

Press release

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Basic information

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Main supervisor: Professor Jens Otto Lunde Jørgensen, MD, DMSc, Department of Endocrinology and Internal Medicine, AUH

Title of dissertation: Clinical consequences of acromegaly: Body composition, insulin sensitivity and protein metabolism

Date for defence: 27/08/2021 at (time of day): 10-12 Place: Auditorium J116, Aarhus University Hospital, Palle Juul-Jensens Blvd. 99, 8200 Aarhus, Denmark

Press release (Danish)

Kliniske konsekvenser af akromegali

Væksthormon er essentiel for somatisk udvikling og længdevækst hos børn, og har desuden vigtige anabole effekter gennem voksenlivet. Disse væksthormon fremmende effekter medieres primært af IGF-I. Under faste øges udskillelsen af væksthormon fra hypofysen og stimulerer nedbrydning samt forbrænding af kroppens fedtdepoter (lipolyse). Denne evne til at skifte mellem anabole effekter på proteinmetabolismen og katabole effekter på lipidmetabolismen afhængig af kroppen energibalance er vigtigt for individets overlevelse. Overproduktion af væksthormon, som det ses ved akromegali og dårligt kontrolleret diabetes mellitus medfører vedvarende lipolyse, hvilket kan medføre insulinresistens. Andre mekanismer kan tænkes at bidrage og de molekylære mekanismer er endnu ikke fuldstændig klarlagt.

De metaboliske konsekvenser af en vedvarende overproduktion af væksthormon med særligt fokus på lipolyse, insulin sensitivitet og proteinomsætning undersøges i et nyt ph.d.-projekt fra Aarhus Universitet, Health. Projektet er gennemført af Mai Christiansen Arlien-Søborg, der forsvarede det d. 27/08/2021.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 27/08/2021 kl. 10 i Auditorium J116, Aarhus University Hospital, Palle Juul-Jensens Blvd. 99, 8200 Aarhus, Denmark. Titlen på projektet er "Clinical consequences of acromegaly: Body composition, insulin sensitivity and protein metabolism". Yderligere oplysninger: Ph.d.-studerende Mai Christiansen Arlien-Søborg, e-mail: mas@clin.au.dk, tlf. 23837420.

Bedømmelsesudvalg:

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Press release (English)

Clinical consequences of acromegaly

Growth hormone (GH) is essential for postnatal growth and exerts important protein anabolic effects in adulthood, which is mainly mediated by IGF-I in the presence of energy substrate abundance. During short and long-term fasting, GH stimulates lipolysis and this ability to promote either protein anabolism or lipid catabolism depending on energy balance is likely to contribute to metabolic flexibility. During pathophysiological conditions of sustained GH excess, however, GH induces insulin resistance, which is linked to the lipolytic actions. Additional mechanisms may contribute and the molecular mechanisms remain incompletely understood. In the current thesis, the metabolic consequences of long standing GH excess with a particular emphasis on lipolysis, insulin sensitivity and protein metabolism are investigated. The project was carried out by Mai Christiansen Arlien-Søborg, who is defending her dissertation on 27/08/2021.

The defence is public and takes place on 27/08/2021 at 10 am in Auditorium J116, Aarhus University Hospital, Entrance J, level 1, 99 Palle Juul-Jensens Boulevard, DK-8200 Aarhus N. The title of the project is "Clinical consequences of acromegaly: Body composition, insulin sensitivity and protein metabolism". For more information, please contact PhD student Mai Christiansen Arlien-Søborg, email: mas@clin.au.dk, Phone +45 23837420

Assessment committee:

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