Establishing the presence and characteristics of snoring sounds in a sleep laboratory population

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The characteristics of snoring sounds could be used to categorize different kinds of snoring sounds, and the treatment effect of OSA/snoring could be evaluated by measuring the characteristics of snoring sounds

Ethische beoordeling	Niet van toepassing
Status	Werving gestart
Type aandoening	-
Onderzoekstype	Observationeel onderzoek, zonder invasieve metingen

Samenvatting

ID

NL-OMON24210

Bron
NTR

Verkorte titel
EPiCSS

Aandoening

Snoring

Ondersteuning

Primaire sponsor: None
Overige ondersteuning: None

Onderzoeksproduct en/of interventie

Uitkomstmaten

Primaire uitkomstmaten

The presence of snoring sounds, snoring sound duration, inter-snore interval duration, frequency, intensity (sound pressure level, equivalent sound pressure level, and top 1, 5, and 10 percentile sound pressure level) and the diagnosis after the PSG will be the primary outcome measures of this study.

Toelichting onderzoek

Achtergrond van het onderzoek

Obstructive sleep apnea (OSA) is characterized by repetitive complete or partial obstruction of the upper airway during sleep, often resulting in oxygen desaturations and arousals from sleep. OSA is associated with a host of negative health outcomes, amongst which a higher risk of hypertension and cardiovascular disease. Excessive daytime sleepiness, fatigue, lack of concentration, and snoring out loud as reported by a sleep partner are amongst the frequently reported subjective complaints. Objectively, OSA is diagnosed by means of polysomnography (PSG), which requires physiologic measurements of brain activity during sleep and measurements of the amount of airflow reductions and oxygen desaturations during sleep. Thus, OSA patients are diagnosed based on the apnea-hypopnea index (AHI) of at least 5 events/hour of sleep determined during a PSG recording. The severity of OSA is classified as mild (AHI 5-15), moderate (AHI 15-30), and severe (AHI >30). OSA is a major public health problem, with an estimated prevalence of 2% and 4% for women and men, respectively. Importantly, in the general population, approximately 80-90% of patients meeting the criteria of at least moderate OSA remain undiagnosed.
Proxy-reported snoring is one of the most disturbing subjective complaints of OSA, but it also commonly occurs in individuals without OSA. Reportedly, it affects about 25% of women and almost 50% of men in the general adult population. The condition in itself is not life-threatening, but it is one of the most important risk factors for the development of OSA, especially when the snoring sounds are loud and occur frequently. Unfortunately, and unlike OSA, snoring has not been studied extensively. Given the potential risk that is associated with snoring for the development of OSA, a better understanding of snoring is called for.

Doel van het onderzoek

The characteristics of snoring sounds could be used to categorize different kinds of snoring sounds, and the treatment effect of OSA/snoring could be evaluated by measuring the characteristics of snoring sounds

Onderzoeksopzet

When patient first came to Department of Neurology/ Clinic Neurophysiology (sleep laboratory), OLVG west, a specialist was available to consult with the patient about his/her sleep problem(s). If a whole-night polysomnography (PSG, snoring sounds recording and snoring questionnaire were embedded in PSG) was required to diagnose his/her sleep problem, a new appointment would be made for PSG and patients would wait for about two

weeks for it.

All the data for primary outcome were collected during the appointment for PSG. Before the PSG, patients would complete a snoring questionnaire. After that, whole-night PSG and snoring sounds recording were performed. After recording, the results of PSG and snoring sounds recording would be analyzed by R, a programming software, in which all the parameters of snoring sounds would be extracted automatically using our programmed codes. This detailed and comprehensive description of snoring sounds is the primary outcome.

For patients who received treatment (surgery, oral appliance, etc.) for OSA and/or snoring, after-treatment PSG was needed to evaluate the treatment effect. These patients were included for secondary outcome. Three months after treatment, an appointment was made for PSG, and that all the procedure and required data for secondary outcome were same with that for primary outcome. The data were also extracted using R. The before and after treatment snoring sounds parameters would be compared using SPSS, providing objective and quantified treatment effect.

Contactpersonen

Publiek

Academisch Centrum Tandheelkunde Amsterdam (ACTA) and Onze Lieve Vrouwe Gasthuis (OLVG)
Zhengfei Huang

(020) 5980412

Wetenschappelijk

Academisch Centrum Tandheelkunde Amsterdam (ACTA) and Onze Lieve Vrouwe Gasthuis (OLVG)
Zhengfei Huang

(020) 5980412

Deelname eisen

Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

- People who are 18 years or older;
- People who underwent sleep recording at sleep laboratory because of possible sleep disorders.

Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)

- People who object to the use of their data.

Onderzoeksopzet

Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Anders
Toewijzing:	N.v.t. / één studie arm
Blindering:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

Deelname

Nederland

Status:	Werving gestart
(Verwachte) startdatum:	01-09-2019
Aantal proefpersonen:	1000
Type:	Verwachte startdatum

Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nee

Ethische beoordeling

Niet van toepassing

Soort:	Niet van toepassing

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	NL8398
Ander register	ACWO OLVG : WO 19.079

Resultaten