Press release

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Basic information

Name: Line Underbjerg Email: linund@rm.dk Phone: 7846 7681

Department of: Clinical Medicine

Main supervisor: Lars Rejnmark

Title of dissertation: Non-Surgical Hypoparathyroidism and Pseudohypoparathyroidism
- Epidemiology, Comorbidity and Bone Health

Date for defence: 8. november at (time of day): 14.00 Place: Aud 1, Aarhus Universitets Hospital. Tage-Hansens Gade

Press release (Danish)

Ny viden om sjældne sygdomme i kalkstofskiftet

Et nyt ph.d.-projekt fra Aarhus Universitet, Health, bidrager med ny viden om sjældne genetiske sygdomme i kalkstofskiftet. Projektet er gennemført af læge Line Underbjerg, der forsvarer det d. 8. november 2017

I afhandlingen har Line Underbjerg undersøgt to grupper af patienter med sjældne sygdomme i kalkstofskiftet grundet genetiske ændringer kaldet hhv. hypoparathyreoidisme og pseudohypoparathyreoidisme. Hun har undersøgt sygdommenes hyppighed og mulige komplikationer via de danske sundheds registre og sammenlignet fundene med en rask kontrolgruppe. Desuden har hun foretaget en klinisk undersøgelse på patienterne med henblik på at undersøge deres knoglestatus.

Studierne viste at patienterne ikke havde en øget dødelighed, men at den ene gruppe (hypoparathyreoidisme) havde en øget risiko for hjertekarsygdom, nedsat nyrefunktion, psykisk sygdom, infektioner og kramper. Risikoen for kræft var signifikant nedsat. Blandt den anden gruppe af patienter (pseudohypoparathyreoidisme) fandt hun en sammenlignelig risiko for knoglebrud, hjerte-, nyre- og ondartede sygdomme og en øget risiko for psykisk sygdom, infektioner, grå stær og kramper.

I det kliniske studie fandt hun at knoglestatus og –kvalitet afhænger af grundsygdommen. Sidstnævnte gruppe (pseudohypoparathyroidisme) havde trods en formodet modstand mod deres kalkstyrende hormon, en effekt af hormonet i knoglerne.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 8. november 2017 kl.14.00 i Auditorium 1, Aarhus Universitets Hospital, Tage-Hansens Gade 2, 8000 Aarhus C. Titlen på projektet er ”Non-Surgical Hypoparathyroidism and Pseudohypoparathyroidism
- Epidemiology, Comorbidity and Bone Health”. Yderligere oplysninger: Ph.d.-studerende Line Underbjerg, e-mail: linund2rm.dk, tlf. 7846 768

Bedømmelsesudvalg:
Richard Eastell, Professor, consultant, DMSc, Academic Unit of Bone Metabolism, Metabolic Bone Centre, Northern General Hospital, University of Sheffield, United Kingdom

Pernille Hermann, Consultant, clinical associate professor, PhD, Department of Endocrinology, Odense University Hospital, Denmark

Kirstine Stochholm (Chairman), Specialist registrar, clinical associate professor, PhD, DMSc, Department of Endocrinology and Internal Medicine, Aarhus University Hospital, Norrebrogade, Denmark

Press release (English)

New knowledge about rare disorders in the calcium metabolism

A new PhD project from Aarhus University, Health, contributes with new knowledge about rare genetic diseases in the calcium metabolism. The project has been carried out by MD Line Underbjerg, who is defending her on November 8th, 2017

In the thesis, Line Underbjerg has studied two groups of patients with rare diseases in the calcium metabolism due to genetic changes. The disorders are called hypoparathyroidism and pseudohypoparathyroidism, respectively. She has studied the frequency of diseases and possible complications through the Danish Health Regidtries and compared the findings with a control group from the backgroup population. In addition, she has conducted a clinical study on patients, aiming to investigate their bone status.

The studies showed that patients had a compariable mortality, but that one group (hypoparathyroidism) had an increased risk of cardiovascular disease, impaired renal function, neuropsychiatric disorders, infections and seizures. The risk of cancer was significantly reduced. Among the other group of patients (pseudohypoparathyroidism) she found a comparable risk of fractures, cardiovascular and renal diseases, as well as malignancies, but an increased risk of neuropsychiatric disorders, infections, cataract and seizures.

In the clinical study, she found that bone status and bone quality depends on the underlying disorder. Patients with pseudohypoparathyroidism had despite a supposed resistance to their parathyroid hormone, an effect of the hormone in the bones.

The defense of the PhD project is public and takes place on November 8, 2017 at 2.00 pm in Auditorium 1, Aarhus University Hospital, Tage-Hansen Street 2, 8000 Aarhus C. The title of the project is "Non-Surgical Hypoparathyroidism and Pseudohypoparathyroidism
- Epidemiology, Comorbidity and Bone Health ".
Further information: PhD student Line Underbjerg, e-mail: linund@rm.dk, tel. 7846 768

Assessment committee:

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