

Association between hand characteristics and musculoskeletal complaints in stringmusicians

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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.

Ethische beoordeling	Positief advies
Status	Werving nog niet gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON22389

Bron

Nationaal Trial Register

Verkorte titel

TBA

Aandoening

Musculoskeletal complaints

Ondersteuning

Primaire sponsor: None

Overige ondersteuning: None

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

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

Toelichting onderzoek

Achtergrond van het onderzoek

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.

Doel van het onderzoek

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.

Onderzoeksopzet

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.

Contactpersonen

Publiek

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Wetenschappelijk

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Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

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.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

People that do not meet the inclusion criteria.

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders

Toewijzing:	N.v.t. / één studie arm
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-07-2019
Aantal proefpersonen:	150
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nee

Ethische beoordeling

Positief advies	
Datum:	28-06-2019
Soort:	Eerste indiening

Registraties

Opgevolgd door onderstaande (mogelijk meer actuele) registratie

Geen registraties gevonden.

Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

In overige registers

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

Resultaten