Ophthalmological exchange between Poland and Germany in Rostock – two countries, one ophthalmology

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At the end of last year, December 14th, Rostock University celebrated its 600-year anniversary – Polish and German ophthalmologists met in Rostock for the First Baltic Sea Eye Conference. Prof. Thomas Fuchsluger, director of the Eye Clinic and Outpatient Department of Rostock Medical University, and Prof. Anna Machalinska, head of the First Department of Ophthalmology, Pomeranian Medical University Szczecin, invited participants for this German-Polish Winter Academy (Figures 1-3).

The main topics were the treatment of corneal and vitreoretinal diseases and glaucoma. Selected lectures shall be reported.

“Clinical trial on limbal stem cell culture in treating corneal disorders” was the theme of dr hab. n. med. Dariusz Dobrowolski (Katowice). He explained the autologous cultivated limbal stem cell transplantation (ACLSCT) for restoring the corneal epithelium as the basis for later corneal surgery. His results of two years for epithelium, cultivated on fibrin gel, showed success in 10 patients (primary success 5 patients, DALK candidates 3 patients, PK candidates 2 patients) and four failures (need of a second graft of cultivated epithelial cells 2 patients, total failure 2 patients).

“Big bubble versus stripping: techniques for preparation of the donor Descemet’s membrane”, Dr. rer. nat. Patrick Merz (Heidelberg) explained that scraping might take half an hour, whereas the dissection with a liquid bubble, trypan-blue colored, takes mostly only a few minutes. So the side of the Descemet’s membrane adjacent to the corneal stroma is identified by the blue color, important for the consecutive correct transplantation.

In “Corneal surgery – update and future developments”, Prof. Fuchsluger explained the “two forceps preparation technique” and the standardized implantation, an air bubble serves as a “third hand” to unfurl the transplant.

In “Modern keratoplasty, own experience”, Prof. Machalinska described keratoconus and cloudiness of cornal stroma as indications for DALK (deep anterior lamellar keratoplasty). For DSAEK (Descemet’s stripping automated endothelial keratoplasty) she recommended as indications Fuchs’ endothelial corneal dystrophy and iatrogenic bullous keratopathy, especially in complicated status. She preferred DMEK (Descemet’s membrane endothelial keratoplasty) in the first line for uncomplicated cases, but also experienced good results in previous keratoplasty.
Prof. Anselm Jünemann (Erlangen), the late director of the University Eye Clinic Rostock (2014-2018), explained the wide, new field of minimal invasive glaucoma surgery (MIGS). Long term studies show that about three years after the surgical implantation topical glaucoma medication might be necessary again. In spite of this, regarding the alteration of cornea and conjunctiva by topical administered glaucoma therapy MIGS should be explained also as possible primary glaucoma therapy.

Prof. Marta Misiuk-Hojło (Wroclaw) reported about the problems of low tension glaucoma. It is important to look for sleep apnea, for low blood pressure during the night and exclude neuro-ophthalmological diseases, also performing MRI of the brain and optic nerves. In cases with progressive visual field loss, filtrating surgery might be necessary to reduce the eye pressure below 10, but not below 7 mmHg.

Prof. Marcin Stopa (Poznań) reported his results of vitreoretinal surgery in 20 patients with retinopathy of prematurity (ROP): in 10 patients the retina became totally attached, in 5 patients partially, and was not attached in 5 patients. The visual acuity (14 patients) resulted in light perception (7 patients), fixation and following the light (3 patients) and no light perception (4 patients). In “Actual aspects in diagnostics and therapy of pathological myopia”, Dr. Raffael Liegl (Munich) explained the myopic foveoschisis as a cause of reduced vision. Vitrectomy and ILM-peeling are helpful; the indication should be given at visual acuity 0.4.

The highlight of this conference was the hour of honor for Prof. em. Rudolf F. Guthoff, director of the University Eye Clinic Rostock 1992-2014, who is still scientifically busy as Senior Professor in Rostock and Kinshasa (Democratic Republic Congo). So he was elected for the first Carl-Wilhelm-von-Zehender medal, named after the professor who held the first chair for ophthalmology in Rostock (Figure 4).


70th Conference of the Assembly of North Germany’s Ophthalmologists, Lübeck, June 12-13th (www.norddeutsche-augenarzte.de).

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