# Press release

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**Basic information**

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Department of: Clinical Medicine

Main supervisor: Mikkel Mylius Rasmussen

Title of dissertation: Spinal perfusion pressure – a novel treatment target in traumatic spinal cord injury

Date for defence: 05/09/2024 at (time of day): 15:00 Place: Auditorium J116-113

Press release (Danish)

## Spinal perfusion pressure – a novel treatment target in traumatic spinal cord injury

Phd-projektet undersøgte om trykket i rygmarven stiger i timerne og dagene efter en akut traumatisk rygmarvsskade. Her fandt, man i modsætning til allerede publiceret litteratur, at det ikke er tilfældet. ph.d.-projekt fra Aarhus Universitet, Health. Projektet er gennemført af Mathias Møller Thygesen, der forsvarer det d. 05/09

Akut rygmarvsskade er typisk en følge af alvorlige ulykker, hvor højenergitraumer forårsager brud på rygsøjlen og skade på rygmarven. Igennem flere år, har flere studier fra udlandet, vist at rygmarven tager yderligere skade i timerne og dagene efter, da trykket stiger i rygmarven. Det betyder at blodgennemstrømningen hindres, og dermed får cellerne ikke nok ilt og næring. I dette ph.d-projekt, blev det undersøgt om trykstigningen skyldes rygmarvsskaden under kontrollerede forhold i et dyreforsøg. Man fandt ikke at trykstigningen i rygmarven var større efter en rygmarvsskade, end hvis man sammenligner det med trykstigningen efter en almindelig operation.
Forsvaret af ph.d.-projektet er offentligt og finder sted den 05/09 kl. 15 i J113-J116 auditorium, Aarhus Universitet, Palle Juul Jensens Blvd, Aarhus N. Titlen på projektet er ”Spinal perfusion pressure – a novel treatment target in
traumatic spinal cord injury”. Yderligere oplysninger: Ph.d.-studerende Mathias Møller Thygesen, e-mail: matthy@clin.au.dk, tlf. 311135236.

Bedømmelsesudvalg:
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Press release (English)

## Spinal perfusion pressure – a novel treatment target in traumatic spinal cord injury

The ph.d-project investigated whether pressure increases within and round the spinal cord, following traumatic spinal cord injury. Contrarty to already published litterature, the study did not spinal cord injury to cause pressure to increse: The project was carried out by Mathias Møller Thygesen, who is defending her/his dissertation on 05/09.

Traumatic spinal cord injury is typically caused by high-energy trauma inflicting damage to the spinal cord. During the last decade, multiple studies have shown that the spinal cord is damaged even further during the folloiwing hours and days. This has been suggested to be caused by an increase in the pressure within the spinal cord, reuding the blood flow. In this ph.d.-project it was invesigated whether this pressure increase was caused by the spinal cord injury. The study found that meanwhile pressure did increase, it did no increase more, than following conventional spinal surgery. The defence is public and takes place on 05 september at Auditorium J1113-J116 At Aarhus University Hospital, Palle Juul Jensens Blvd, Aarhus N. The title of the project is Spinal perfusion pressure – a novel treatment target in
traumatic spinal cord injury. For more information, please contact PhD student Mathias Møller Thygesen, email: matthi@clin.au.dk, Phone +45 3113 5236.

Assessment committee:
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