

Press release

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Basic information

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Main supervisor: Niels Møller, dr.med, professor

Title of dissertation: Clinical aspects of hypoglycemia; studies in patients with type 1 diabetes, type 2 diabetes and healthy subjects

Date for defence: 14th of August 2020 at (time of day): 1400 Place: Universitetstorv Nord, auditorium J116-113 and as a virtual Zoom meeting. Please email madsbengtsen@clin.au.dk to receive an invitation with a Zoom link.

Press release (Danish)

Kliniske aspekter som følge af hypoglykæmi; studier i patienter med type 1 diabetes, type 2 diabetes og raske kontroller.

Hovedformålet med denne ph.d.-afhandling var at belyse forskellige kliniske aspekter af hypoglykæmi (lavt blodsukker) hos patienter med diabetes. Insulinbehandling af type 1 diabetes og type 2 diabetes er en vanskelig opgave med stor risiko for hypoglykæmi. Hypoglykæmi er både den største egenhændige hindring for en optimal behandling af diabetes, og en hyppig og frygtet tilstand, som forringer livskvaliteten og kan have alvorlige vidtrækkende konsekvenser. Tidligere studier har vist, at lang diabetes varighed og gentagne tilfælde af hypoglykæmi af mere end 1,5 times varighed hæmmer den hormonelle modregulation ved et efterfølgende tilfælde (et fænomen kendt som hypoglycemia-associated autonomic failure). Studie 1 var et humant studie, der undersøgte det hormonelle og metaboliske modregulatoriske respons ved gentagne tilfælde af kortvarig hypoglykæmi hos personer med type 1 diabetes og raske kontrol personer. Studie 2 var et minireview som undersøgte studier der sammenholdt glukagon responset hos type 1 diabetikere overfor raske individer. Studie 3 var et epidemiologisk studie, der undersøgte indlæggelsesrater for hypoglykæmi samt HbA1c (langtids blodsukkeret) og antidiabetisk behandling før og efter indlæggelsen hos patienter med type 1 diabetes og type 2 diabetes.

Nyt ph.d.-projekt fra Aarhus Universitet, Health. Resultater præsenteres med baggrund i et nyt ph.d.-projekt fra Aarhus Universitet, Health. Projektet er gennemført af Mads Bisgaard Bengtsen, der forsvarede det d. 14/08-2020 kl. 14.00 i auditorium J116-113, Universitetstorv Nord, Aarhus Universitetshospital.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 14/08-2020 kl. 14.00. Grundet den uvisse situation med COVID-19 vil forsvaret blive gennemført både et fysisk forsvar i auditorium J116-113, Universitetstorv Nord, Aarhus Universitetshospital og som et web forsvar via Zoom. For at se det virtuelt skal du sende en mail til madsbengtsen@clin.au.dk for at modtage en invitation med et link til Zoom. Titlen på projektet er "Clinical aspects of hypoglycemia; studies in patients with type 1 diabetes, type 2 diabetes and healthy subjects". Yderligere oplysninger: Ph.d.-studerende Mads Bisgaard Bengtsen, e-mail: madsbengtsen@clin.au.dk, tlf. +45 29277453.

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Press release (English)

Clinical aspects of hypoglycemia; studies in patients with type 1 diabetes, type 2 diabetes and healthy subject

The main objective of this PhD thesis was to investigate different clinical aspects of hypoglycemia in patients with diabetes. Hypoglycemia remains one of the sole largest hindrances for optimal management of diabetes. Iatrogenic hypoglycemia is a common, and dreaded condition in type 1 diabetes and type 2 diabetes with negative impact on quality of life. Long diabetes duration and repeated episodes of hypoglycemia lasting more than 1.5 hour have been shown to significantly, and severely impair the hormonal counter regulation (a phenomenon known as hypoglycemia-associated autonomic failure). Study 1 was a human trial investigating the counter regulatory responses and metabolic responses to consecutive episodes of short-lived hypoglycemia in subjects with type 1 diabetes and comparable healthy subjects. Study 2 was a minireview focusing on glucagon responses in type 1 diabetes compared with responses from non-diabetes subjects. Study 3 was an epidemiological, population-based study investigating incidence rates of hospitalization for hypoglycemia in Denmark from 1997-2017.

The defence is public and takes place on 14/08 at 14.00. Due to the uncertain situation with COVID-19, the defence will be held both at the auditorium J116-113, Universitetstorv Nord, Aarhus University Hospital, and as a web defence via Zoom. Please e-mail madsbengtzen@clin.au.dk to receive an invitation with a Zoom link.

The title of the project is "Clinical aspects of hypoglycemia; studies in patients with type 1 diabetes, type 2 diabetes and healthy subject". For more information, please contact PhD student Mads Bisgaard Bengtzen, email: madsbengtzen@clin.au.dk , Phone +45 29277453.

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