AARHUS UNIVERSITY

Press release

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Basic information

Name: Jelmer Westra Email: Jelmer.westra@clin.a.dk Phone: 30869660

Department of: Clinical Medicine

Main supervisor: Evald Høj Christiansen

Title of dissertation: Clinical Evaluation of Quantitative Flow Ratio

Date for defence: 26/11/2021 at (time of day): 15:15 Place: Auditorium B, Aarhus University Hospital, Skejby

Press release (Danish)

Klinisk evaluering af Quantitative Flow Ratio til vurdering af forsnævringer i kranspulsårer

Åreforkalkningssygdom kan medføre hjertesmerter, hjertesvigt og er en hyppig dødsårsag. Hos patienter der har forsævringer i kranspulsårene anbefales det, at beslutninger om behandling med bypass-operation eller ballonbehandling baseres på funktionelle målinger, for at identificere forsnævringer der begrænser blodgennemstrømingen i betydende omfang. Quantitative Flow Ratio (QFR) er en ny metode til at vurdere betydningen af forsnævringer. QFR-målingen er baseret på computeranalyse af røntgenbilleder der optages rutinemæssigt ved kranspulsåreundersøgelser. Denne ph.d.-afhandling viser, at QFR har en god diagnostisk præcision, og er anvendelig i normal klinisk praksis. QFR kræver endvidere ikke brug af de særlige engangskatetre der skal føres ind i kranspulsårene ved de aktuelle standardundersøgelser. Resultaterne af denne ph.d.-afhandling kan have indflydelse på den diagnostiske udredning af en stor patientgruppe.

Projektet er gennemført af Jelmer Westra, der forsvarer det d. 26.november 2021.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 26/11 kl. 2021 i Auditorium B, Aarhus Universitets Hospital, Palle Juul-Jensens Boulevard 99, Aarhus N. Titlen på projektet er "Clinical Validation of Quantitative Flow Ratio". Yderligere oplysninger: Ph.d.-studerende Jelmer Westra, e-mail: Jelmer.westra@clin.au.dk, tlf. 30869660.

Bedømmelsesudvalg:

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Press release (English)

Clinical Validation of Quantitative Flow Ratio in evaluation of Coronary Artery Stenosis

Coronary artery disease can cause chest pain, heart failure and is a leading cause of death. It is reccomended that treatment of patients with stenosis in the coronary arterie is guided by physiological measurements to identify flow-limiting disease. Quantitative Flow Ratio (QFR) is a new, computer-based method used to identfly flow-limiting coronary arterty stenosis with the use of

routine-acquired images. This PhD dissertation shows that QFR has a good diagnostic performance and clincial applicability for identificaton if coronary artery stenoses with indication for treatment. QFR provides a less invasive and safe diagnostic tool. The results of this PhD thesis may have a impact on the diagnostic approach to a large patient group

The project was carried out by Jelmer Westra, who is defending his dissertation on November 26th, 2021.

The defence is public and takes place on 26/11 at 3:15 PM in Auditorium B, Aarhus University Hospital, Palle Juul-Jensens Boulevard 99, Aarhus N. The title of the project is Clinical Validation of Quantitative Flow Ratio. For more information, please contact PhD student Jelmer Westra, email: Jelmer.westra@clin.au.dk, Phone +45 30869660.

Assessment committee:

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