

## Press release

Please fill in this form and return it to [graduateschoolhealth@au.dk](mailto:graduateschoolhealth@au.dk) in Word format no later than three weeks prior to your defence.

### Basic information

Name: Mette Winther Klinge Email: [mette\\_winther\\_andersen@clin.au.dk](mailto:mette_winther_andersen@clin.au.dk) Phone: 22635197

Department of: Clinical Medicine

Main supervisor: Klaus Krogh

Title of dissertation: Gastrointestinal Motility in Patients with Diabetes Mellitus

Date for defence: 17. January 2020 at (time of day): 14:00 Place: Auditorium C114-101  
Indgang C, Plan 1  
Aarhus Universitetshospital  
Palle Juul-Jensens Boulevard 99  
8200 Aarhus N

Press release (Danish)

### Forstyrrelser i mave-tarm kanalen hos patienter med diabetes mellitus

Et nyt ph.d.-projekt fra Aarhus Universitet, Health undersøger med to nye metoder forstyrrelser i mave-tarm kanalens funktion hos diabetespatienter. Projektet er gennemført af Mette Winther Klinge, der forsvarede ph.d. projektet d. 17/1 2020.

Det er velkendt, at nogle patienter med diabetes har dårlig funktion af deres mave-tarm system. Hyppigt præsenterer symptomerne sig som kvalme, opkastninger, tidlig mæthed, forstoppelse og diarre. Baggrunden for diabetisk tarmsygdom er ikke fuldstændig klarlagt. Hovedformålet med ph.d.-projektet var at undersøge de fysiologiske ændringer, der opstår i mave-tarm systemet i forbindelse med diabetisk tarmsygdom. Undersøgelserne i ph.d.-projektet viste, at patienter med diabetes og svære tarmproblemer har nedsat nerveforsyning til mave-tarmkanalen. Endvidere har tyndtarmens væg har et større volumen sammenlignet med raske, og patienterne har forlængede passagetider gennem mavesækken og tyktarmen. Overordnet giver studierne ny og væsentlig viden om patofysiologien bag diabetisk tarmsygdom og kan danne grundlag for fremtidig diagnostik og behandling.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 17/1 kl. 14.00 i Auditorium C114-101, Aarhus Universitetshospital, Indgang C, plan 1, Palle Juul-Jensens Boulevard 99, 8200 Aarhus N. Titlen på projektet er "Gastrointestinal Motility in Patients with Diabetes Mellitus". Yderligere oplysninger: Ph.d.-studerende Mette Winther Klinge, e-mail: [mette\\_winther\\_andersen@clin.au.dk](mailto:mette_winther_andersen@clin.au.dk) tlf. 22635197.

Bedømmelsesudvalg:

Lektor Lene Hjerrild Iversen (Formand), MD, PhD, Dr. med, Mave -og Tarm Kirurgisk afdeling, Aarhus Universitetshospital, Aarhus, Danmark

Lektor Maura Corsetti, MD, PhD og overlæge Center for Fordøjelsessygdomme og Biomedicinsk Forskningsenhed, Nottingham University, Nottingham, Storbritannien

Lektor Knud Yderstræde, MD, PhD og overlæge, Afdelingen for Intern Medicin og Endokrinologi Odense Universitetshospital, Odense, Danmark

Press release (English)

## Gastrointestinal Motility in Patients with Diabetes Mellitus

A new PhD-project from Aarhus University, Health investigates using two novel methods the pathophysiology behind diabetic gastrointestinal dysfunction. The project was carried out by Mette Winther Klinge, who is defending her dissertation on 17/1 2020.

It is well-known that patients with diabetes frequently suffers from gastrointestinal dysfunction with symptoms including recurrent nausea and vomiting, early satiety, constipation, diarrhea and even nocturnal fecal incontinens. The patofysiology behind diabetic gastroenteropathy is not completely clear. The main aim of the PhD-project was to investigate the pathophysiology and the physiological alterations in diabetic gastroenteropathy. The investigations during the PhD-studies showed that patients with diabetes had impaired cholinergic innervation of the gastrointestinal tract, increased volume of the small intestinal wall. Furthermore, patients with diabetes had prolonged gastric and colonic transit times, but only minor alterations of the contraction pattern were demonstrated in the colon and no changes in the stomach. Overall, the studies provide new and significant knowledge on the pathophysiology behind diabetic gastroenteropathy and might contribute to new diagnostics and treatment in the field.

The defence is public and takes place on 17/1 at 14:00 in Auditorium C114-101, Aarhus University Hospital, Entrance C, level 1, 99 Palle Juul-Jensens Boulevard, DK-8200 Aarhus N. The title of the project is Gastrointestinal motility in patients with diabetes mellitus. For more information, please contact PhD student Mette Winther Klinge, email: mette\_winther\_andersen@clin.au.dk, Phone +45 22635197.

Assessment committee:

Professor, Lene Hjerrild Iversen (Chairman), MD, PhD, Dr. med, Department of Surgery, Aarhus University Hospital, Aarhus, Denmark

Associate professor, Maura Corsetti, MD, PhD, Digestive diseases Centre and Biomedical Research Unit, Nottingham University, Nottingham, United Kingdom

Associate professor, Knud Yderstræde, MD, PhD, Department of Internal Medicine and Endocrinology, Odense University Hospital, Odense, Denmark

### **Permission**

By sending in this form:

- I hereby grant permission to publish the above Danish and English press releases.
- I confirm that I have been informed that any applicable inventions shall be treated confidentially and shall under no circumstances whatsoever be published, presented or mentioned prior to submission of a patent application, and that I have an obligation to inform my head of department and the university's Patents Committee if I believe I have made an invention in connection with my work. I also confirm that I am not aware that publication violates any other possible holders of a copyright.