

# Fascia manipulation for the treatment of muscle pain

<b>Submission date</b> 11/12/2019	<b>Recruitment status</b> No longer recruiting	<input checked="" type="checkbox"/> Prospectively registered <input type="checkbox"/> Protocol
<b>Registration date</b> 15/01/2020	<b>Overall study status</b> Completed	<input type="checkbox"/> Statistical analysis plan <input checked="" type="checkbox"/> Results
<b>Last Edited</b> 27/02/2023	<b>Condition category</b> Musculoskeletal Diseases	<input type="checkbox"/> Individual participant data

## Plain English summary of protocol

### Background and study aims

Muscle pain (myofascial pain) is a clear problem whose source is not fully understood. It may be a consequence of wrong fascial tension. It is assumed that restoration of the right fascial tension using manual methods, including deep massage (Fascia Manipulation [FM]), can reduce the patient's pain sensation.

### Who can participate?

People of 18-40 years old of all genders with musculoskeletal pain for at least 1 week or healthy people for the control group

### What does the study involve?

Participants will be randomly allocated to one of three therapies of Fascial Manipulation (different methods in different groups) or no treatment at all (control group).

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

Possible benefits: Reduction in myofascial pain and improvement in quality of life.

Risks: local pain caused by deep friction massage.

### Where is the study run from?

The Jerzy Kukuczka Academy of Physical Education in Katowice, Poland

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

January 2020 to July 2021

### Who is funding the study?

The Jerzy Kukuczka Academy of Physical Education in Katowice, Poland

### Who is the main contact?

Mateusz Pawlukiewicz

m.pawlukiewicz@awf.katowice.pl

## Contact information

**Type(s)**

Public

**Contact name**

Mr Mateusz Pawlukiewicz

**ORCID ID**

<https://orcid.org/0000-0003-0890-7718>

**Contact details**

The Jerzy Kukuczka Academy of Physical Education in Katowice

Mikołowska 72B

Katowice

Poland

40-065

+48 508852486

[m.pawlukiewicz@awf.katowice.pl](mailto:m.pawlukiewicz@awf.katowice.pl)

## Additional identifiers

**Clinical Trials Information System (CTIS)**

Nil known

**ClinicalTrials.gov (NCT)**

Nil known

**Protocol serial number**

(1/2017)

## Study information

**Scientific Title**

Evaluation of Fascial Manipulation method on effectiveness in treatment of myofascial pain: a randomised controlled trial of various treatment protocols and their influence on pain levels, the reactivity of soft tissues, change in USG imaging (including elastography), EMG, range of motion, function, and Neurac's tests

**Study objectives**

Standard treatment protocol of Fascial Manipulation method has better effects than modified protocols or controls

**Ethics approval required**

Old ethics approval format

**Ethics approval(s)**

Approved DATE, The Jerzy Kukuczka Academy of Physical Education Ethics Committee

(Uczelniana Komisja Bioetyczna AWF Katowice, ul. Mikołowska 72a, 40-065 Katowice, Poland;

+48 322075152; [a.smykla@awf.katowice.pl](mailto:a.smykla@awf.katowice.pl)) ref: (1/2017)

**Study design**

Double-blinded randomized control trial

**Primary study design**

Interventional

**Study type(s)**

Treatment

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

Myofascial pain

**Interventions**

Patients will be randomly allocated (using a computer program) to one of three groups, where each group will have a different therapy protocol and there will be a control group with no therapy as well. Each protocol will involve three treatments at intervals of 7-10 days, and a follow-up examination after 30 days. Study will be single-centre, and will take place at the premises of The Jerzy Kukuczka Academy of Physical Education.

Patients in treatments groups will undergo a Fascial Manipulation therapy (with different protocols), while the control group will not have any treatment. Patients will be randomly allocated to each group, using a computer program. Each protocol group will involve three treatments at intervals of 7-10 days, and a follow-up examination after 30 days.

Group 1: fascial manipulations according to the Stecco's concept (manipulation of 2 most densified myofascial trains, that stand in opposition to each other)

Group 2: fascial manipulations according to modified Stecco's protocol (manipulation of 2 myofascial trains, that stand in opposition to each other, but not that much densified as points of first group)

Group 3: fascial manipulations of random Stecco's centers of coordination

Control group: no treatment was provided

**Intervention Type**

Other

**Primary outcome(s)**

Measured before and after first therapy, after third therapy and after 30 days (follow-up):

1. Pain levels - VAS scale
2. Reactivity of soft tissues - MyotonPro device

**Key secondary outcome(s)**

Measured before and after first therapy, after third therapy and after 30 days (follow-up):

1. Change in USG imaging (including elastography) (USG Device)
2. EMG (EMG device)
3. Range of motion (digital inclinometer)
4. Function (FMS)
5. Proprioception (kinesthesia tests)
6. Neuromuscular activation test using Neurac test protocol.

**Completion date**

31/07/2021

# Eligibility

## Key inclusion criteria

1. Age 18-40
2. Presence of musculoskeletal pain for at least 1 week or healthy with no pain (for control group)

## Participant type(s)

Other

## Healthy volunteers allowed

No

## Age group

Adult

## Lower age limit

18 years

## Upper age limit

40 years

## Sex

All

## Total final enrolment

54

## Key exclusion criteria

1. Coexistence of a chronic or systemic disease
2. Pregnancy
3. Taking steroids, anti-inflammatory drugs or drugs that change blood coagulability
4. Acute injuries
5. Acute surgical interventions
6. The use of other therapeutic forms
7. Serious neurological disorders

## Date of first enrolment

15/01/2020

## Date of final enrolment

20/04/2021

# Locations

## Countries of recruitment

Poland

**Study participating centre**  
The Jerzy Kukuczka Academy of Physical Education  
Mikołowska 72A  
Katowice  
Poland  
40-065

## Sponsor information

**Organisation**  
The Jerzy Kukuczka Academy of Physical Education

**ROR**  
<https://ror.org/05wtrdx73>

## Funder(s)

**Funder type**  
University/education

**Funder Name**  
The Jerzy Kukuczka Academy of Physical Education in Katowice

## Results and Publications

### Individual participant data (IPD) sharing plan

The datasets generated during and/or analysed during the current study are not expected to be made available due to ethics restriction on sharing data.

### IPD sharing plan summary

Not expected to be made available

### Study outputs

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>		04/08/2022	27/02/2023	Yes	No