

## Press release

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### Basic information

Name: Jens Hartlev Email: [jens.hartlev@clin.au.dk](mailto:jens.hartlev@clin.au.dk) Phone: +4540385638

Department of: Dentistry

Main supervisor: Professor Sven Erik Nørholt

Title of dissertation: Platelet-rich fibrin membranes in lateral alveolar ridge augmentation

Date for defence: 26/2/2021 at (time of day): 2:30 p.m. Place: Online meeting (Zoom)

Press release (Danish)

Blodpladeberigede fibrinmembraner ved opbygning af kæbekam

Blodpladeberigede fibrinmembraner ved opbygning af kæbekammen er et nyt ph.d.-projekt fra Aarhus Universitet, Health. Projektet er gennemført af specialtandlæge i tand-, mund- kæbekirurgi Jens Hartlev, der forsvare det d. 26/02/2021

Tandtab medfører oftest behov for genopbygning af kæbekammen før tandimplantater kan isættes. Dette foretages oftest vha. af et knogletransplantat udtaget fra underkæben. Knogletransplantatet tilpasses og fæstnes svarende til den mangelfulde kæbedel. Afslutningsvis dækkes knogletransplantatet med et knogleerstatningsmateriale og en membran (kontrolgruppe). Nyere undersøgelser har antydnet, at membraner lavet ud fra blodprøve med fordel kan anvendes ved genopbygning af kæben (testgruppe). Der er i midlertidig ikke foretaget sammenlignende undersøgelser på mennesker. Formålet med denne undersøgelse er derfor at sammenligne en kontrolgruppe med en testgruppe, hvor kontrolgruppen får foretaget konventionel knogleopbygning, mens testgruppen får foretaget knogleopbygning med et knogletransplantat som dækkes af en membran lavet ud fra en blodprøve. Ph.d.-projektet undersøgte således om der var forskel mellem test og kontrolgruppen med fokus på endelige kliniske behandlingsresultat af tandimplantatet, knogleforandringer over tid med fokus på ændringer af knoglens fylde, samt knoglehelingen vurderet vha. knoglebiopsier.

Forsvaret af ph.d.-projektet er offentligt og finder sted den 26/02/2021 kl. 14:30 virtuelt via Zoom. Titlen på projektet er "Platelet-rich fibrin membranes in lateral alveolar ridge augmentation". Yderligere oplysninger: Ph.d.-studerende Jens Hartlev, e-mail: [jens.hartlev@clin.au.dk](mailto:jens.hartlev@clin.au.dk), tlf. +4540385638. Link til Zoom kan tilsendes ved at kontakte sekretær Gitte Bak Ditlefsen på [gitte.ditlefsen@dent.au.dk](mailto:gitte.ditlefsen@dent.au.dk).

Bedømmelsesudvalg:

Lektor Lene Baad-Hansen (formand og moderator)

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Professor Simon Storgård Jensen

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Press release (English)

## Platelet-rich fibrin membranes in lateral alveolar ridge augmentation

The use of platelet-rich fibrin in lateral alveolar ridge augmentation is a new project from Aarhus University. The project was carried out by consultant surgeon in oral and maxillofacial surgery Jens Hartlev, who is defending his dissertation on 26/02/2021.

Missing teeth often leads to the need for alveolar ridge augmentation prior to dental implant placement. The most frequently used procedure includes lateral alveolar ridge augmentation by an autogenous bone graft harvested from the lower jaw. The bone graft is fixated to the edentulous area and covered by a barrier membrane and a bone substitute (control group). Biological platelet-rich fibrin membranes derived from a blood sample of the patient has been introduced to have a positive effect on bone healing. However, the use of platelet-rich fibrin membranes in lateral alveolar ridge augmentation has not been addressed in humans. The purpose of this investigations was to assess the treatment outcome after lateral alveolar ridge augmentation by using an autogenous bone graft covered by 1) a platelet-rich fibrin membrane (test group) or 2) a bone substitute and a barrier membrane (control group) with focus on the final treatment outcome of the dental implants. In addition, the volumetric changes and the healing of the augmented bone was also evaluated.

The defence is public and takes place on 26/02/2021 virtual via Zoom. The title of the project is "Platelet-rich fibrin membranes in lateral alveolar ridge augmentation". For more information, please contact PhD student Jens Hartlev, email: jens.hartlev@clin.au.dk, Phone +45 40385638. The Zoom link can be provided by contacting sekretary Gitte Bak Ditlefsen on gitte.ditlefsen@dent.au.dk.

### Assessment committee:

Associate Professor Lene Baad-Hansen (Chairman and moderator of the defence)

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