prospectively registered    |
|                                        |                                                                  | <input type="checkbox"/> Protocol                    |
| <b>Registration date</b><br>22/05/2020 | <b>Overall study status</b><br>Completed                         | <input type="checkbox"/> Statistical analysis plan   |
|                                        |                                                                  | <input type="checkbox"/> Results                     |
| <b>Last Edited</b><br>22/05/2020       | <b>Condition category</b><br>Skin and Connective Tissue Diseases | <input type="checkbox"/> Individual participant data |
|                                        |                                                                  | <input type="checkbox"/> Record updated in last year |

## Plain English summary of protocol

### Background and study aims

Systemic sclerosis is characterized by stiffness and contraction of tissues such as the skin, caused by the dominant pathologic feature called fibrosis, which leads to decreased tissue function and to a limitation in the execution of daily activities. The aim of our study was to investigate the impact of a specialized physiotherapy/occupational therapy program focused on the function of the hands and face and quality of life.

### Who can participate?

Adults over 18 years, with systemic sclerosis and skin involvement at least of the fingers/hands and the face.

### What does the study involve?

Participants will be randomly allocated to receive either treatment as usual or an additional six month program twice a week consisting of supervised physiotherapy (1 hour) and occupational therapy (0.5 hour) focused on the function of hands and face.

### What are the possible benefits and risks of participating?

None

### Where is the study run from?

Institute of Rheumatology (Czech Republic)

### When is the study starting and how long is it expected to run for?

January 2015 to June 2017

### Who is funding the study?

Ministry of Health Czech Republic

### Who is the main contact?

Dr Michal Tomcik, [tomcik@revma.cz](mailto:tomcik@revma.cz)

## Contact information

**Type(s)**

Scientific

**Contact name**

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## **Additional identifiers**

**EudraCT/CTIS number**

Nil known

**IRAS number****ClinicalTrials.gov number**

Nil known

**Secondary identifying numbers**

Nil known

## **Study information**

**Scientific Title**

Effectiveness of specialized hand/face physical-occupational therapy in patients with systemic sclerosis

**Acronym**

RHB-SSc

**Study objectives**

Our specialized, long-term, tailored, physiotherapy/occupational therapy program focused on hand and face involvement in systemic sclerosis patients improves the function of hands/face, disability, quality of life (compared to controls treated with the standard of care).

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved 29/07/2014, Ethics Committee of the Institute of Rheumatology Prague (Ethics Committee of Institute of Rheumatology Prague, Na Slupi 4, 128 50 Praha 2, Czech Republic; +420 234075244; putova@revma.cz), ref: 1446/2014

### **Study design**

interventional single-centre prospective non-randomized controlled study

### **Primary study design**

Interventional

### **Secondary study design**

Non randomised study

### **Study setting(s)**

Hospital

### **Study type(s)**

Treatment

### **Participant information sheet**

Not available in web format, please use contact details to request a participant information sheet

### **Health condition(s) or problem(s) studied**

Systemic sclerosis/scleroderma

### **Interventions**

Control group: standard of care (i.e. standard pharmacological treatment according to the EULAR /ACR recommendations on the management of systemic sclerosis, education, and materials for regular daily home exercise)

Intervention group: standard of care (as described above) + 6 months of specialized intervention program twice a week consisting of supervised physiotherapy (1 hour) and occupational therapy (0.5 hour) focused on the function of hands and face

### **Intervention Type**

Behavioural

### **Primary outcome measure**

Measured at baseline, week 12, week 24, week 48:

1. Function of the hands assessed by:

- HAMIS test (Hand Mobility in Scleroderma)
- delta finger to palm distance
- hand grip strength measured by dynamometry
- CHFS questionnaire (Cochin Hand Function Scale)

2. Function of the face:

- inter-lip and inter-incisor distance
- MHISS questionnaire (Mouth Handicap in Systemic Sclerosis)

### **Secondary outcome measures**

Measured at baseline, week 12, week 24, week 48:

1. Assessment of health/disability:

- HAQ questionnaire (Health Assessment Questionnaire)
  - SHAQ questionnaire (Scleroderma Health Assessment Questionnaire)
2. Quality of life:
- SF-36 questionnaire (Medical Outcomes Short Form-36)

**Overall study start date**

01/05/2014

**Completion date**

30/06/2017

## **Eligibility**

**Key inclusion criteria**

1. Informed consent form signed and dated
2. Reliable and capable of adhering to the protocol and visit schedule
3. At least 18 years of age
4. Fulfilled the 2013 EULAR/ACR classification criteria for systemic sclerosis
5. Skin involvement at least of the fingers/hands and the face
6. Regularly followed at our out-patient department and adheres to the standard-of-care pharmacological therapy indicated by his treating rheumatologist
7. Willing to participate in the study and undergo all planned examinations

**Participant type(s)**

Patient

**Age group**

Adult

**Lower age limit**

18 Years

**Sex**

Both

**Target number of participants**

25 patients in the intervention group and 25 patients in the control group

**Total final enrolment**

59

**Key exclusion criteria**

Subject has any other condition, including medical or psychiatric, which in the investigator's judgment would make the subject unsuitable for inclusion in the study

**Date of first enrolment**

01/01/2015

**Date of final enrolment**

01/04/2016

# Locations

## Countries of recruitment

Czech Republic

## Study participating centre

### Institute of Rheumatology

Na Slupi 4

Prague

Czech Republic

12850

# Sponsor information

## Organisation

Revmatologický ústav

## Sponsor details

(Institute of Rheumatology)

Na Slupi 4

Prague

Czech Republic

12850

+420 (0)234075244

pavelka@revma.cz

## Sponsor type

Hospital/treatment centre

## Website

<http://www.revma.cz/en>

## ROR

<https://ror.org/00jk0vn85>

# Funder(s)

## Funder type

Government

## Funder Name

**Funder Name**

Project for Conceptual Development for the institution of Ministry of Health Czech Republic—  
Institute of Rheumatology (number 023728)

## **Results and Publications**

**Publication and dissemination plan**

Planning to publish the results in a rheumatology-oriented peer-reviewed journal with impact factor.

**Intention to publish date**

31/12/2020

**Individual participant data (IPD) sharing plan**

The current data sharing plans for this study are unknown and will be available at a later date.

**IPD sharing plan summary**

Data sharing statement to be made available at a later date