

Press release

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Basic information

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Department of: Clinical Medicine

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Title of dissertation: Diagnosing Polymyalgia Rheumatica using FDG-PET/CT and estimating incidence of Late-onset Giant Cell Arteritis using repeated Vascular Ultrasonography

Date for defence: 23-08-2024 at (time of day): 14:00 Place: Aarhus Universitetshospital, Auditorium J116-113, Indg. J, J110

Press release (Danish)

PET/CT til Diagnostik af Polymyalgia Reumatika samt Underliggende Kæmpecellearteritis

Polymyalgia reumatika (PMR) og kæmpecellearteritis (GCA) er hyppigt sameksisterende sygdomme. Det er dog uvist, om udvikling af GCA senere i PMR sygdomsforløbet skyldes en initialt overset asymptomatisk GCA eller om GCA kan udvikles senere. Herudover kan det være vanskeligt at stille en korrekt PMR diagnose, da flere andre sygdomme kan præsentere sig med lignende symptomer. Desværre er ca. 50% af disse patienter allerede opstartet i prednisolon-behandling inden reumatologisk vurdering, hvilket kan sløre symptomerne. FDG-PET/CT er blevet foreslået som et diagnostisk værktøj, men det er endnu uklart, om FDG-PET/CT kan bruges efter påbegyndelsen af prednisolon-behandling.

101 patienter mistænkt for PMR blev inkluderet og undersøgt for sameksisterende GCA ved diagnosetidspunktet samt fulgt 1 år for udvikling af sen-GCA. PMR patienterne fik foretaget FDG-PET/CT både før og under prednisolon-behandling samt efter en kortvarig behandlingspause.

Dette studie viste, 1) at forekomsten af sameksisterende asymptomatisk GCA ved PMR-diagnosen er sjældent, og at kun få PMR patienter udvikler sen-GCA det første år, 2) anvendelse af FDG-PET/CT til at supplere den kliniske diagnose kan markant mindske risikoen for fejlagnostik, 3) prednisolon-behandling reducerer den diagnostiske nøjagtighed af FDG-PET/CT for PMR, imens at en kortvarig prednisolon-pause kan bedre den diagnostiske nøjagtighed igen..

Dette nye ph.d.-projekt gennemført af Andreas Wiggers Nielsen, der forsvare det d. 23/08-24. Forsvaret af ph.d.-projektet er offentligt og finder sted den 23/08-24 kl. 14:00 i Auditorium J116-113, Indg. J, J110, Aarhus Universitet Hospital, Palle Juul-Jensens Boulevard 99, Aarhus. Titlen på projektet er "Diagnosing Polymyalgia Rheumatica using FDG-PET/CT and estimating incidence of Late-onset Giant Cell Arteritis using repeated Vascular Ultrasonography". Yderligere oplysninger: Læge, Ph.d.-studerende Andreas Wiggers Nielsen, e-mail: andrenie@rm.dk, tlf. 30956515.

Bedømmelsesudvalg:

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Press release (English)

Diagnosing Polymyalgia Rheumatica and Subclinical Giant Cell Arteritis using PET/CT.

Polymyalgia rheumatica (PMR) and giant cell arteritis (GCA) often coexist. However, it is uncertain whether the development of GCA later in the PMR disease course represent a late-onset or an initially overlooked GCA diagnosis. Additionally, correctly diagnosing PMR can be challenging as other diseases can present with similar symptoms. Unfortunately, 50% of these patients are already started on prednisolone treatment before rheumatological evaluation, which can mask the symptoms. FDG-PET/CT has been suggested as a diagnostic tool, but it remains unclear whether FDG-PET/CT can be used after the initiation of prednisolone.

101 patients suspected of PMR were included and examined for coexisting GCA at baseline and during a one-year follow-up period. The PMR patients underwent FDG-PET/CT before and during prednisolone treatment, as well as after a short-term prednisolone discontinuation.

This study demonstrated that 1) coexisting asymptomatic GCA at PMR diagnosis is rare, and the frequency of late-onset GCA within the first year is low, 2) using FDG-PET/CT to assist the clinical diagnosis can reduce the risk of misdiagnosis, and 3) prednisolone treatment reduces the diagnostic accuracy of FDG-PET/CT for PMR, while a short-term prednisolone discontinuation can improve the diagnostic quality

The project was carried out by Andreas Wiggers Nielsen, who is defending his dissertation on 23/08-24.

The defence is public and takes place on 23/08-24 kl. 14:00 in Auditorium J116-113, Entrance. J, J110, Aarhus Universitet Hospital, Palle Juul-Jensens Boulevard 99, Aarhus. . The title of the project is "Diagnosing Polymyalgia Rheumatica using FDG-PET/CT and estimating incidence of Late-onset Giant Cell Arteritis using repeated Vascular Ultrasonography". For more information, please contact PhD student Andreas Wiggers Nielsen, e-mail: andrenie@rm.dk, tlf. 30956515.

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