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Dear colleagues

The 3rd Annual Congress of the Swiss Academy of Ophthalmology SAoO is already just around the corner. Internationally and nationally recognised experts will report on innovations and further developments and present the current state of knowledge. The contents conveyed will be of great benefit, above all, for everyday and clinical use.

Another important feature of the SAoO meeting is controversial discussions. At the end of each session there will be panel discussions between the chair, the speakers and the audience. The audience is again actively involved by means of a voting system. Optometrists, opticians, orthoptists, OR staff and practice staff will also not be neglected. You’ll have opportunity to practise there. But be warned: places are limited!

On Thursday evening we will seduce you into the world-famous KKL. The orchestra of the Festival Strings Lucerne will enchant you into another world. The evening will be accompanied by culinary delights. However, please reserve your ticket while registering for the congress – if you buy your concert ticket privately, dinner is not included! For further information please do not hesitate to contact us (info@saoo.ch).

We look forward to your participation in the 3rd SAoO Annual Congress at the Messe Lucerne from 6 to 8 March 2019!
Our Foundation SAoO Foundation continues to support the uniform profession of ophthalmic practice assistant. The information sheets and guidelines for the practice are making progress. To this end, we ask for your support - all donations to our foundation can be deducted from taxes.

We would like to take this opportunity to thank Dr. Vera Schmit-Eilenberger for the exciting and scientifically sound ophthalmology news.

ON BEHALF OF THE BOARD OF TRUSTEES AND THE PROGRAM COMMITTEE, WE WISH EVERYONE A PLEASANT ADVENT.

Your

Theo Signer
BOARD OF TRUSTEES
n−3 Fatty Acid Supplementation for the Treatment of Dry Eye Disease- no effect proven

In a multicenter, double-blind clinical trial, patients with moderate-to-severe dry eye disease have been randomly assigned to receive a daily oral dose of 3000 mg of fish-derived n−3 eicosapentaenoic and docosahexaenoic acids (active supplement group) or an olive oil placebo (placebo group). After 6 and 12 months, the Ocular Surface Disease Index, conjunctival and corneal staining tests, tear break-up time (BUT) measurement and Schirmer’s test were performed in both groups.

There was no statistically significant benefit for omega-3 fatty acids between the treatment and placebo group.


Aflibercept and nAMD - Does a lot help a lot?

In this retrospective, interventional case series, patients with nAMD were treated with stepwise dose and frequency escalation of aflibercept.

Non-vitrectomized patients resistant to monthly intravitreal injections of ranibizumab / bevacizumab were switched to 2 mg aflibercept every 8 weeks. If unresponsive, they were switched to monthly injections of 2 mg aflibercept, then to 4 mg every 4 weeks of aflibercept.

Resistance was defined as ≥2 recurrences after being dry after ≥3 injections or prolonged exudation in the treatment of ≥5 injections.

33 eyes from 28 patients were treated with high-dose (4mg) monthly (4Q4W) aflibercept and observed for an average of 16 months. A dry retina (no intraretinal or subretinal fluid) was achieved after initiating a 4Q4W-Aflibercept treatment at a mean of 3.8 months. The central foveal thickness, maximum foveal thickness, intraretinal fluid, subretinal fluid, and level of retinal pigment detachment decreased significantly one month after the start of 4Q4W-Aflibercept, and the morphological therapeutic effect lasted until the last visit. 45% of the eyes had one or more lines of visual acuity increase. Geographic atrophy developed in 9% of eyes during follow-up.

High-dose high-frequency Aflibercept for recalcitrant neovascular age-related macular degeneration, Qi Sheng You et al; RETINA 38:1156–1165, 2018
Are risk factors for growth of choroidal nevi associated with malignant transformation?

In 207 choroidal melanocytic tumors <3.5 mm thick, a fine-needle biopsy was performed to assign the gene expression profile (class 1 or 2).

The class 2 profile was used as a validated biomarker for malignant transformation. The following data were collected: patient age and sex, tumor diameter and thickness, distance of posterior tumor margin from the optic disc, and the presence or absence of serous retinal detachment, orange lipofuscin pigment, drusen, retinal pigment epithelial fibrosis, retinal pigment epithelial atrophy, visual symptoms, and documented tumor growth.

None of the widely used choroidal nevus risk factors for tumor growth or documented growth itself is pathognomonic of malignant transformation as defined by the class 2 gene expression profile. Patient age and tumor thickness may be helpful in identifying small choroidal melanocytic tumors that are more likely to have the class 2 profile. Observation for growth prior to treatment continues to be reasonable for most patients with suspicious choroidal nevi.

Posterior capsular complication rates with femtosecond laser-assisted cataract surgery: a consecutive comparative cohort and literature review

The aim of the study was to determine whether femtosecond-assisted laser cataract surgery (FLACS) reduces the posterior capsular complication (PCC) rate compared to manual cataract surgery when performed by an experienced surgeon.

As a single-center study, 2,021 consecutive FLACS procedures were reviewed, including all posterior capsule rupture (PCR) with or without vitreous prolapse or zonular dialysis (ZD), which prevented intracapsular IOL placement.

Results: 6 out of 2,021 (0.3%) eyes receiving FLACS had either PCR or ZD. One eye (0.25%) of 403 eyes on manual cataract surgery had a PCR. There was no significant difference in the results. Risk factors included advanced age, dense nuclei, pseudoexfoliation, and small pupils. Only a single case in the FLACS series may have been directly attributed to the FLACS process.

This study suggests that there is no significant difference in the PCC rate between FLACS and manual cataract surgery in the hands of an experienced surgeon who performs >350 cases annually. This low complication rate could be achieved by less experienced surgeons using FLACS.

https://www.dovepress.com/articles.php?article_id=40375

Antivascular endothelial growth factor agents pretreatment before vitrectomy for complicated proliferative diabetic retinopathy: a meta-analysis of randomized controlled trials

14 randomized controlled trials with 613 patients were evaluated; the anti-VEGF pretreatment group included 289 patients and the control group 324 patients.

The analysis shows that anti-VEGF treatment prior to vitrectomy in complicated PDR may favor the surgical and healing process: less intraoperative bleeding, less use of endodiathermia, shorter duration of surgery, less iatrogenic retinal foramina, less frequent use of silicone oil and need of retinotomies (P <0.05).

In addition, anti-VEGF pretreatment could also provide better postoperative best corrected visual acuity, less early recurrent vitreous hemorrhages, and faster resorption of vitreous hemorrhages (P <0.05). However, the incidence of recurrent vitreous hemorrhage, recurrent retinal detachment, or associated sequelae could not be reduced (P >0.05).

Aerpio completes enrolment in Phase IIb trial of AKB-9778 for Diabetic Retinopathy

AKB-9778 is being developed as a subcutaneous injection for the treatment of non-proliferative diabetic retinopathy.

In TIME-2, a Phase 2a, proof-of-concept study, AKB-9778 monotherapy showed the ability to improve underlying diabetic retinopathy by 2 or more steps on the ETDRS diabetic retinopathy severity scale in both eyes. Based on these results, Aerpio has initiated a Phase 2b study, TIME-2b, studying AKB-9778 administered once or twice daily versus placebo in patients with NPDR, whereas the enrolment has been completed in February this year; results are expected 2019.

The TIME-2b trial is a double-masked, placebo-controlled, multi-center study. It has included 167 patients, which have been randomized to receive 48-weeks of treatment with either AKB-9778 15mg subcutaneously once-daily, AKB-9778 15mg subcutaneously twice-daily, or placebo subcutaneously twice-daily.

AKB-9778 binds to and inhibits vascular endothelial phosphotyrosine phosphatase (VE-PTP), the most critical negative regulator of Tie2. AKB-9778 has demonstrated the ability to activate the Tie2 receptor irrespective of extracellular levels of its binding ligands, angiopoietin-1 (agonist) or angiopoietin-2 (antagonist), and may be the most efficient pharmacologic approach to activating Tie2.

AKB-9778 may have the ability to improve diabetic retinopathy without anti-VEGF, with the advantage that the medication could be self-administered by the patient.

Presented at the Euretina, 2018; Wien
New analysis of Novartis Phase III brolucizumab (RTH258) data in nAMD

Brolucizumab (RTH258) is a humanized single-chain antibody fragment (scFv).

The proprietary innovative structure results in a small molecule (26 kDa) with potent inhibition of, and high affinity to, all VEGF-A isoforms. In preclinical studies, brolucizumab inhibited activation of VEGF receptors through prevention of the ligand-receptor interaction.

The studies HAWK (NCT02307682) and HARRIER (NCT02434328) were designed to compare the efficacy and safety of intravitreal injections of brolucizumab 6 mg and 3 mg (HAWK only) versus aflibercept 2 mg in patients with nAMD. In both trials, patients were randomized to either brolucizumab or aflibercept. Immediately following the 3-month loading phase, patients in the brolucizumab arms received a q12w dosing interval with an option to adjust to a q8w dosing interval based on masked disease activity assessments at defined visits. Aflibercept was dosed bi-monthly according to its label at the time of study initiation. Brolucizumab met the primary efficacy objective of non-inferiority versus aflibercept in mean change in best-corrected visual acuity (BCVA) from baseline to week 48 with high statistical significance.

Additionally, brolucizumab demonstrated superiority in three secondary endpoints considered key parameters of nAMD: central subfield retinal thickness, retinal fluid (intraretinal fluid and/or subretinal fluid) and disease activity.

These results were achieved while a majority of brolucizumab patients—56% in HAWK and 51% in HARRIER—were maintained on a q12w dosing interval immediately following the loading phase through week 48. Regulatory submissions for brolucizumab are on track for December 2018.

Sub-Threshold Nanosecond Laser Intervention in Age-Related Macular Degeneration: The LEAD Randomized Controlled Clinical Trial

Sub-threshold nanosecond laser (SNL) treatment has been shown in preclinical studies and a pilot study in intermediate AMD (iAMD defined as large drusen > 125 microns diameter) to reverse the signs of AMD without causing damage to the overlying retina, thus demonstrating promise as a potential treatment.

The Laser intervention in Early stages of Age-related Macular Degeneration (LEAD) study is a world-first, 36-month, multicenter, randomized, sham-controlled trial conducted from 2012-2015, which aimed to evaluate the safety of SNL treatment in iAMD and its efficacy for slowing progression to late AMD. The LEAD study was designed as a proof of concept study.

292 participants with iAMD and without optical coherence tomography signs of atrophy were randomly assigned to receive SNL or sham treatment to the study eye at six-monthly intervals. Overall, progression to late AMD was not significantly slowed with SNL compared to sham treatment.

However, a post-hoc analysis showed that progression was slowed for the 222 participants without coexistent reticular pseudodrusen (RPD are morphologically defined as subretinal drusenoid deposits) at baseline, whilst an increased progression rate was observed for the 70 participants with RPD.

Respectively, SNL treatment may have a role in slowing progression for those without coexistent RPD and may be inappropriate in those with RPD, warranting caution when considering treatment in clinical phenotypes with RPD.