Association between hand characteristics and musculoskeletal complaints in stringmusicians

No registrations found.

Ethical review	Positive opinion
Status	Pending
Health condition type	-
Study type	Observational non invasive

Summary

ID

NL-OMON22389

Source
Nationaal Trial Register

Brief title
TBA

Health condition

Musculoskeletal complaints

Sponsors and support

Primary sponsor: None
Source(s) of monetary or material Support: None

Intervention

Outcome measures

Primary outcome

The association between MSC in musicians and the four basic biomechanical proportions, being size, span width, joint rigidity and strength

Secondary outcome

MSC related disability and other risk factors

Study description

Background summary

Musculoskeletal complaints (MSC) are common in professional musicians and can lead to limitations in the ability to play their instrument. This can lead to reduced income or even the end of their career. Therefore, insight in the causal mechanisms is important for prevention and effective treatment of MSC. The underlying mechanisms of developing MSC however, are complex and multi causal. Previous studies have found certain anthropometric characteristics to have an association between playing an instrument and the development of MSC, but recent systematic reviews show that no standardised study has been done so far. Prof. Christoph Wagner, MD PhD (1931-2013) suggested, in order to assess individual risk factors, to look at the four basic biomechanical components that influence the quality of music performance. These being, according to Wagner, the size of the hand, the active range of motion, the joint resistance (e.g. rigidity) and the muscle strength. Wagner's analysis of anthropometric components has however not been investigated in a scientific manner. Therefore, the aim of this study is to determine the association between MSC in musicians and the four basic biomechanical components related to the ability of playing an instrument as described by Wagner. Sub aims are to assess the MSC related limitations regarding musical performance and daily life and to explore further risk factors for developing MSC in musicians.

Study objective

There is a significant association between the four basic biomechanical components (size, span width, joint rigidity and strength) and the development of musculoskeletal complaints in string musicians.

Study design

3 months: formulating introduction and search for validated testing methods.
3 months: testing, improving and finalizing method section. Contacting Dutch orchestras, conservatoires and music schools to assess interest in participation in the trial.
12 months: recruiting participants and conducting measurements.
4 months: analyzing data and writing results section.
4 months: writing the discussion section and completing the article.
2 months: peer reviewing.
2 months: revising article and submit for publication.
3 months: extra time for unexpected delays.

Contacts

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Eligibility criteria

Inclusion criteria

Musicians, age ≥ 18 years, playing a string instrument for at least 5 hours per week. Participants have to be able to read and answer questionnaires in the English language, and have to provide written informed consent before entering the study.

Exclusion criteria

People that do not meet the inclusion criteria.

Study design

Design

Study type:	Observational non invasive
Intervention model:	Other
Allocation:	Non controlled trial
Masking:	Open (masking not used)
Control:	N/A , unknown

Recruitment

NL

Recruitment status:	Pending
Start date (anticipated):	01-07-2019
Enrollment:	150
Type:	Anticipated

IPD sharing statement

Plan to share IPD: No

Ethics review

Positive opinion

Date:	28-06-2019
Application type:	First submission

Study registrations

Followed up by the following (possibly more current) registration

No registrations found.

Other (possibly less up-to-date) registrations in this register

No registrations found.

In other registers

Register	ID
NTR-new	NL7840
Other	METc UMCG : METc 2016/622

Study results