

Press release

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Basic information

Name: Zarmiga Karunanithi Email: zk@clin.au.dk Phone:

Department of: Clinical Medicine

Main supervisor: Vibeke Elisabeth Hjortdal

Title of dissertation: Atrial septal defects: Subtle deteriorations decades after correction

Date for defence: 29th of October 2021 at (time of day): 14.00 Place: Lokale C114-101, krydspunkt C110, Indgang C, Aarhus Universitetshospital.

Zoom link: <https://aarhusuniversity.zoom.us/j/69683734073>

Press release (Danish)

Atriseptumdefekter: Subtile forringelser årtier efter korrektion

I et ph.d.-projekt fra Aarhus Universitet, Health, undersøges patienter korrigeret for et medfødt hul i skillevæggen mellem hjertets forkamre (atrieseptumdefekt). Årsagen er, at nylig forskning har påvist, at denne patientgruppe er i risiko for at udvikle komplikationer på den lange bane. Formålet med projektet er således at afsløre potentielle mekanismer, der kan forklare disse komplikationsrisici.

Dette er undersøgt ved at inkludere voksne med en korrigeret atriseptumdefekt samt raske kontroller. De er alle undersøgt med arbejdstest, ultralydskanning af hjertet, trykmålinger inde i hjertet samt overvågning af hjerterytmen.

Resultaterne viser, at voksne med en korrigeret atriseptumdefekt har bevaret arbejdskapacitet. Men de har subtile tryk og funktionsforandringer i hjertet under arbejde samt autonom imbalance. Disse subtile forandringer kan potentielt forklare, hvorfor de udvikler komplikationer.

Projektet er gennemført af Zarmiga Karunanithi, der forsvarede det d. 29/10 2021

Forsvaret af ph.d.-projektet er offentligt og finder sted den 29/10 kl. 14.00 i Lokale C114-101, krydspunkt C110, Indgang C, Aarhus Universitetshospital, Palle Juul-Jensen Boulevard 99, 8200 Aarhus N. Titlen på projektet er "Atrial septal defects: Subtle deteriorations decades after correction". Yderligere oplysninger: Ph.d.-studerende Zarmiga Karunanithi, e-mail: zk@clin.au.dk.

Bedømmelsesudvalg:

Dorte Guldband, Associate Professor MD PhD (Chair)

Department of Cardiology, Aarhus University Hospital, Denmark

Stephanie Fuller, Associate Professor MD

Department of Cardiothoracic Surgery, Children's Hospital of Philadelphia, United States of America

Annette Schophuus Jensen, MD PhD

Department of Cardiology, Rigshospitalet, Denmark

Press release (English)

Atrial septal defects: Subtle deteriorations decades after correction

In a PhD project from Aarhus University, Health, patients corrected for a congenital hole in the wall dividing the atrial chambers in the heart (atrial septal defect) are examined. The reason for this recent research has documented that this particular patient group has an increased risk of developing

complication on the long-term. The purpose of this study is to reveal potential mechanisms that may explain these complications.

This is examined by including adults with a corrected atrial septal defect and healthy controls. All participants were examined using cardiopulmonary exercise testing, ultrasound scanning of the heart, pressure measurements in the heart and monitoring the heart rhythm.

The results show that adults with a corrected atrial septal defect have preserved exercise capacity. But they have subtle pressure and functional changes in the heart during exercise and autonomic imbalance. These subtle deteriorations may potentially explain why they develop complications over time

The project was carried out by Zarmiga Karunanithi, who is defending her dissertation on 29/10 2021.

The defence is public and takes place on 29/10 at 14.00 in room C114-101, intersection C110, entrance C, Aarhus University Hospital, Palle Juul-Jensen Boulevard 99, 8200 Aarhus N. The title of the project is "Atrial septal defects: Subtle deteriorations decades after correction". For more information, please contact PhD student Zarmiga Karunanithi, email: zk@clin.au.dk.

Assessment committee:

Dorte Guldbrand, Associate Professor MD PhD (Chair)
Department of Cardiology, Aarhus University Hospital, Denmark

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