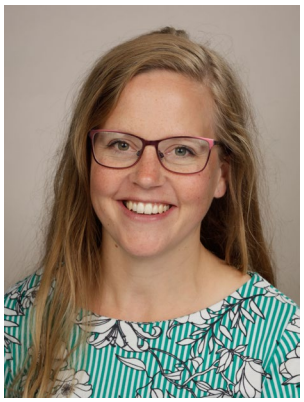
INVITATION – PHD DEFENCE

ELLEN LUND SCHALDEMOSE, MD

"Sensory loss and pain in diabetic polyneuropathy"



Friday January 27, 2023, at 14.00

In Auditorium C114-101, Entrance C, Aarhus University Hospital,
Palle Juul-Jensens Boulevard 165, 8200 Aarhus N

The defence is public, in English and expected to last 2 hours.
After the defence, Danish Pain Research Center will host a reception.

Assessment committee

- Associate Professor Boris Alexander Kleber (charman and moderator of the defence)
  Center for Music in the Brain, Department of Clinical Medicine, Aarhus University, Denmark
- Professor Elena Enax-Krumova
  Department of Neurology, BG University Hospital Bergmannsheil, Ruhr-University Bochum, Germany
- Associate professor Carsten Dahl Mørch
  Center for Neuroplasticity and Pain, Center for Sensory-Motor Interaction Integrative neuroscience, Department of Health Science and Technology, School of Medicine, Aalborg University, Denmark

Supervisors

- Professor Nanna Brix Finnerup (Main Supervisor)
  The Danish Pain Research Center, Department of Clinical Medicine, Aarhus University
- Associate Professor Francesca Fardo
  Center of Functionally Integrative Neuroscience, Department of Clinical Medicine, Aarhus University
- Clinical Professor Hatice Tankisi
  Department of Neurophysiology, Aarhus University Hospital & Aarhus University
- Clinical Professor Leif Østergaard
  Center of Functionally Integrative Neuroscience, Department of Clinical Medicine, Aarhus University

AARHUS
UNIVERSITY
HEALTH – DEPARTMENT OF CLINICAL MEDICINE
IDNC & Department of Neurology

PRESS RELEASE

Ellen Lund Schaldemose, MD, from The Danish Pain Research Center, Department of Clinical Medicine, will defend her PhD thesis titled "Sensory loss and pain in diabetic polyneuropathy" at 14.00 on January 27, 2023. The defence is in English and will last approximately 2 hours.

Diabetic polyneuropathy (DPN) is a disabling complication to diabetes, typically characterized by sensory loss in both feet and neuropathic symptoms such as numbness or tingling. Some patients also suffer from neuropathic pain (painful DPN). Although tremendous studies on DPN and painful DPN have been conducted, the specific mechanisms leading to DPN and painful DPN are still unclear and effective treatments are lacking. Therefore, it is essential to increase our knowledge on the pathology behind DPN and painful DPN. These issues are treated in a new PhD project from Aarhus University, Health.

A pathological sign frequently observed among patients with DPN is the so-called paradoxical heat sensation (PHS), where mild cooling of the skin is perceived as warmth. The phenomenon is related to thermal sensory loss, but why some patients experience PHS and others do not is unclear. Further, it has been proposed that both peripheral and central changes in the nervous system are related to the pathophysiology of painful DPN, but how these changes contribute to the generation of spontaneous pain are not fully elucidated.

The main purpose of this PhD project was to examine specific phenomena related to thermal sensory loss in diabetic polyneuropathy as well as to clarify the role of the peripheral input for the maintenance of spontaneous pain in patients with painful DPN.

The defence is public and takes place on January 27, 2023, at 14.00 in Auditorium C114-101, Entrance C, Aarhus University Hospital, Palle Juul-Jensens Boulevard 165, 8200 Aarhus N

The title of the project is "Sensory loss and pain in diabetic polyneuropathy".
For more information, please contact PhD student Ellen Lund Schaldemose
Email: ells@clin.au.dk

PRESSEMEDDELELSE

Ph.d.-forsvar, Ellen Lund Schaldemose, læge, fra Dansk Smerteforskningscenter, Institut for Klinisk Medicin, vil forsvare sin ph.d.-afhandling med titlen "Sensory loss and pain in diabetic polyneuropathy" den 27. januar 2023 kl. 14.00. Forsvaret er på engelsk og vil cirka vare 2 timer.

Diabetisk polyneuropati (DPN) er en alvorlig diabeteskomplikation, der er karakteriseret ved tab af følesans i fødderne samt symptomer såsom sovende eller prikkende fornemmelser. Yderligere oplever nogle patienter også neuropatiske smerter (smertefuld DPN). Trods talrige studier omhandlende DPN og smertefuld DPN er det fortsat uklart hvad der leder til neuropatien samt hvordan den kan behandles. Det er derfor fortsat vigtigt at generere mere viden om DPN patologi, hvilket dette ph.d. projekt fra Aarhus Universitet, Health vil bidrage med.

Et patologisk fund der hyppigt er set blandt DPN-patienter er såkaldt paradoks varmefornemmelse (paradoxical heat sensation, PHS), der er defineret som en følelse af varme når huden afkøles. PHS er associeret med nedsat temperatursans, men hvorfor nogle patienter oplever PHS og andre ikke gør er uklart. I forbindelse med smertefuld DPN er der fundet tegn på både perifere og centrale forandringer i nervesystemet. Hvordan de forskellige forandringer har indflydelse på opretholdelsen af smerte i smertefuld DPN er dog uvis.

Hovedformålene med dette ph.d.-projekt var at undersøge forekomsten af PHS hos patienter med diabetes samt at undersøge vigtigeden af det perifere input for opretholdelse af spontan smerte hos patienter med smerteful DPN.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 27. januar 2023 kl. 14.00 i auditorium C114-101, indgang C, Aarhus Universitets Hospital, Palle Juul-Jensens Boulevard 165, 8200 Aarhus N

Titlen på projektet er " Sensory loss and pain in diabetic polyneuropathy".

Yderligere oplysninger: Ph.d.-studerende Ellen Lund Schaldemose
Mail: ells@clin.au.dk