

Press release

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Basic information

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Department of: Clinical Medicine

Main supervisor:

Title of dissertation: TLIF versus PLF in Degenerative Lumbar Spinal Disorders - Short- and Long-term PROMS, Pain, and Health Economics - Results from an RCT

Date for defence: 06.04.2018 at (time of day): 2 pm Place: Auditorium 1, byg. 4a, Aarhus Universitetshospital, Tage-Hansens Gade 2, 8000 Aarhus C.

Press release (Danish)

Ny ph.d. afhandling fra Health AU undersøger den ”nye” og i øjeblikket, Worldwide mest anvendte kirurgiske teknik til lindring af lænderygsmerter. Transforaminal interkorporal lænderygs kirurgi (TLIF) hos patienter med degenerativ lænderygs sygdom og heraf følgende kroniske smerter. Via et kontrolleret lodtrækningsforsøg, sammenlignes den nye metode med den vanlig accepterede behandling. Afhandlingen indeholder kort- og lang tids resultater. Der fokuseres på forskelle i patienternes egne vurderinger af den opnåede behandlings effekt. Måle parametre er smerte, livskvalitet og egen oplevelse af generel helbredstatus. Det undersøges samtidig om behandlingen gav uønskede bivirkninger. Via en sundhedsøkonomisk analyse vurderes om TLIF er omkostningseffektiv set fra et social og sundheds økonomisk perspektiv. Afhandlingen kunne ikke påvise en positiv effekt af den nye kirurgiske teknik (TLIF) sammenlignet med standardmetoden, hverken i kort eller lang tids resultater. Operationsmetoden resulterede i længere operation længde og øget blødning. Begge behandlinger gav signifikant lindring af smerter og forbedret livskvalitet. Effekten af kirurgi var fortsat tilstede 9 år efter det operative indgreb. Den positive effekt af kirurgi blev reduceret hos patienter som efterfølgende gennemgik flere operationer. Den nye metode gav ikke uønskede bivirkninger. TLIF fandtes ikke omkostningseffektiv grundet øgede omkostninger uden livskvalitet forbedring i forhold den normalt accepterede behandling.

Projektet er gennemført af Kristian Høy, overlæge, klinisk lektor, ortopædisk afdeling E, Aarhus Universitets Hospital.

Forsvaret af Ph.D.-projektet er offentligt og finder sted den 06/04 kl. 14 i auditorium 1 byg. 4a,, Aarhus Universitetshospital, Tage-Hansens Gade 2, Aarhus. Titlen på projektet er ”TLIF versus PLF in Degenerative Lumbar Spinal Disorders -Short- and Long-term PROMS, Pain, and Health Economics - Results from an RCT”. Yderligere oplysninger: Ph.D.-studerende Kristian Høy, e-mail: krishoey@rm.dk, tlf. 20105058.

Bedømmelsesudvalg:

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Press release (English)

TLIF versus PLF in Degenerative Lumbar Spinal Disorders - Short- and Long-term PROMS, Pain, and Health Economics - Results from an RCT. A new Ph.D. Dissertation from Health AU, explores the surgical technique Transforaminal Interbody Lumbar Fusion (TLIF) as a new treatment method in a population of patients with chronic low back pain (CLBP) due to degenerative lumbar disorders in a short- and long-term perspective. The dissertation contains 2 years and 9 years results from a prospective randomized study (RCT) conducted in a patient population selected for surgical treatment. Patient-related outcome measurement in the group of patients operated on with TLIF are compared to that of Instrumented posterolateral fusion. Focus is on possible differences in patient-experienced treatment effects. Unexpected side effects of the TLIF technique are investigated. The health economics of TLIF is explored in a classical cost-utility evaluation. The dissertation could not demonstrate a positive effect of the TLIF in patient-reported outcome measures. The TLIF operation resulted in prolonged surgery time and increased bleeding. Both treatments significantly improved quality of life. The improved quality of life was still present after 9 years. Additional surgery resulted in less improvement in functional outcome. The new method did not result in additional side effects. TLIF did not improve health or lowered costs. Thus, the method was not cost-effective.

The project was carried out by Kristian Høy, MD, Consultant, Associate professor, Orthopedic Department E, Aarhus University Hospital.

The defence is public and takes place on 06/04 at , Aarhus University For more information, please contact PhD student Kristian Høy, email:krishoey@rm.dk, Phone +45 20105058.

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