

## Program – DOKS 41. Årsmøde, Hesselet, 11.-12. oktober 2018

### **Torsdag den 11. oktober**

- 13.00-13.30 **Peter Schousboe:** Velkomst og udstillerrunde  
13.30-14.15 **Gæsteforelæsning Jeremy Lavy:** Otosclerosis and Stapes Surgery

### **14.15-14.45 Kaffepause og udstilling**

- 14.45-15.15 **Round table (J. Lavy, K. Tveterås, M. S. Sørensen, L. V. Johansen, M. Dahlstrøm, Moderator: Chr. Faber) :** Complications to stapes surgery,  
15.15-15.45 **Preben Homøe:** Otitis media and long-term developmental consequences  
15.45-16.00 **Simona Padurariu:** Mastoid pneumatization. Histo-morphological observations and the development of a sclerotic mastoid  
16.00-16.15 **Frederik Skou Nielsen:** Determination of daily physiological openings of the Eustachian tube by direct measurements of middle ear pressure  
16.15-16.23 **Steven A. W. Andersen:** Patient-specific surgical virtual reality rehearsal  
16.23-16.30 **Jens Wanscher:** Kasuistik: Oprensning af radikalkaviteten – en anderledes oplevelse

### **16.30-17.00 Pause og udstilling**

### **17.00-18.00 Generalforsamling**

Dagsorden:

1. Valg af dirigent,
2. Formanden aflægger beretning,
3. Kassereren aflægger revideret regnskab og kontingent for næste år vedtages
4. Valg af bestyrelse i henhold til §6
5. Repræsentanter for Selskabets forskellige råd og udvalg aflægger beretning,
6. Opstilling af kandidater og valg af råd og udvalg,
7. Valg af revisor og revisorsuppleant i henhold til §14,
8. Eventuelt.

### **18.30 Samling til Drinks**

### **19.00 Middag**

### **Fredag den 12. oktober**

- 09.00-09.45 **Gæsteforelæsning Jeremy Lavy:** Revision Stapes Surgery

### **09.45-10.15 Kaffepause og udstilling – Husk at aflevere nøgler til receptionen før kl. 10!**

- 10.15-10.35 **Mads S. Sørensen:** Stapedotomy - results of primary surgery and revisions  
10.35-10.50 **Steven Andersen:** The stability of short-term hearing outcome after stapedotomy: A prospective database study  
10.50-11.35 **Gæsteforelæsning Jeremy Lavy:** Cochlear Implants (reflections of 35 years)  
11.35-11.50 **Jonas Jeppesen:** Postoperative infections following cochlear implant surgery  
11.50-12.00 **Malene Kirchmann:** Korte kliniske retningslinier.

### **12.00 Afslutning og frokost/sandwich to-go**

## **Abstracts:**

### **Torsdag 11. oktober:**

#### **Otitis media and long-term developmental consequences**

Asbjørn Kørvel-Hanquist og **Preben Homøe**

Most clinical guidelines dealing with otitis media and ventilation tube insertion argues that otitis media may have long-term developmental consequences. In this presentation we present some of these guidelines and new population-based studies debating this issue.

#### **Mastoid pneumatization. Histo-morphological observations and the development of a sclerotic mastoid**

**Simona Padurariu**§, Christof Rössli†, Rasmus Røge§, Mogens Vyberg§, Allan Stensballe§, Alex Huber†, Michael Gaihede.

§Dept. of Otorhinolaryngology and dept. of Pathology, Aalborg University Hosp.

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The normal mastoid is well pneumatized with many air filled cells, which may hold important properties for the middle ear (ME) function. In ME's with chronic otitis media, this pneumatization is often replaced by a sclerotization, so that the entire mastoid is filled up with bone and soft tissue instead of air cells.

In a temporal bone archive histological material with predominantly normal ME's, we found discrete focal changes with various extent of pathological findings: fluid in the air cells, thickened mucosa, soft tissue invasion of air cells, occasional granulation and polyps, and areas with new bone formation. Altogether, these findings point to inflammatory changes related to remnants of otitis media with effusion, where the new bone formation may be perceived as early stages of the sclerotic mastoid found in chronic ears. Further research of the cellular and biochemical aspects of the mastoid pathology are warranted.

#### **Determination of daily physiological openings of the Eustachian tube by direct measurements of middle ear pressure**

**Frederik Skou Nielsen**§, M. S. Larsen§, S. Padurariu§, J. Dirckx†, M. Gaihede§.

§Dept. of Otorhinolaryngology, Aalborg University Hosp.

†Laboratory of Biomedical Physics, University of Antwerp, Belgien.

Regular openings of the Eustachian tube (ET) is a prerequisite for normal pressure regulation of the middle ear (ME), and these openings are considered related to swallowing. From direct long-term monitoring of ME pressure in normal subjects, we applied an algorithm that automatically detected ET openings, and the total number of daily openings could be estimated amounting to a mean of 84 per 24 hrs.

This number is significantly less than the number of daily swallowing's based on literature data (means 1200 per hrs); thus, swallowing may be a prerequisite for ET openings, but the ET does not open at each swallowing. Thus, ET openings are not a passive by-product of swallowing, but instead it may point to a distinct neural reflex governs the ET openings.

#### **Patient-specific surgical virtual reality rehearsal**

**Steven A. W. Andersen**

Foredragsholderen har modtaget et 2-årigt internationalt postdoc stipendiat fra Danmarks Frie Forskningsfond til 1.5 års forskningsophold hos Prof. Greg Wiet, Dept. of Otorhinolaryngology, Nationwide Children's Hospital, Ohio State University, Columbus, Ohio, USA, efterfulgt af 6 måneders returophold hos Prof. Mads Sølvsten Sørensen, ØNH-kir, Rigshospitalet. I projektet skal vi undersøge brugen af virtual reality (VR) simulation til patient-specifik træning før tindingebenskirurgi. I Ohio har de ekspertise i klinisk billeddannelse og machine learning til import af CT-scanninger i simulationsmiljøet mens vi ved Rigshospitalet bl.a. har integreret en CI-elektrode i the Visible Ear Simulator. Tilsammen giver det nye muligheder for at træne og planlægge procedurer før kirurgi, og dermed at undersøge hvordan simulationstræning kan bruges til mere end blot træning af novicer.

### Fredag 12. oktober:

#### **Stapedotomy - Results of Primary Surgery and Revisions**

**Mads S. Sørensen**

Prospective results of surgical treatment of otosclerosis is presented and primary cases are compared with revisions and with data from the literature. Strategies and limitations are discussed.

#### **The stability of short-term hearing outcome after stapedotomy: a prospective database study**

**Steven A. W. Andersen, Malin C. Öhman, Mads Sølvsten Sørensen**

De nuværende guidelines anbefaler afrapportering af >12 måneders resultaterne efter otokirurgi. I dette studie undersøgte vi med udgangspunkt i den otokirurgiske database ved Rigshospitalet om der var forskel i høreresultaterne mellem 3- og 12-månederskontrollerne efter primær og revisions stapedotomi for otosklerose. 166 primær- og 37 revisionscases blev inkluderet. Der blev kun fundet minimal og klinisk ubetydende forskel i høretærskler mellem de to kontroller: blot 3-5 % af primære cases og 14-16 % af revisions cases havde en ændring i høretærskel i en eller flere frekvenser på 10 dB eller mere. Resultaterne var også stabile i forhold til traditionelle succes kriterier som fx Belfast Rule of Thumb. Rutinemæssig 12 måneders kontrol bør derfor genovervejes.

#### **Postoperative infections following cochlear implant surgery**

L. B. Olsen, S. Larsen, J. H. Wanscher, C. E. Faber, **Jonas Jeppesen**, Department of Otorhinolaryngology, Odense University Hospital, Denmark

**Aim:** To report the frequency and management of postoperative wound infections and to investigate bacteriology and biofilm formation following cochlear implantations in adults. **Method:** A retrospective file review of 653 consecutive adult cochlear implantations between 1994 and 2015 at the Department of Otorhinolaryngology at Odense University Hospital. **Results:** The major and minor infection rates were 2% and 8% respectively. The explantation rate due to infection was 1%. The most common pathogen found was *Staphylococcus aureus*. **Discussion:** Biofilm was found in 88% of the explantations. One could speculate that if there is visual confirmation of biofilm during a revision procedure, the likelihood of saving the implant is poor. In some cases, the implants were saved though through surgical revision, and still functional after 3 years follow-up. **Conclusion:** Postoperative infection occurred in 10 % of the implantations. Few of these were severe. Presence of biofilm seemed to be associated with a higher risk of explantation.