

Press release

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Basic information

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Department of: Clinical Medicine

Main supervisor: Professor Steen Dalby Kristensen

Title of dissertation: Adherence and the Role of Coagulation Assays in patients treated with Dabigatran Etexilate for atrial fibrillation- the ARCADE study

Date for defence: 27th of March, 2019 at (time of day): 14:00-16:00 Place: Auditorium (entrance N1, basement), Regional Hospital of West Jutland, Gl. Landevej 61, Herning, Denmark

Press release (Danish)

PhD-forsvar: Tager patienter med forkammerflimren deres blodfortyndende medicin som foreskrevet og kan dette måles med en blodprøve?

Forkammerflimren (uregelmæssig hjerterytme) rammer 2-3% af den danske befolkning. Forkammerflimren øger risikoen for dannelse af en blodprop i hjertet. Denne blodprop kan flyde med blodstrømmen til hjernen og forårsage et slagtilfælde ved at blokere blodstrømmen til en del af hjernen. Warfarin er en blodfortynder, der reducerer risikoen for slagtilfælde ved forkammerflimren ved 60-70%. Imidlertid har behandling med warfarin flere ulemper (hyppige blodprøver og en øget risiko for blødning i hjernen). Dabigatran er en relativt ny blodfortynder, som er mindst lige så effektiv som warfarin. Den har en kortere virkningstid i forhold til warfarin. Dette er en fordel, når det kommer til blødning, men det er en ulempe, hvis patienter ikke tager deres medicin som foreskrevet. Især hos patienter, der skal have et elektrisk stød for hjerterytmen, er det meget vigtigt at tage blodfortyndere som foreskrevet, for at forhindre komplikationer. Det er uklart, hvilken blodprøve der bedst afspejler niveauet af dabigatran i blodet. Formålet med denne afhandling er at klarlægge, om patienter med atrieflimren tager dabigatran som foreskrevet, om dette kan evalueres med en blodprøve, samt hvilke blodprøver er det bedste mål for niveauet af dabigatran i blodet. Projektet er gennemført af kardiologen Willemijn Comuth, der forsvare sin afhandling den 27. marts 2019.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 27. marts kl. 14-16 i Auditoriet (indgang N1, kælderen), Regionshospitalet Herning, Gl. Landevej 61, Herning. Titlen på projektet er "Medicinoverholdelse og rollen af koagulationsanalyser i patienter behandlet med dabigatran etexilate for forkammerflimren". Yderligere oplysninger: kardiolog, Ph.d.-studerende Willemijn Comuth, e-mail: wilcom@clin.au.dk, tlf. +47 412 88 110.

Bedømmelsesudvalg:

1. Professor Ulf Simonsen, MD, DMSci (formand); Institut for Biomedicin, Aarhus Universitet, Aarhus, Danmark
2. Professor John Camm, MD, PhD; Afdeling for Klinisk Kardiologi, St. George's Universitet, London, Storbritannien
3. Professor Isabelle van Gelder, MD, PhD; Fakultet for Medicinsk Videnskab, Kardiologi og Thorax-kirurgi, University of Groningen, Holland

Press release (English)

PhD Defence: Do patients with atrial fibrillation take their blood thinners as prescribed and can this be measured using a blood test?

Atrial fibrillation (irregular heartbeat) affects 2-3% of the Danish population. Atrial fibrillation increases the risk of blood clots forming in the heart. This blood clot can migrate to the brain and

cause a stroke by blocking the blood flow to part of the brain. Warfarin is a blood thinner that reduces the risk of stroke in atrial fibrillation by 60-70%. However, treatment with warfarin has several disadvantages such as the need for frequent blood tests and an increased risk of bleeding in the brain. Dabigatran is relatively new blood thinner which is at least as effective as warfarin. It acts for a shorter period of time than warfarin. This is an advantage when it comes to bleeding, but it is a disadvantage when patients do not take their medication as prescribed. Especially in patients undergoing an electric shock to reset their heart rhythm, taking blood thinners as prescribed is very important to prevent complications. Furthermore, it is unclear which blood test best reflects the level of dabigatran in the blood. The aims of this thesis included an evaluation of how well patients with atrial fibrillation take dabigatran as prescribed, if this can be measured by a blood test, as well as which blood tests are the best measure of the level of dabigatran in the blood. The project was carried out by cardiologist Willemijn Comuth, who is defending her dissertation on the 27th of March 2019.

The defence is public and takes place on the 27th of March 2019, 14:00-16:00 at the Auditorium (entrance N1, basement) of the Regional Hospital of West Jutland, Gl. Landevej 61, Herning, Denmark. The title of the project is "Adherence and the Role of Coagulation Assays in patients treated with Dabigatran Etxilate for atrial fibrillation- the ARCADE study". For more information, please contact Cardiologist, PhD-student Willemijn Comuth, e-mail: wilcom@clin.au.dk, Phone +47 412 88 110.

Assessment committee:

1. Professor Ulf Simonsen, MD, DMSci (chairman); Institute for Biomedicine, Aarhus University, Aarhus, Denmark
2. Professor John Camm, MD, PhD; Department of Clinical Cardiology, St. George's University of London, London, United Kingdom
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