

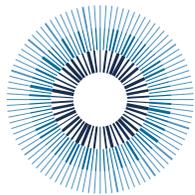
Swiss Academy of Ophthalmology

FOUNDATION

NEWSLETTER

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www.SAoO.ch



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of Ophthalmology
FOUNDATION

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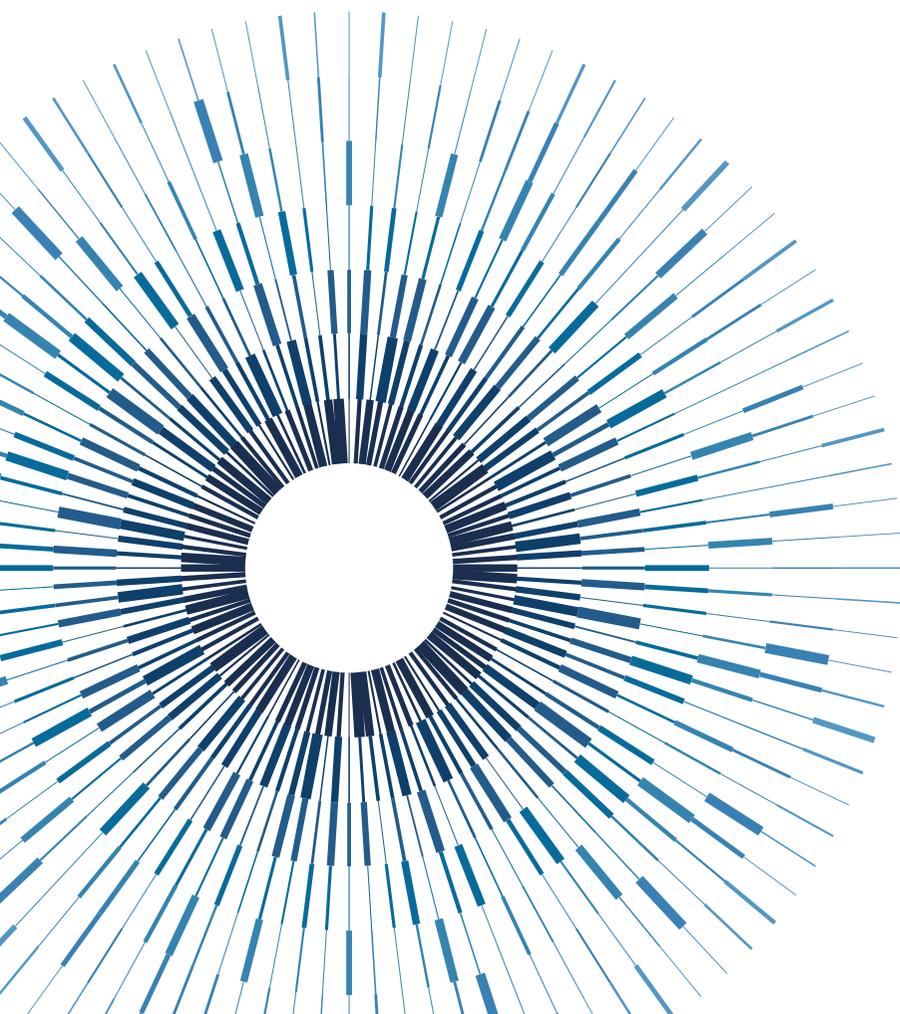
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LOOKING BACK CONGRESS 2018



The second SAoO Congress took place from February 28th to March 2nd. All in all, it may be considered a big success, with the number of participants having already increased to 670.

Both the main lectures given to the full auditory and the numerous parallel functions held for surgeons, anaesthetists, assistant doctors, orthoptists, practice employees, opticians and optometrists were well attended and highly appreciated. The good atmosphere is captured in the videos we got made again this year (2 students supporting us, who did an excellent job). They can be downloaded from our website 2018.saoo.ch/kongress-2018, where you will also find more congress impressions as well as a major part of the presentations: 2018.saoo.ch/kongress-2018/pdfs-der-praesentationen

In any case, visiting our website www.saoo.ch is always worthwhile. At regular intervals, you'll find innovations presented there as well as all previous newsletters which can be retrieved via this [link](#).



Again, our keynote lectures were met with high regard. While Prof. Piovela's report about ophthalmology in Italy made us think and inspired further cooperation, Prof. Bach's lecture about seeing between visual illusion and ophthalmology sparked off enthusiasm and made us chuckle, whereas Dr. Brunner's presentation of third-world ophthalmology aroused not only a lot of attention but also respect, interest and admiration.

Other highlights included the Consilium Diagnosticum and the excellent lecture of Nicolas Krämer who reported about the problem of cyber attacks on the basis of personal experience. Unfortunately, both events could not be attended by many of us as they took place late in the evening. On Friday afternoon we heard a great lecture of Prof. Wilhelm, whose knowledge and superior mind were formerly disseminated in St. Gallen while they can now be witnessed in Luzern.

The parallel functions and lunchtime symposia were very successful and well attended. Into the bargain, a lot of evaluation sheets have been returned to us. (Excellent! Thank you very much!) We are already busy analysing them and implementing the results in the next congress! For the coming year, we plan to rearrange and optimize the room occupancy again. Moreover, we hope it will not be as cold in 2019 as it was this year, when the technology of the trade fair reached its limits.

On the sidelines, the ASSOCIATION SAOO, a society supporting the foundation, held its important initial GA, which resolved that its support should no longer be limited to moral backup provided from behind the scenes but be extended to active financial assistance for the foundation's great plans: in addition to the congress, which is to be supplemented by events in the French- and Italian-speaking regions of Switzerland, some other projects are pending: 'quality label' and 'ophthalmic assistant' are just two key words for topics that will involve a great deal of work in the years to come.

On this note, we'd like to thank all of you who contributed to this very successful congress and we are looking forward to next year.

On behalf of the foundation council and the programme committee, I wish you a wonderful spring!

Dietmar Thumm
PRESIDENT

On behalf of the whole foundation council and the programme committee

INNOVATION PRIZE Marc Gobin



The SAoO pays tribute to a strabologist who is little known outside the speciality of strabismus but who has played an important role in his sub-speciality.

Marc Gobin, born in Belgium in 1930, decided to become an ophthalmologist because his triplet daughters were cross-eyed from birth. He started his education in Leuven to continue it afterwards with René Hugonnier in Lyon, with Thomas Keith Lyle in England, and with August Colenbrander in the USA. Thus, he came into contact with all three schools of strabology that were important at that time.

In his dissertation, he dealt with the difficult subject of cyclodeviations. In the process, he developed a theory on the basis of which he tried to sagittalise the inferior oblique muscles during surgery even in case of merely horizontal strabismus procedures to normalize the balance of both eyes which resulted in an improved fusion after the surgery.

Marc Gobin was the first to perform surgery of the straight eye muscles only via two small parainsertional openings and is therefore rightfully considered as the founder of today's minimally invasive eye muscle surgery MISS.

Daniel Mojon

PRESIDENT OF THE PROGRAMME COMMITTEE

Antiplatelet and Anticoagulant Drugs Do Not Affect Visual Outcome in Neovascular Age-Related Macular Degeneration in the BRAMD Trial.

Recently, several population-based studies have shown a possible association of aspirin use with an increased risk of CNV in AMD. These findings were not unequivocal, as randomized trials and met-analyses were inconclusive.

It was the purpose of this study to determine the influence of antiplatelet or anticoagulant (AP/AC) in patients with active neovascular age-related macular degeneration (N-AMD) on the visual acuity while anti-Vegf (Ranibizumab, Bevacizumab) injections were applied monthly over 1 year.

330 eyes of 330 patients with active N-AMD from the BRAMD study (a comparative trial between bevacizumab and ranibizumab in the Netherlands) were therefore investigated in a retrospective analysis of data from this trial.

In total, 40.9% of the patients used AP/AC medication, of which 73.3% was aspirin. AP/AC use was not associated with visual impairment (adjusted odds ratio [OR] 0.79; 95% confidence interval [CI] 0.43-1.44) or severe visual impairment (adjusted OR 0.75; 95% CI 0.40-1.43). Patients on AP/AC presented with comparable frequencies of hemorrhages (27% vs 32%, $P = .32$, respectively).

Similar results were found when analyses were restricted to aspirin users only. Further data is expected from the large-scale « ASPRirin in Reducing Events in the Elderly» (ASPREE) trial, an ongoing study investigating if the potential primary prevention benefits of low dose aspirin outweigh the risks in older healthy individuals.

Buitendijk GHS et al, Am J Ophthalmol. 2018 Mar;187:130-137

Early Versus Late Canalicular Laceration Repair Outcomes

Canalicular laceration has been regarded for a long time as an ophthalmic emergency, reconstruction within 48 hours has become like a standard. It was the aim of this study to determine whether delayed repair of traumatic canalicular laceration affects the final outcome.

A retrospective study was performed for 334 patients who underwent primary traumatic canalicular laceration repair. Patients were divided into 2 groups according to the surgical timing within 48 hours (early) or after 48 hours (delayed). The causes of delayed surgery were, that patients were unfit for immediate surgery. The anatomic results were compared between these 2 groups. 23 (7.6%) failed cases were among 301 patients who had a repair within 48 hours and 3 failed cases among 33 patients (9.1%) who had a repair after 48 hours ($P = .732$).

The mean operation time was around 1 hour with so significant difference between the two groups.

Delayed canalicular repair in unstable patients did not lead to poor results. This study finds that surgery is feasible within 1 week, without compromising the success rate, since the wound is not completely healed and tearing the granulation apart is not difficult.

Chu YC, Am J Ophthalmol. 2017 Oct;182:155-159

OPHTHALMOLOGY

Comparative analysis of the safety and efficacy of intracameral cefuroxime, moxifloxacin and vancomycin at the end of cataract surgery: a meta-analysis.

Although intracameral administration of antibiotics is widely accepted, there is no consensus on the best prophylactic therapy or route of administration for postoperative endophthalmitis (POE).

The aim of this study was to evaluate the safety and efficacy of intracameral cefuroxime (ICC), moxifloxacin (ICM) and vancomycin (ICV) as prophylactic therapy for prevention of POE.

The authors conducted a systematic review and meta-analysis of the relevant literature. The primary outcome was the incidence of postcataract surgery endophthalmitis.

Seventeen studies with over 900000 eyes were included, which favoured the use of intracameral antibiotics at the end of cataract surgery. The average weighted postoperative endophthalmitis incidence rates with intracameral cefuroxime, moxifloxacin and vancomycin were 0.0332%, 0.0153% and 0.0106%, respectively.

Secondary analyses showed no difference in efficacy between intracameral plus topical antibiotics versus intracameral alone ($P > 0.3$). Additionally, IC antibiotics alone may be as effective as IC plus postoperative topical antibiotics; however, the lack of direct comparison and the variety of topical antibiotics could suggest an alternative interpretation. These data showed although very rare, ICV has been associated with hemorrhagic occlusive retinal vasculitis (HORV). ICC has minimal toxicity events at standard doses. ICM was the most studied antibiotic for safety and found to have a low toxicity profile at all studied concentrations.

Bowen RC1, Zhou AX2, Bondalapati S et al. Br J Ophthalmol. [Epub ahead of printt, doi: 10.1136/bjophthalmol-2017-311051.

OPHTHALMOLOGY

Recent clinically relevant highlights from the Diabetic Retinopathy Clinical Research Network

The purpose of this review is to present some recent clinically relevant results from Diabetic Retinopathy Clinical Research (DRCR) Network trials that may guide management of diabetic macular edema (DME) or proliferative diabetic retinopathy (PDR):

Among eyes with DME and visual acuity 20/50 or worse, Aflibercept, on average, had greater improvement in visual acuity over 2 years compared with bevacizumab or ranibizumab.

Aflibercept is associated with higher rates of improvements in diabetic retinopathy severity among eyes with PDR and vision-impairing DME at baseline compared with bevacizumab or ranibizumab.

Among eyes with persistent central-involved DME after at least six anti-vascular endothelial growth factor (anti-VEGF) injections, no difference in mean visual acuity improvement was observed between eyes that received continued ranibizumab and sham injections versus ranibizumab and intravitreal sustained dexamethasone drug-delivery system, especially for phakic eyes.

For eyes with PDR, ranibizumab was associated with lower rates of developing PDR-worsening events compared with panretinal photocoagulation, especially among eyes that did not receive ranibizumab for central-involved DME at baseline. Ranibizumab is cost-effective for PDR for eyes with, not without, vision-impairing central-involved DME, highlighting challenges when safety and efficacy results are at odds with cost-effectiveness results.

SUMMARY: Aflibercept for DME, in certain circumstances, is more likely to have superior visual acuity and anatomical outcomes compared with bevacizumab or ranibizumab. No vision benefits are apparent, especially for phakic eyes, by adding intravitreal corticosteroids for persistent DME following anti-VEGF injections.

Krick, Tracy W.; Bressler, Neil M., Current Opinion in Ophthalmology: March 9, 2018 - Volume Publish Ahead of Print

OPHTHALMOLOGY

Circulating Serum Fatty Acid-Binding Protein 4 (FABP4) Levels Predict the Development of Diabetic Retinopathy in Type 2 Diabetic Patients.

Fatty acid-binding protein 4 (FABP4) serum concentrations are associated with obesity-related metabolic and cardiovascular disorders, stroke, T2DM, and gestational diabetes mellitus and have been shown to be markers for metabolic risks and metabolic syndrome. However, the association between FABP4 blood concentrations and microvascular diseases such as DR has not been assessed.

In this cohort study, serum FABP4 levels were determined in type 2 diabetic patients without DR at admission in order to investigate a possible contribution of FABP4 to the increased risk of 5-year incidence of DR.

A total of 738 patients with type 2 diabetes without DR were consecutively enrolled and followed up prospectively. Retinopathy evaluation was annually performed by ophthalmologists in the following 5 years.

During the follow-up period 20 % of the patients developed DR and 8% patients vision-threatening DR (VTDR). A positive correlation could be statistically revealed between serum FAB4 level and international Clinical Diabetic Retinopathy Severity Scales. After adjustment for other estab-

lished risk factors, in multivariate models comparing the third and fourth quartiles against the first quartile of the FABP4, levels of FABP4 were associated with DR and the adjusted risk of DR increased by 124% and 227%, respectively. Similarly, the adjusted risk of VTDR increased by 140% and 278%.

Though the potential causal relationship between FABP4 and DR is still not clear, the authors confirm that FABP4 is a strong and independent prognostic marker of DR and VTDR in patients with Type 2 Diabetes. Possible mechanisms might be: associated inflammation, oxidative stress, a possible impact of FABP4 on atherosclerosis and insulin resistance, and lately considered FABP 4 induced stress to the endoplasmatic reticulum.

FABP4 shows potential as a novel biomarker for DR prediction in Chinese patients with T2DM, and strict glycemic control and more frequent retinal examination should be highlighted for T2DM patients with the highest quartile range of FABP4.

Zhang XZ, Tu WJ et al, AM J Ophthalmol . 2018 Mar;187:71-79.

OPHTHALMOLOGY

Smartphones in Ophthalmology

Smartphones have been reported to be used more and more in daily practice in various medical specialties for different purposes.

One of the reasons for this boom is the large number of medical “apps” or applications that are now available, most of them in English.

Tools like vision cards, color vision plates, pupil gauge, Fluorescein light and pen light, pediatric fixation targets, Amsler grid and red desaturation tests are available on the smartphone and can be used in situations where standardized tests are not readily available or possible, e.g. inpatient or emergency room settings. The ophthalmologist should remember that all the testing tools are not ideally standardized.

One alternative feature of office-based tools is photography. In circumstances, like within the emergency area, a smartphone is often used to document injuries, slit-lamp photos of the anterior segment, fundus biomicroscopy, and also indirect ophthalmoscopy findings.

At the tip of your finger, you may have classifications and grading systems such as angle anatomy, iritis severity, diabetic retinopathy, macular holes, optic nerve edema, or melanoma, as well as references to drug applications, dosages and laboratory values.

Calculators include the useful utilities such as an IOL calculator.

USEFUL APPS (IN SOME CASES REGISTRATION IS REQUIRED):

1. [PubMed on tap](#) searches PubMed and PubMed Central to find, display and import reference information.
2. Diverse Amsler grid, Ishihara or colour blindness or visual acuity test apps
3. [Atlas of Ophthalmology](#) by Onjoph for IOS-Atlas presents clinical images of eye diseases
4. [Eyetube](#) provides free digital access to the world’s largest online surgical video archive dedicated to ophthalmologists.
5. [Eye Handbook](#) is a diagnostic and treatment reference smartphone app.
6. [Smart optometry](#) with 16 free interactive, precise and simple eye exams in 9 languages
7. [Medscape](#) provides fast and accurate clinical answers at the point-of-care.
8. [Omnio](#) gives you a quick and easy access to important and relevant medical information.
9. [Axis assistant](#) or [toriCAM](#) – could be useful for marking the cornea for toric IOLs
10. [Optodrum](#) for IOS is an easy to use replacement for a bulky optokinetic drum.
11. [Parks Three step](#) is used to isolate the paretic muscle in acquired vertical diplopia.
12. [Google docs](#) create, edit and collaborate with others on documents from your Ipad, Iphone or Ipad
13. [Genius scan](#) can scan your documents on the go and export them as JPEG or multi-page PDF files.

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