Press release

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Basic information

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Department of: Clinical Medicine

Main supervisor: Thor Petersen

Title of dissertation: Optic neuritis, multiple sclerosis and neuromyelitis optica spectrum disorders in the Central Denmark Region

Date for defence: 15.03.19 at (time of day): 14.00 Place: DNU (Det Nye Universitetshospital), C-auditoriet - Indgang C, C114-101 på Universitetstorv Syd, Palle Juul-Jensens Boulevard 99, Aarhus

Press release (Danish)

Synsnervebetændelse, multipel sklerose og neuromyelitis optica spectrum disorders i Region Midtjylland

Demyeliniserende lidelser i centralnervesystemet udgør en gruppe sygdomme med delvis overlappende symptomer. Dette kan gøre diagnosticeringen udfordrende. For eksempel, kan synsnervebetændelse forekomme både ved multipel sklerose (MS) og neuromyelitis optica spectrum disorders (NMOSD). I den akutte fase er behandlingsprincipperne lignende for disse sygdomme. Den langvarige, forebyggende behandling er dog forskellig, hvorfor en tidlig og korrekt diagnose er vigtig for at reducere risikoen for permanent funktionsnedsættelse.

I et nyt ph.d.-projekt fra Aarhus Universitet, Health, blev langtidseffekten af steroid-behandling for akut synsnervebetændelse undersøgt – specielt effekten af behandling givet indenfor én uge vs. behandling givet efter én uge. Videre blev forekomsten af antal nye tilfælde med NMOSD pr år i Region Midtjylland beregnet. Endelig blev der videreudviklet to analysemetoder for at påvise et antistof mod vandkanalen aquaporin-4. Påvisning af dette antistof er væsentlig i diagnosticeringen af NMOSD.

Der blev vist at den gavnlige effekt af steroid-behandling for akut synsnervebetændelse var begrænset til få måneder, og at langtidsprognosen var uafhængig af tidspunkt for behandlingsstart. Der blev estimeret en betydelig lavere forekomst af nye NMOSD-tilfælde pr år, end tidligere fundet i Danmark. Projektet bidrog med en potentielt klinisk anvendelig analysemetode for påvisning af antistof mod aquaporin-4.

Projektet er gennemført af Gro Helen Dale, der forsvarer det d. 15.03.19.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 15.03.19 kl. 14.00 i DNU (Det Nye Universitetshospital), C-auditoriet - Indgang C, C114-101 på Universitetstorv Syd, Palle Juul-Jensens Boulevard 99, Aarhus. Titlen på projektet er ”Optic neuritis, multiple sclerosis and neuromyelitis optica spectrum disorders in the Central Denmark Region”. Yderligere oplysninger: Ph.d.-studerende Gro Helen Dale, e-mail: grodale@gmail.com, tlf. +47 45194921.

Bedømmelsesudvalg:
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Press release (English)

Optic neuritis, multiple sclerosis and neuromyelitis optica spectrum disorders in the Central Denmark Region

Demyelinating disorders of the central nervous system represent a group of diseases with partly overlapping symptomatology. This can make the diagnostic process challenging. For instance, optic neuritis (ON) can occur in both multiple sclerosis (MS) and neuromyelitis optica spectrum disorders (NMOSD). In the acute phase, the treatment principle is similar between these diseases. However, the long-term prophylactic treatment differs and an early, correct diagnosis is therefore important in order to reduce the risk of permanent disability.

In a new ph.d.-project at Aarhus University, Health, the long-term effect of steroid treatment for acute ON was investigated - especially the effect of treatment initiated within one week vs. treatment initiated after one week. Furthermore, the yearly incidence rate of NMOSD in the Central Denmark Region was estimated. Finally, two assays for the detection of an antibody against the waterchannel aquaporin-4 were further developed. Detection of this antibody is important for the diagnosis of NMOSD.

It was shown that the beneficial effect of steroid treatment for acute ON was limited to a few months, and that the long-term prognosis was independent of the timing of treatment initation. A considerably lower incidence rate was estimated for NMOSD, than a previous estimate in Denmark. The project contributed with a potentially clinical useful assay for the detection of antibodies against aquaporin-4.

The project was carried out by Gro Helen Dale, who is defending her dissertation on 15.03.19.

The defence is public and takes place on 15.03.19 at 14.00 in DNU (Det Nye Universitetshospital), C-auditorium - Entrance C, C114-101 at Universitetstorv Syd, Palle Juul-Jensens Boulevard 99, Aarhus. The title of the project is "Optic neuritis, multiple sclerosis and neuromyelitis optica spectrum disorders in the Central Denmark Region". For more information, please contact PhD student Gro Helen Dale, email: grodale@gmail.com, Phone +47 45194921.

Assessment committee:

Michael Horsman, professor, Institute of Clinical Medicine - Department of Experimental Clinical Oncology, Aarhus University Hospital, Aarhus, Denmark

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