

## Press release

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### Basic information

Name: Lene Duez                      Email: [leneduez@rm.dk](mailto:leneduez@rm.dk) Phone: +4560649389

Department of:

Main supervisor: Anders Fuglsang-Frederiksen

Title of dissertation: Clinical usefulness of electromagnetic source imaging  
in epilepsy

Date for defence: 03-10-2018 at (time of day): 14:00 Place: Palle Juul-Jensen Auditoriet

Press release (Danish)

Neurofysiologiske undersøgelser tilføjer ny viden i udredningen af patienter forud for epilepsi kirurgi.

Nyt PhD-projekt fra Aarhus Universitet stadfæster brugen af elektromagnetisk kildelokaliseri ng i udredningen af de svært syge epilepsi patienter, der undersøges for om epilepsi kirurgi er en mulig behandlingsform. "Hos 80 % af patienterne tilføjer elektromagnetisk kildelokaliseri ng ny og brugbar viden" udtaler Lene Duez, som forsvare r sine forskningsresultater ved en offentlig forelæsning onsdag d. 3. oktober 2018.

Nogle epilepsipatienter bliver ikke anfalds frie af medicin, og derfor undersøges de for, om det er muligt at bortoperere den del af hjernen, hvor epilepsien sidder – epilepsi kirurgi. Den største udfordring inden for epilepsi kirurgi ligger i udredningen af patienter. I udredningen kan elektromagnetisk kilde lokaliseri ng af epileptiske aktivitet bruges. Indtil nu er der kun få studier, der har undersøgt den kliniske anvendelighed af både elektro og magnetisk kilde lokaliseri ng i epilepsi kirurgi udredningen. I dag er Lene Duez ikke i tvivl: "Resultaterne er forholdsvis entydige, og vi anbefaler at den fremtidige udredning af epilepsi kirurgi patienter indeholder elektromagnetisk kildelokaliseri ng. Herved bliver flere epilepsi kirurgi patienter formentlig anfaldsfri efter operationen".

I vores andet studie undersøgte vi, om magnetisk kildelokaliseri ng kan hjælpe i tilfælde, hvor patienter har svært diagnosticerbare anfald, og diagnosen ikke kan stilles ved hjælp af de gængse udredningsmetoder. "Hos ca. 1/5 af patienterne kunne diagnosen epilepsi stilles efter magnetisk kildelokaliseri ng." udtaler Lene Duez .

Forsvaret af ph.d.-projektet er offentligt og finder sted den 3. oktober 2018 kl. 14 i auditorium M bygning 3, Aarhus Universitets Hospital, Nørrebrogade 44, Aarhus C. Titlen på projektet er "Den kliniske anvendelighed af elektromagnetisk kildelokaliseri ng i epilepsi". Yderligere oplysninger: Ph.d.-studerende Lene Duez, e-mail: [leneduez@rm.dk](mailto:leneduez@rm.dk), tlf. 7846 9909.

Bedømmelsesudvalg:

Jakob Christensen MD, DMSc (Chairman of the committee). Associate Professor. Aarhus University Hospital. Department of Neurology. Aarhus C, Denmark.

Manjari Tripathi, MD, PhD. Professor. All India Institute of Medical Sciences (AIIMS). Department of Neurology. New Delhi, India

Margitta Seeck, MD, PhD. Professor. University Hospital of Geneva. EEG and Epilepsy Unit. Geneva, Switzerland

Press release (English)

Magnetoencephalography helps the diagnosis and surgical treatment of patients with epilepsy.

In a new PhD project from Aarhus University, faculty of Health magnetoencephalography (MEG) and simultaneous electroencephalography (EEG) are for the first time in Denmark incorporated in the Danish epilepsy surgery team's decision on where the area in the brain causing seizures is. We found that incorporating MEG in the epilepsy surgery work-up provided new non-redundant information in 30% of the cases. MEG changes the decision of the epilepsy surgery team in 34% of the cases and the changes were useful in 80% of the cases. The project was carried out by Lene Duez, who is defending her dissertation on 3 October 2018.

The defence is public and takes place on 3 October 2018 at 14:00 in Auditorium M, building 3, Aarhus University Hospital, Nørrebrogade 44, Aarhus C. The title of the project is The clinical usefulness of magnetoencephalography in epilepsy. For more information, please contact PhD student Lene Duez, email: leneduez@rm.dk, Phone +45 7846 9909.

Assessment committee:

Jakob Christensen MD, DMSc (Chairman of the committee). Associate Professor. Aarhus University Hospital. Department of Neurology. Aarhus C, Denmark.

Manjari Tripathi, MD, PhD. Professor. All India Institute of Medical Sciences (AIIMS). Department of Neurology. New Delhi, India

Margitta Seeck, MD, PhD. Professor. University Hospital of Geneva. EEG and Epilepsy Unit. Geneva, Switzerland

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