EUROPEAN SCHOOL FOR ADVANCED STUDIES IN OPHTHALMOLOGY

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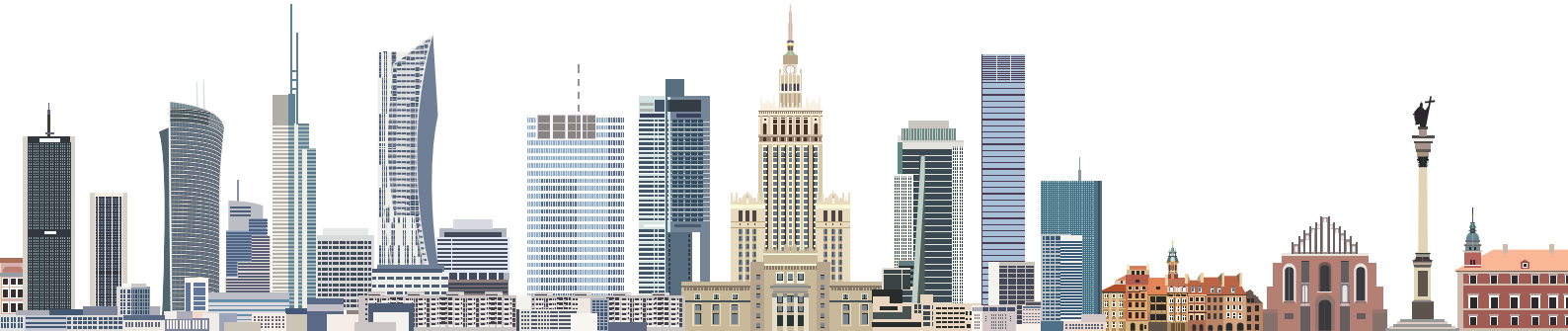
# 19th ESASO RETINA ACADEMY

## FINAL PROGRAM

**15 - 16 November, 2019**
**Warsaw, Poland**



# 19th ESASO RETINA ACADEMY

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WELCOME

# Welcome to Warsaw!

## Some highlights from ESASO Retina Academy 2019

We are delighted to welcome you to Warsaw for the 19th ESASO Retina Academy: on this occasion renowned experts in the field will deal with the latest scientific and technical advances in the diagnosis and treatment of retinal diseases.

This year our Scientific Committee prepared an engaging scientific programme by adopting two different teaching approaches: surgical and medical.

The surgical part will take place on Friday and will be divided into small masterclasses focusing on emerging aspects related to retinal surgery.

The medical part will take place on Saturday and will be divided into sessions focusing on major retinal diseases and related controversial aspects.

Last but not least: don't forget to visit the poster exhibition to find out about the latest international researches and have a friendly discussion with the authors!

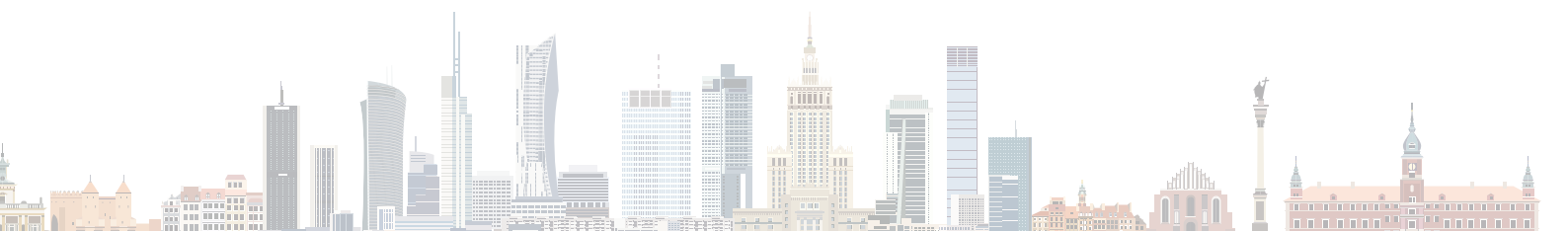
A warm welcome to WARSAW to all of our ESASO colleagues!

Sincerely yours,
Organising Committee

**Francesco Bandello**
President
ESASO Retina Academy

**Borja Corcóstegui**
President
ESASO Foundation

**Giuseppe Guarnaccia**
ESASO Global Executive Director
Lugano, Switzerland



# 19th ESASO RETINA ACADEMY

ORGANISATION

## Organizing Committee

**Francesco Bandello**
President
ESASO Retina Academy

**Borja Corcóstegui**
President
ESASO Foundation

**Giuseppe Guarnaccia**
ESASO Global Executive Director
Lugano, Switzerland

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**Francesco Bandello**
Chair
ESASO Retina Academy

**Maurizio Battaglia-Parodi**
Coordinator
ESASO Retina Academy

**Bruno Falcomatà**
Coordinator
ESASO Retina Academy

**Robert Rejdak**
Local President
Professor of Ophthalmology
Department of General Ophthalmology
Medical University in Lublin

## Local Scientifi Coordinator

**Mario Toro**
Local Scientific Coordinator
Senior researcher
Department of General Ophthalmology
Medical University in Lublin

## Programme Coordinators and Abstracts Review Committee

**Maurizio Battaglia-Parodi**
Coordinator
ESASO Retina Academy

**Bruno Falcomatà**
Coordinator
ESASO Retina Academy



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FACULTY

# FACULTY

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**Romano Mario,** Italy
**Sivraprasad Sobha,** UK
**Stopa Marcin,** Poland
**Teper Slawomir,** Poland
**Toro Mario,** Poland



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# Wet lab - ALCON ACADEMY



## ▶ No CME Accreditation
## Industry - Sponsored Session

### BASIC TECHNIQUES IN VITRECTOMY

*(Pre-registration required due to a limited number of seats)*

### FRIDAY, NOVEMBER 15TH

**8.30-10.00**
**Wet Lab 1A**
K. Nowomieyska (Poland), M. Toro (Poland)

**10.00-11.30**
**Wet Lab 1B**
K. Nowomieyska (Poland), M. Toro (Poland)

### FRIDAY, NOVEMBER 15TH

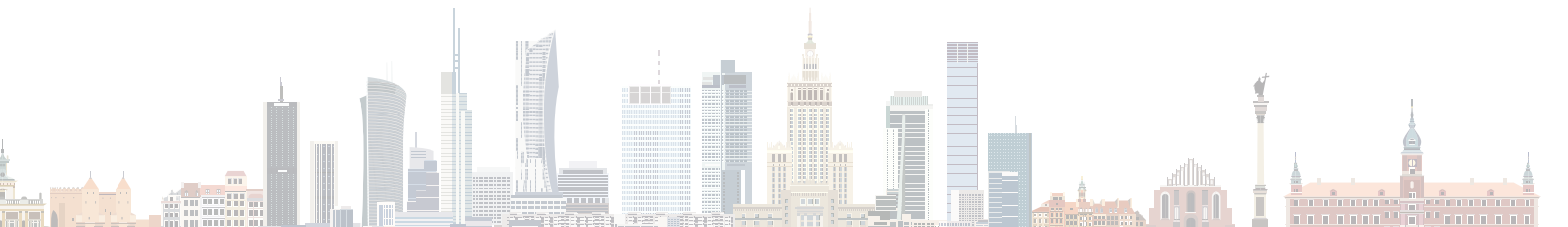
**16.00-17.30**
**Wet Lab 2A**
R. Rejdak (Poland), T. Choragiewicz (Poland)

**17.30-19.00**
**Wet Lab 2B**
R. Rejdak (Poland), T. Choragiewicz (Poland)

**OBJECTIVE:** to let the surgeons work on the Constellation machine together with LuxOR microscope and NGENUITY 3D system. During 25G vitreoretinal procedure with artificial eyes filled with eggs white participants will be able to:

- Insert the trocar cannula
- Place the infusion cannula
- Remove the vitreous body using our technology
- Peel the blue ILM membrane (placed before procedure at the bottom of the eye) with our ILM forceps

*All procedure will be conducted in 3D system.*





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SCIENTIFIC PROGRAMME

# 19th ESASO RETINA ACADEMY

## 15-16 November 2019
## Medical University, Warsaw, Poland

### SCIENTIFIC RATIONALE

A key aim of the ESASO Retina Academy is to maximise the learning of participants, which we try to achieve using a variety of different types of session in order to provide effective education. We have a number of classic plenary sessions which begin and end with questions to the audience to evaluate learning in each session. In addition, we have a keynote lecture which is delivered by a well-known expert on an important topic.

Attendees will benefit from a wide variety of post-residency education provided by a large faculty of experts from around the world. Dissemination of new and effective learning and expertise will help participants to improve their clinical and surgical practice, using a range of approaches including in-depth exposition of topics, face-to- face didactical tutoring and hands-on experience. Of course, another important aspect of this international event is the opportunity it provides for young and more experienced ophthalmologists alike to meet, discuss and network in a relaxed environment and with collegial spirit.

### FRIDAY, NOVEMBER 15TH

**08.30-11.30** **WET LAB (no CME Accreditation)**
**Industry - Sponsored Session**

### RETINAL SURGERY 1

08.45-09.00 **Welcome and Introduction**
F. Bandello, Italy, G. Guarnaccia, Switzerland, R. Rejdak, Poland

09.00-10.00 **Complex cases in vitreoretinal surgery**
*Directed by:* M. Romano, Italy, A. Lyssek Boron, Poland
*Panelist:* F. Boscia, Italy, F. Dhawahir –Scala, UK, J. Mackiewicz, Poland

10.00-11.00 **COMPLICATED CASES - 3D VIDEO SESSION**
Directed by: R. Rejdak
F. Boscia, S. Cisiecki , J. Mackievicz, A. Nikolakopoulos, K. Nowomiejska, M. Stopa

***11.00-11.30*** ***Coffee break***

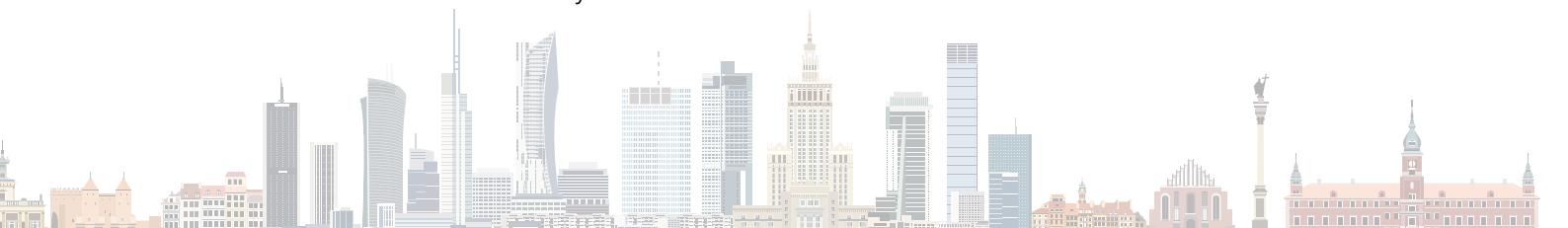
11.30-12.00 **Discussing all the new vitreoretinal equipments**
H. Bennett, UK, F. Dhawahir –Scala, UK

12.00-12.30 **Surgical Management of vitreomacular traction from normal to high miopic eyes**
I. Chowers, Israel, A. Nikolakopoulos, Greece

**12.30-13.30** **Lunch Master Classes (no CME Accreditation)**
**Industry - Sponsored Symposium**

13.30-14.00 **ESASO GRADUATION AND POSTER AWARD**
F. Bandello, Italy, G. Guarnaccia, Switzerland

**GREETINGS FROM THE RECTOR**
Prof. Mirosław Wielgoś, MD, PhD
Head of the I Department of Obstetrics and Gyneacology
Medical University of Warsaw





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# 19th ESASO RETINA ACADEMY



## FRIDAY, NOVEMBER 15TH

### RETINAL SURGERY 2

*Chair:* T. Avitabile (Italy)

14.00-14.30 **From simple vitreal hemorrhage to tractional detachment: surgical management of Diabetic Retinopathy**
F. Boscia, Italy, E. Özmert, Turkey

14.30-15.00 **TAMPONADES: what to do when they don't flat the retina and surgical complications correlated with their use**
F. Dhawahir –Scala, UK, P. Lanzetta, Italy

15.00-15.30 **Retinal detachment in miopic eye**
S. Cisiecki, Poland, A. Nikolakopoulos, Greece

***15.30-16.00 Coffee break***

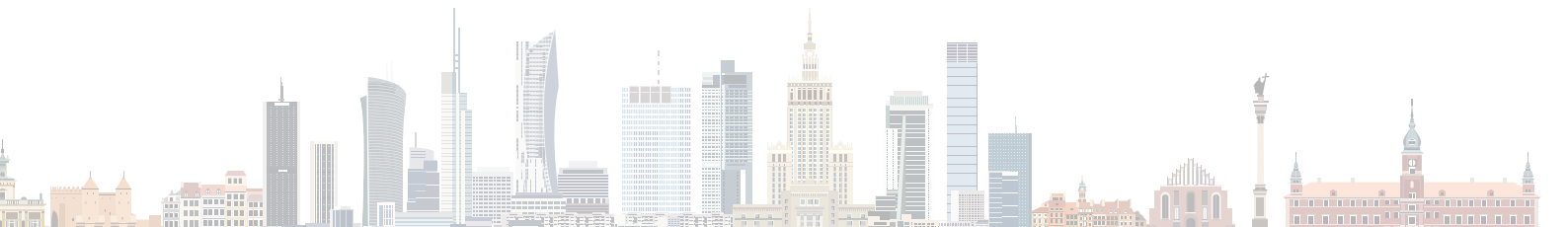
### RETINAL SURGERY 3

*Chair:* R. Rejdak (Poland)

16.00-16.30 **Cataract extraction and presence or implant of Premium IOL in retinal surgery**
H. Bennett, UK, S. Cisiecki, Poland

16.30-17.00 **Choosing among techniques for scleral fixation of IOL or anterior chamber IOL Implantation**
A. Augustin, Germany, M. Rekas, Poland

**16.00-19.00 WET LAB (no CME Accreditation)**
**Industry - Sponsored Session**





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SCIENTIFIC PROGRAMME

## SATURDAY, NOVEMBER 16TH

| | |
|---|---|
| 09.00-09.40 | **OCT-A The Contribution of Polish Ophthalmology**<br>*Directed and Organized by:* Robert Rejdak |
| 09.00-09.05 | **Introduction** by Prof. Rejdak |
| 09.05-09.12 | **How OCTA has changed our clinical practice**<br>Anna Matysik-Wozniak, Robert Rejdak |
| 09.12-09.19 | **Angio OCT in DME**<br>K. Michalska Malecka |
| 09.19-09.26 | **Angio OCT in age related macular degeneration**<br>Slawomir Teper |
| 09.26-09.33 | **Role of Angio OCT in the national treatment programme for AMD**<br>Joanna Golebiewska |
| 09.33-09.40 | **Discussion** |

### DME

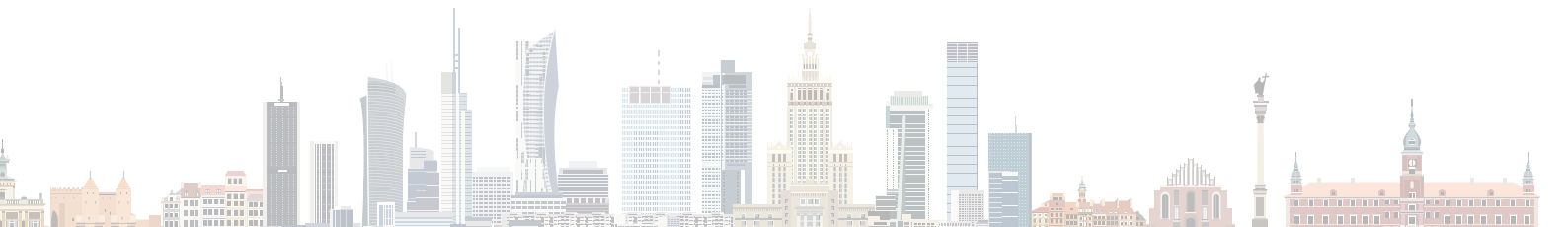
*Chairs:* A. Loewenstein (Israel), T. Avitabile (Italy)

| | |
|---|---|
| 09.40 | **Oct signs not to be missed in DME assessment**<br>A. Erginay, France |
| 09.47 | **New data of anti-VEGF treatment of DME**<br>M. Goldstein, Israel |
| 09.54 | **New data on corticosteroids treatment of DME**<br>A. Augustin, Germany |
| 10.01 | **Controversial point: Combining corticosteroids with anti-VEGF should be considered in the management of DME or not?**<br>A. Loewenstein, Israel |
| 10.11 | **Critical point: Under or Over Treat a DME? What risk you can accept to?**<br>F. Bandello, Italy |
| ***10.21-10.51*** | ***Coffee break*** |

### DIABETIC RETINOPATHY

*Chairs:* I. Chowers (Israel), A. Loewenstein (Israel)

| | |
|---|---|
| 10.51 | **Retinal Non perfusion and Anti-VEGF Therapy in Diabetic Retinopathy: What We Know and What We Don't Know**<br>S. Sivraprasad, UK, A. Loewenstein, Israel |
| 10.58 | **Protocols of treatment for PDR**<br>E. Özmert, Turkey |
| 11.05 | **Controversia lpoint: Potential retinal damage in the long-term anti VEGF treatment**<br>A. Loewenstein, Israel |
| 11.15 | **Critical point: What may happen when a patient stops intravitreal anti-VEGF treatment for PDR?**<br>F. Bandello, Italy |





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# 19th ESASO RETINA ACADEMY

SCIENTIFIC PROGRAMME

## SATURDAY, NOVEMBER 16TH

11.25-11.35 **Key-note Lecture: The Global Burden of Vision Loss- changes in Prevalence and Causes of Visual Impairment and the implications for the future**
Rupert Bourne

### AMD

*Chairs:* A. Augustin (Germany), F. Bandello (Italy)

11.35 **Imaging of AMD**
A. Erginay, France

11.42 **What we can learn from AMD genetics**
F. D'Esposito, UK

11.49 **Reactive or proactive treatment for neovascular AMD**
S. Sivraprasad, UK

11.56 **Update on emerging treatments for geographic atrophy**
A. Augustin, Germany

12.03 **Gene therapy for AMD**
F. D'Esposito, UK

12.10 **Controversial point: How do you treat a silent or low-activity CNV?**
M. Goldstein, Israel

### NEW RETINAL LASERS

*Chairs:* P. Lanzetta (Italy), A. Matysik-Wosniak (Poland)

12.20 **Sublimilal/Micropulse laser**
B. Falcomatà, Italy

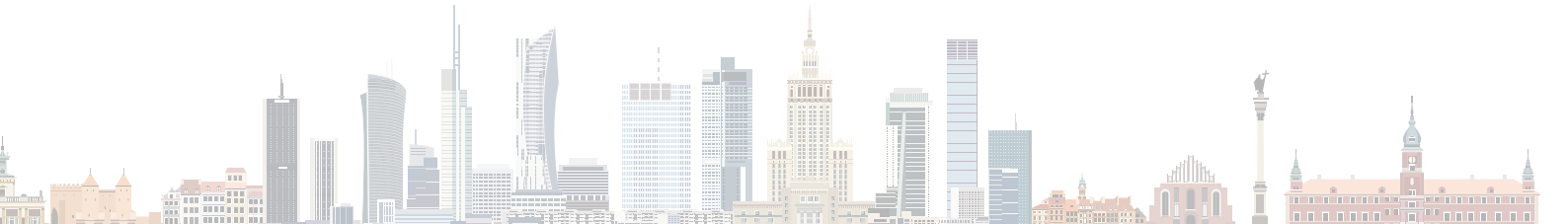
12.27 **Photo biomodulation**
M. Battaglia Parodi, Italy

12.34 **Nanosecond laser**
P. Lanzetta, Italy

12.41-13.00 **Panel Discussion**

13.00 **Closing remarks**

*UEMS/EACCME Accreditation:*
*"An application has been made to the EACCME® for CME accreditation of this event"*



# 19th ESASO RETINA ACADEMY

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ESASO MODULES CALENDAR 2020


## ESASO MODULES CALENDAR 2020

### LUGANO CAMPUS

**27-31 JANUARY** — **Orbital, Lacrimal and Ophthalmic Plastic Surgery**
Lugano, Switzerland
Online application opening: **30 September 2019**

**10-14 FEBRUARY** — **Intermediate - Advanced Surgical Retina**
Lugano, Switzerland
Online application opening: **14 October 2019**

**09-13 MARCH** — **Medical Retina**
Lugano, Switzerland
Online application opening: **11 November 2019**

**30 MARCH 03 APRIL** — **Basic Surgical Retina**
Lugano, Switzerland
Online application opening: **2 December 2019**

**27 APRIL 01 MAY** — **Orbital, Lacrimal and Ophthalmic Plastic Surgery**
Lugano, Switzerland
Online application opening: **23 December 2019**

**10-15 MAY** — **Medical Retina**
Lublin, Poland
Online application opening: **13 January 2020**

**15-19 JUNE JUNE** — **Intermediate - Advanced Surgical Retina**
Lugano, Switzerland
Online application opening: **17 February 2020**

**21-25 SEPTEMBER** — **Cornea and Corneal Refractive Surgery**
Lugano, Switzerland
Online application opening: **25 May 2020**

**19-23 OCTOBER** — **Glaucoma**
Lugano, Switzerland
Online application opening: **22 June 2020**

**16-20 NOVEMBER** — **Basic Cataract and Intraocular Refractive Surgery**
Lugano, Switzerland
Online application opening: **20 July 2020**

**14-18 DECEMBER** — **Intermediate - Advanced Cataract and Intraocular Refractive Surgery**
Lugano, Switzerland
Online application opening: **17 August 2020**

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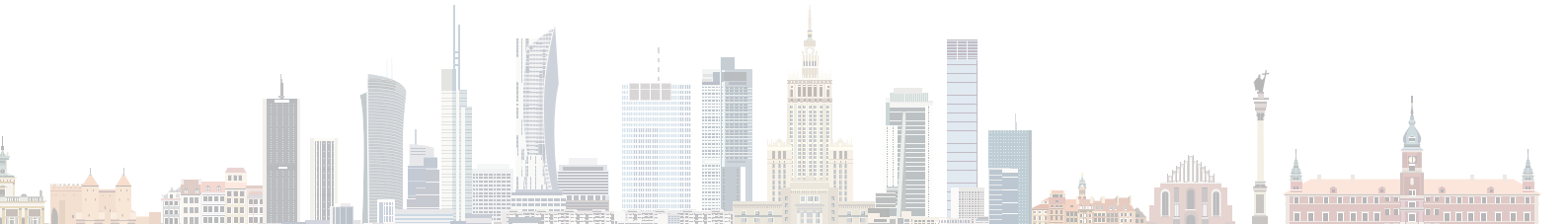



## Topic: AMD



### PO01
### RETINAL PIGMENT EPITHELIAL TEAR AFTER AFLIBERCEPT INJECTION: PRESENTATION OF A CASE STUDY

J. Yanguas, A. González-Gómez, C. Reino-Pérez
*Hospital Universitario Virgen de la Victoria, Málaga, Spain*

**Introduction/Background:** Retinal pigment epithelial (RPE) tear is a disruption of the RPE monolayer caused by underlying tangential tensile forces. The most common cause is a vascularized retinal pigment epithelial detachment (PED) in patients with exudative AMD. RPE tears can develop spontaneously, but currently, many cases are associated with anti-VEGF therapy.

**Methods:** Literature review and clinical case report. Imaging were obtained with color fundus photography, optical coherence tomography and fluorescein angiography.

**Results:** An 84-year-old women, previously treated for branch thrombosis in the left eye, consults for decreased vision in her right eye (BCVA of 0.15 and 0.05 respectively). Funduscopy revealed a large parafoveal PED without hemorrhages in the right eye. The OCT confirmed the finding, also showing adjacent neurosensory detachment. The patient was scheduled for a loading dose of Aflibercept. In later revisions a RPE tear was noted, with persistence of subretinal fluid, so a new dose of anti-VEGF was proposed. In the last examination, BCVA was 0.15 in both eyes, with persistence of the RPE tear without signs of activity.

**Conclusions:** There is no proven method for RPE tear prevention, so, early recognition of risk factors, defined by retinal imaging, is crucial. After tear formation, in the presence of an active CNVM, anti-VEGF therapy is the best therapeutic option. However, stronger scientific evidence on drug differences, doses or follow-up time is needed.

**Keywords:** RPE tear, anti-VEGF, exudative AMD

### PO03
### THE POSSIBILITY OF EARLY DIAGNOSIS AND PREVENTION NOF AMD

N. Malachkova [1], T. Kozlova [2], K. Radega [2]
*[1] VNPMMU, Vinnytsia, Ukraine, [2] Clinica Optimal, Vinnytsia, Ukraine*

**Introduction/Background:** Age-related macular degeneration (AMD) is one of the first places among the causes of blindness among people over the age of 60 in developed countries and is the main cause of loss of central vision.To determine the early changes, as well as to assess the relationship between the onset of AMD in individuals whose immediate relatives already have a history of a progressive AMD.

**Methods:** There were 108 people which parents have in anamnesis AMD, who was participated in the study. STARS questionnaires were used for the study and OCT.

**Results:** During the course of mathematical analysis, clear correlations were established between the age of the questioned and the volume of complaints ($p < 0.05$).
Also, a positive correlation between the number of points scored on the results of the STARS questionnaire and the complaints.
The expected and predictable result was a direct correlation between the qualitative and quantitative composition of complaints and structural changes in the retina that were detected during OCT.

**Conclusions:** This study confirmed that the STARS questionnaire is a simplified tool for the detection of early changes in patients at risk of developing AMD, and helps to assess the relationship between the onset of AMD in individuals whose immediate families already have a history of progressive AMD.

**Acknowledgements:** people at risk are recommended to take after 40 years nutraceuticals, as a Nutrof - total as a preventive therapy.

**Keywords:** STARS questionary, AMD,OCT



POSTER LIST

## Topic: Diabetic retinopathy and DME

### PO04
### THE PROGNOSTIC VALUE OF THE STUDY OF HORMONES AT VARIOUS STAGES OF DRP IN PATIENTS WITH T2DM

N. Malachkova, I. Komarovska
*VNPMMU, Vinnytsia, Ukraine*

**Introduction/Background:** Diabetic retinopathy (DR) is a common complication of diabetes and a leading cause of visual impairment and blindness. The aim of the study was to increase the effectiveness of diagnosing the progression of diabetic retinopathy in patients with type 2 diabetes and obesity by establishing a predictive value of the study of adiponectin, resistin and sex steroid-binding globulin.

**Methods:** The study involved 43 people with overweight or obesity without T2DM and 98 patients of both sexes with T2DM, obesity, diabetic. Sex steroid binding globulin, serum resistin and adiponectin levels was measured by ELISA. The ANOVA was used as statistical analysis.

**Results:** Complex research was made over the stage of development of DRP in obese patients with diabetes mellitus, taking into account the content of adiponectin, resistin and SSBG in blood, due to the risk factors for the development and progression of diabetic microvascular complications.

**Conclusions:** A higher concentration of adiponectin in the blood will indicate a positive dynamics of lipid metabolism and an increase in the protective role of adiponectin in the development of DRP, a lower concentration of resistin - about the positive dynamics of the lipid metabolism and the reduction of the pathogenic effect of insulin resistance on the development of DRP, and the concentration of SSBG in serum more than 100 nmol/L will have a tread effect on the development of DRP, especially in male patients.

**Acknowledgements:** Important to control level of this hormones for prognostic values

**Keywords:** Diabetic retinopathy, diabetes 2 type, adiponectin, resistin, sex steroid-binding globulin

## Topic: Imaging

### PO06
### ACUTE POSTERIOR MULTIFOCAL PLACOID PIGMENT EPITHELIOPATHY: ALL STARTS IN THE CHORIOCAPILLARIS LAYER

M.L. Redon Soriano
*General Hospital Castellon, Castellon, Spain*

**Introduction/Background:** Acute posterior multifocal placoid pigment epitheliopathy (APMPPE) is an inflammatory disease that affects young healthy adults. The characteristic clinical finding is the presence of multiple yellow-white placoid lesions located primarily in the posterior pole. [1]

**Methods:** Case report. Spectral domain-OCT (SD-OCT) and OCT-Angiography (OCT-A)

**Results:** A 27-year-old female came to the emergency room complaining of redness and blurred vision over the last 10 days. Two weeks prior to presentation, the patient developed asthenia, flu-like symptoms and headache. She had no significant past medical history.
Visual acuity was 0,9 in the right eye (OD) and 1 in the left eye (OS). There was a moderate anterior chamber reaction. Vitritis was present. Fundoscopy showed hypo-pigmented yellow lesions in the posterior pole.
SD-OCT revealed ellipsoid zone disruption in the macula with overlying hyper-reflectivity in the outer retina corresponding to the lesions seen in the fundus. OCT-A of the choriocapillaris revealed areas of hypo-intense circular flow voids clustered in groups around the macula, although only the biggest lesions affected the below retinal pigment epithelium (RPE).

**Conclusions:** OCT- A helps us to see underneath the RPE and understand more the evolution of the lesions. It is an effective noninvasive image modality to follow up these patients and may provide further information to help us understand the pathophysiology and complications of these diseases2.

**Keywords:** APMPPE,OCT-Angiograhpy, choriocapillaris





## Topic: Imaging

### PO07
### IMAGING TAU PROTEIN IN THE RETINA

U. Kayabasi [1], S. Cekmeceli [2]
[1] *Uskudar University, Istanbul, Turkey,* [2] *Istinye University, Istanbul, Turkey*

**Introduction/Background:** Tau protein plays a crucial role in many neurodegenerative diseases including Alzheimer's disease (AD). Tau inclusions and amyloid beta (AB) depositions have been described in the post-mortem retina exams of AD patients. Cryo- electron microscopy (Cryo- EM) was recently used to detect the detailed structure of Tau filaments.

**Methods:** We examined the retinas of 30 PET-proven live AD patients by spectral domain optical scanning tomography (SD- OCT) and fundus auto fluoresce in (FAF). The hyper or hypo- fluorescent lesions in the retina were scanned by OCT and images that completely corresponded with the histopathological and Cryo- EM shapes of Tau filaments were observed.

**Results:** In all the patients, neuro fibrillary tangles that exactly corresponded with the histopathologic and cryo-EM images of Tau in terms of shape and dimension were detected along with thin fibrils plus lesions similar to amyloid beta. The number of the retinal filaments and other abnormal proteins was in concordance with the severity of the disease process. The advanced retinal tangles had normal or reverse paired C shapes and thin fibrils had the shape of histopathologic images seen in early developmental stages of the disease.

**Conclusions:** Retinal images of Tau were disclosed for the first time in live AD patients. Retinal neuroimaging is a trustable biomarker and tool for monitoring the disease.

**Acknowledgements:** Nothing to disclose.

**Keywords:** OCT, Faf, Retina, Tau,alzheimer's

### PO08
### DEPICTING MYELINATED RETINAL NERVE FIBER LAYER WITH OPTOMAP

I. Garcia Basterra [1], J. Díaz Bernal [1], J. Mora Castilla [2], A. Moreno Guerrero [2]
[1] *Hospital Clínico Virgen de la Victoria, Malaga, Spain,* [2] *Clínica Antonio Moreno, Malaga, Spain*

**Introduction/Background:** Myelinated nerve fibers (MNF) are characterized as whitish, well-demarcated patches located at the retinal nerve fiber layer. Patients with MNF are usually asymptomatic, nevertheless, visual acuity can be altered depending on the location, extension and coexisting ocular disorder.

We present clinical features and imaging in 5 cases of MNF.

**Methods:** Imaging features of 5 eyes of 3 patients (2 were bilateral) with MNF were characterized. During routine eye examination, the patient underwent visual acuity test, biomicroscopic and non dilated funds examination using ultra wide field (optomap), red free imaging and optic coherence tomography. Imaging was compared with other conditions that can mimic MNF.

**Results:** Dilated fundus examination, retinography, optomap revealed distinct peripapillary continuous white striated patches with feathered borders (3 eyes). We found discontinuous patch with the optic nerve in 2 eyes. Swept-source optical coherence tomography analysis were also performed.

**Conclusions:** When making the initial diagnosis, it is essential to distinguish this typically benign condition from other potentially serious conditions such a neoplastic infiltrate. It is also important to use retinal imaging to make the diagnosis and follow the patient over time, as other entities may change but MNFL rarely changes. The management of MFL is focused on the follow-up evaluating and treating associated complications including neovascularization.

**Acknowledgements:** None

**Keywords:** Myelina, Retinal nerve fiber layer, Optomap





## Topic: Imaging

### PO09
### CHOROIDAL NEOVASCULARIZATION IN CENTRAL SEROUS CHOROIDOPATHY DIAGNOSED BY OCTA. TREAT OR NOT?

A. Dyrda, A. Rey, I. Jürgens
*Institut Català de Retina, Barcelona, Spain*

**Introduction/Background:** Choroidal neovascularization (CNV) is a rare complication of chronic central serous chorioretinopathy (CSCC). It is an important cause of low vision. The detection of CNV is based on the multimodal imaging, being the angiography by optical coherence tomography (OCT-A) the most sensitive technique. Currently, there is no standard therapy for CNV in CSCC described in the literature.

**Methods:** CASE STUDY

**Results:** Four patients (4 eyes), three men and one woman, with a mean age of 64±9 years, were diagnosed with CNV secondary to CSC using OCT-A. No changes were observed in distance visual acuity (BCVA) or near (CNVA) nor in central foveal thickness (CFT) despite not treating the CNV, after a minimum follow-up of 6 months. In the final visit, mean BCVA was 0.9±0.1 (0.9±0.1, initial) on the Snellen scale, mean CNVA of 1.5±0.6 (2±0.8; initial) on the Jaeger scale, mean CFT of 273±78.8 (243±31.8, initial) microm and CNV was still observed in OCT-A. In the affected eyes fibrovascular pigment epithelial detachment (PED) (n=2), flat and irregular PED (n=2), subretinal fluid (n=2) were seen. All patients presented alterations of the pigment epithelium in the contralateral eye and pachychoroid in both eyes (subfoveal choroidal thickness: 259.7±47.9 microm in the affected eye and 302.7±29.4 microm in the contralateral eye).

**Conclusions:** The expectant attitude may be a viable option for patients with CNV secondary to CSC as a worsening of functional and anatomical parameters during 6 months of follow-up was not observed.

**Keywords:** OCT-A, central serous choroidopathy, choroidal neovascularization

### PO10
### OLD AND NEW IMAGING METHODS IN THE DIAGNOSIS OF OPTIC NERVE HEAD DRUSEN: A CASE SERIES

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**Introduction/Background:** Optic nerve head drusen (ONHD) are benign acellular deposits of calcium that usually form early in life. Most of ONHD are asymptomatic and detected incidentally on routine eye examinations. Improving imaging using optical coherence tomography suggests ONHD are more prevalent that previously reported and may be present in many clinically normal discs. We present a case series of 5 patients with ONHD and their follow up using different imaging modalities.

**Methods:** A variety of imaging modalities were employed to identify for the presence of ONHD, including retinography, optical coherence tomography (including enhanced depth imaging-OCT and OCT-Angiography) fluorescein angiography and fundus autofluorescence.

**Results:** We used OCT-measured RNFL thickness and automated perimetry during the follow up to track disease activity.

**Conclusions:** Correct identification of ONHD can be clinically challenging but is highly important because of the visual morbidity associated with this condition and because of the similar appearance to true optic nerve swelling. Multimodal approach allows for ONHD identification at earliest stages . At the present time, there is no consensus on which of these techniques is most accurate, further studies are necessary to develop protocols for the diagnosis and management of ONHD.

**Keywords:** Optic nerve head drusen, Imaging

## Topic: Imaging

### PO11

### THE IMPORTANCE OF OPTICAL COHERENCE TOMOGRAPHY ANGIOGRAPHY FOR DIAGNOSIS OF INFLAMMATORY CNV

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**Introduction/Background:** We report a case of choroidal neovascularization (CNV) secondary to tuberculosis and which was not obvious with dye angiogarphy but shown by optical coherence tomography angiography (OCTA).

**Methods:** Fifty years old healthy female presented with decreased visual acuity for 6 weeks in her right eye. Visual acuity was 20 cm finger counting. Slit-lamp biomicroscobic examination revealed active cells in the vitreous without anterior chamber reaction. Intraocular pressure was 13 mmHg. Funduscopic examination showed a swollen hyperemic disc, peripapillary exudation and hemorrhage.

**Results:** Spectral domain optical coherence tomography (SD-OCT) showed intraretinal cysts in papillomacular region and subretinal fluid and material in the macular region. ICGA showed hypocyanescence in peripapillary area and the plaques secondary to infiltration. There is no appearance of CNV which is expected hypercyanesens spot or plaque in ICGA. However after we got the OCTA scan, there is obvious CNV in peripapillary area. .

**Conclusions:** OCTA is unaffected by leakage and/or any choroidal condition that can make hypo or hyperecyanesans in ICGA according to the type of pathology. Therefore it can easily demostrate CNV secondary to any of these situation especially inflammatory infiltration such as choriocapillaritis. .

**Acknowledgements:** Ankara University Faculty of Medicine Department of Ophthalmology Retinal Imaging Unit

**Keywords:** OCT angiography, Inflammatory CNV, Tuberculosis

## Topic: Other retinal disorders

### PO12

### THE RESULTS OF INTRAVITREAL TREATMENT OPTIONS IN PSEUDOPHAKIC CYSTOID MACULAR EDEMA (PCME)

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**Introduction/Background:** To evaluate the efficacy and safety of intravitreal(IVT) anti-VEGF, IVT dexamethasone implant(DEX), IVT triamcinolone acetonide(IVTA) in the treatment of acute PCME that is resistant to topical therapy.

**Methods:** The patients' records,with minimum 6-month follow-up were reviewed retrospectively. All patients received topical steroid+NSAI for 2 months,and randomized anti-VEGF[ranibizumab(IVR)/ bevacizumab (IVB)],DEX or IVTA were applied to patients with non-regressing PCME.Injections were repeated when PCME recurred. Visual acuity(BCVA),central macular thickness(CMT) and complications were evaluated before treatment and at the last follow-up(Before/After:B/A).

**Results:** 28 Patients(60% male) with a mean age of 68.7±8.6years were included in study.Mean follow-up was 11.5±5.9months.8 eyes(28.6%) were treated with IVTA,9 eyes(32.1%) with anti-VEGF(4 IVB-5 IVR),11 eyes(39.3%) with DEX. Injections were repeated 3 times in 7 eyes(87.5%) with IVTA,3 times in 7 eyes(77.8%) with anti-VEGF,3 times in 3 eyes(27.3%) with DEX.The mean BCVA was 55.9±16.5 - 70.6±8.2 ETDRS letters(B/A),mean CMT:513.4±183.5 - 305.8±102.4(B/A)($p<0.05$).Visual improvement and CMT reduction were detected in each group when evaluated separately($p<0.05$).Increased IOP occurred in 4 eyes(50.0%) with IVTA and 2 eyes(18.2%) with DEX treatment.

**Conclusions:** DEX implant and anti-VEGF treatment are effective and safe treatments with similar effects in PCME treatment.Repeat injections may be required. IVTA is less effective,and IOP increase is a major problem.

**Keywords:** CYSTOID MACULAR EDEMA, PSEUDOPHAKIC EYE, INTRAVITREAL TREATMENT

## Topic: Other retinal disorders

### PO13
### THE RESULTS OF INTRAVITREAL TREATMENT OPTIONS IN PSEUDOPHAKIC CYSTOID MACULAR EDEMA (PCME)

Z. Yazar, M. Onen, N.I. Ucgun
*Ankara City Hospital, Department of Ophthalmology, Ankara, Turkey*

**Introduction/Background:** To evaluate efficacy and safety of intravitreal(IVT) anti-VEGF, IVT dexamethasone implant(DEX), IVT triamcinolone acetonide(IVTA) used in treatment of acute PCME resistant to topical therapy.

**Methods:** The PCME patients' records,with min. 6-month follow-up,were reviewed retrospectively. All patients received topical steroid+NSAI for 2 months,and randomized anti-VEGF[ranibizumab(IVR)/ bevacizumab(IVB)] or DEX or IVTA were applied to patients with non-regressing PCME.Injections were repeated when PCME recurred.Visual acuity(BCVA),central macular thickness(CMT), complications were evaluated before IVT-at the last follow-up(before-last).

**Results:** 28 Patients(60% male) with mean age 68.7±8.6 years were included in study.Mean follow-up was 11.5±5.9 months.8 eyes(28.6%) were treated with IVTA,9 eyes(32.1%) with anti-VEGF(4 IVB-5 IVR),11 eyes(39.3%) with DEX. Injections were repeated 3 times in 7 eyes(87.5%)with IVTA,3 times in 7 eyes(77.8%) with anti-VEGF, 3 times in 3 eyes(27.3%) with DEX.The mean BCVA was 55.9±16.5 -70.6±8.2 ETDRS letters before-last,mean CMT was 513.4±183.5 -305.8±102.4 respectively($p<0.05$). When the groups were evaluated separately, visual improvement and CMT reduction were detected in each group($p<0.05$).Increased IOP was occurred in 4 eyes(50.0%) with IVTA and 2 eyes(18.2%) with DEX.

**Conclusions:** DEX implant and anti-VEGF treatment are effective and safe treatments with similar effects in PCME treatment.Repeat injections may necessary.IVTA is less effective,and IOP increase is major problem.

**Keywords:** Pseudophakic macular edema,Intravitreal injection, Anti-VEGF therapy, Triamcinolone acetonide, Dexamethasone implant

### PO14
### M-CHARTS AND MICROPERIMETRY FOR ASSESSMENT OF THE VISUAL FUNCTION AFTER PPV DUE TO MACULAR HOLE

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**Introduction/Background:** The purpose of the study is to examine the relationship between the morphological and functional results in eyes after pars plana vitrectomy (PPV) with internal limiting membrane (ILM) peeling due to stage 4 full thickness macular hole (FTMH).

**Methods:** The study included 22 eyes who underwent successful PPV due to FTMH. Both vertical metamorphopsia (MV) and horizontal metamorphopsia (MH) were determined using M-charts as well as visual acuity (VA), microperimetry and optical coherence tomography (SD-OCT) were performed before PPV, after 1 and 6 months.

**Results:** A significant improvement of VA and metamorphopsia scores measured by M-charts in particular periods before surgery, 1 and 6 months after PPV was observed. The MV scores were consistently higher than the MH scores at all assessment times. There was a correlation between MV only and microperimetry parameters before surgery. The macular sensitivity (MS) as well as macular integrity index increased from 1 month to 6 months after PPV and were correlated with postoperative BCVA. There was a correlation found between hole diameter and MS and P2 parameter 6 months after PPV. There was a correlation found between mean duration of symptoms of FTMH and VA and MV score.

**Conclusions:** MV scores seem to correlate better with microperimetry parameters and duration of symptoms of full thickness macular hole.
MV scores are higher after PPV than MH scores in patients with stage 4 full thickness macular hole.

**Keywords:** full thickness macular hole, metamorphopsia, microperimetry

## Topic: Other retinal disorders

### PO15
### OPTIC NEUROPATHY DIAGNOSIS THROUGH RETINAL NERVE FIBER AND GANGLION CELL LAYERS THICKNESS

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**Introduction/Background:** Optic neuropathy is a rare and under-recognised manifestation of B vitamins deficiency. The purpose of this report is to present a case of nutritional optic neuropathy and to outline the usefulness of RFNL and GCL analysis by OCT to establish a final diagnostic.

**Methods:** Case report.

**Results:** A 20-year-old man presented with a 6-month history of progressive bilateral visual loss. The patient also presented distal lower extremity paraesthesias for a period of 1 year. His medical history revealed an important weight loss and fatigue, associated with strict diet during last 2 years. There was no history of tobacco, alcohol or drugs abuse. Best corrected visual acuity was 20/70 in both eyes. Fundus examination revealed subtle temporal pallor of optic disc in both eyes. An OCT of the optic nerve head exposed temporally thinning of the retinal nerve fiber layer. After an extensive evaluation, a diagnosis of sever folic acid and vitamin B12 deficiency anemia was made. Other systemic diseases were ruled out. Inmediate treatment with vitamin B12 and folate supplementation was undertaken. Six months after normalisation of anemia and vitamin levels, his vision remained almost stable and finally improved to 20/50.

**Conclusions:** Nutritional optic neuropathy is a potencial cause of severe visual loss. Irreversible damage and optic atrophy can be prevented with an early intervention. This report highlights the importance of RNFL and GCL thickness OCT evaluation as an accurate method of predicting this functional damage.

**Acknowledgements:** No.

**Keywords:** Optic neuropathy, Optical Coherence Tomography

### PO16
### RETINAL ARTERIAL MACROANEURYSM. DIFFERENT TREATMENTS TO DIFFERENT PRESENTATIONS

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**Introduction/Background:** To show the different ways of presentation and treatment of macroaneurysms in our service

**Methods:** Retrospective series of cases of 6 patients diagnosed of retinal arterial macroaneurysm.We performed a rewiew of clinical and photographical documentation

**Results:** We present 6 patients with the diagnose of retinal arterial macroaneurysms follow up in our service in the last 5 years.On examination,the best-corrected visual acuity was damaged in only half of the cases,coinciding with those with macular edema.Intraocular pressure measurements were unremarkable,as were results of the slitlamp examinations.In all of them AGF was performed confirming the presence of macroaneurysm.Three of them presented hard exudates and macular edema revealed by the OCT and were treated with laser and anti VEGF.Three cases presented subretinal and retrohyaloid hemorrhages and were treated with focal laser and two of the them also underwent YAG hyaloidectomy

**Conclusions:** Macroaneurysms can occur with a wide range of symptoms so it is important to make differential diagnosis.Even if they are asymptomatic,observation is convenient due to spontaneously resolution.Cases in which the central vision is affected,laser treatment may be beneficial, taking care not to apply too much power due to the risk of producing an arterial branch occlusion.Also if the macular edema does not resolve,we can associate anti-VEGF.The performance of YAG hyaloidectomy in cases of subhyaloid hemorrhage produce rapid drainage with restoration of visual function

**Keywords:** Macroaneurysms, Anti VEGF, YAG hyaloidectomy

POSTER LIST

## Topic: Other retinal disorders

### PO17
### BILATERAL FUNGAL CHORIORETINITIS IN AN IMMUNOCOMPETENT PATIENT – A DIAGNOSTIC CHALLENGE

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**Introduction/Background:** Intraocular fungal infections, including endogenous fungal endophthalmitis and chorioretinitis frequently present with an indolent disease course. These cases can represent real challenging diagnosis, in which a high suspicion index and an experienced multidisciplinary team are fundamental.

**Methods:** We report a rare case of an indolent progressive intraocular fungal infection presenting in an immunocompetent patient.

**Results:** A 57-year-old man was referred for bilateral chronic recalcitrant posterior uveitis. He had been followed at another ophthalmology clinic for two years and previous comprehensive systemic workup, including bilateral diagnostic vitrectomy, had been negative. Besides the previous history of prostate cancer 3 years before, the patient was otherwise healthy. At our initial observation, the patient presented with a subretinal yellow-whitish, plaque-like lesion in the superior temporal arcade and subfoveal reticular fibrotic lesions in his right eye (OD); and a macular leopard-spot pattern bilaterally (OU). A chorioretinal biopsy OD was performed, ultimately revealing the presence of fungal hyphae.

**Conclusions:** Fungal infections should be considered in immunocompetent patients presenting with posterior uveitis with negative systemic workup and resistant to corticosteroids and immunosuppressive treatment. High suspicion index and an early chorioretinal biopsy can lead to an expeditious diagnosis and better prognosis of these vision-threatening entities.

**Acknowledgements:** To the laboratory

**Keywords:** posterior uveitis, intraocular fungal infection

### PO18
### THE NEW MUTATION AND UNUSAUAL PHENOTYPE OF X-LINKED RETINOSCHISIS

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**Introduction/Background:** Inheritance type of inherited macular dystrophies, prevalence, beginning of disease, spread of the disease between female and male, clinic, electrophysiology, genetic research and prognosis are very important during diagnose process of unobvious, unexplained visual loss.

**Methods:** Case report

**Results:** Case presentation: We report the atypical phenotype of new gen RS1 mutation. Fundus examination wasn't characteristic, without retinal schisis. There was found in optical coherence tomography (OCT) central degeneration of outer photoreceptors segments and "bulls eye" sign in autofluorescence. Also function of macula was disturbed what confirmed reduced answers in photopic full field electroretionography (full field ERG) and multi focal electroretionography (mfERG). Molecular genetic analysis of the RS1 was performed and c.185-1G>c; p.? (hemi.), NM_000330.3, rs281865344:) mutation was detected.

**Conclusions:** The inherited macular dystrophies can occur with unusual phenotypes and the new mutations can be still presented.

**Acknowledgements:** to Prof. Eberhart Zrenner

**Keywords:** inherited macular dystrophies, unexplained visual loss, X-linked retinoschisis

## Topic: Other retinal disorders

### PO19
### MACULAR INJURY DUE TO SPORT OCULAR TRAUMA

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**Introduction/Background:** Showing the anti-VEGF treatment results for macular choroidal rupture due to sport ocular trauma through a case report.

**Methods:** A 38-year-old female without ophthalmologist history was attended emergency service for severe decreased visual acuity (VA) in left eye due to ocular trauma with a paddle ball, presenting arreactive mydriasis, Berlin`s edema, preretinal hemorrhage, subfoveal tear and peripheral retinal tears. The patient was followed for three years with complete ophthalmologic evaluation incluiding VA, intraocular pressure, Amsler grid test, funduscopy and optical coherence tomography (OCT).

**Results:** The retinal tears were treated with laser photocoagulation. After the acute episode the subfoveal tear was healed. Two years later, she presented three episodes, during a year, of a sudden increase of the central scotoma due to choroidal rupture and Choroidal Neovascularization Membrane (CNVM) with subretinal fluid. They were firstly resolved with three intravitreal ranibizumab injections, two and three intravitreal aflibercept injections. Finally, the OCT showed an inactive CNVM, which has remained stable during the last 2 years with VA 0.1.

**Conclusions:** An ocular contusion may cause a sudden compression of the ocular globe and a choroidal rupture because the Bruch´s membrane, the retinal pigment epithelium (RPE) and the choroid are not flexible. Certain time after, it healed up. Although rare, a CNVM can cause a sudden and severe decreased of VA, which can be solved with intravitreal injections.

**Keywords:** Maculopathy, Macular choroidal rupture, Sport ocular trauma, Neovascularization Membrane, Intravitreal injections

### PO20
### MACULA TELANGIECTASIA TYPE II

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**Introduction/Background:** To discuss the case of four patients (eight eyes) with idiopathic macula telangiectasia type 2. The diagnosis and the treatment of the patients as well as the possible factors that lead to the appearance of idiopathic macula telangiectasia, are being analyzed bellow.

**Methods:** OCT examination (Spectralis HRA+OCT, Heidelberg Engineering, Germany), as well as Multicolor imaging were performed in order to confirm that they fit the criteria to proceed with the study.

**Results:** The findings are consistent with macular telangiectasia type 2 (MacTel type 2). The BCVA of the most affected eye was 20/200, even though not all the patients had a full thickness macular hole.

**Conclusions:** The loss of visual acuity in all the above cases can be attributed to the loss of photoreceptors on the fovea. What should be noted, however, is the fact that that not all the patients had a history of diabetes mellitus or hypertension. Thus, we can draw the conclusion that, in some cases, the background of the disease is genetic.

**Keywords:** mac tel type 2, retina

POSTER LIST

## Topic: Other retinal disorders

### PO21
### BEHÇET DISEASE AND PREGNANCY: ANY CORRELATION?

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**Introduction/Background:** During pregnancy ophthalmologic alterations may occur and, on the other hand, it is known that Behçet's Disease can cause both ophthalmological and obstetric changes. It is intended to analyze the evolution of previous ophthalmological alterations of Behçet's Disease during pregnancy.

**Methods:** Description of a clinical case.

**Results:** A 32-year-old female patient was observed due to bilateral redution of the visual acuity (VA) with a week of evolution (0.4 – right eye, RE; 0.1 – left eye, LE), bilateral non-granulomatous anterior uveitis, vitritis, vasculitis and mild macular edema (ME), comproved in macular OCT and fluorescein angiography. She presented clinical improvement after treatment with drops of dexamethasone and tropicamide; intravenous methylprednisolone followed by oral prednisolone and cyclosporine. At the 8th week of pregnancy immunosuppressants were reduced, without ophthalmological manifestations until 6 months after giving birth. At this time presented branch vein occlusion RE and vasculitis RLE, with mild ME. She started Infliximab associated with the previous treatment, with good clinical evolution after 3 months (VA of 0.6 RLE, without relevant alterations).

**Conclusions:** The case suggests an improvement in the ocular manifestations of Behçet's disease during pregnancy and highlights the importance of a tight follow-up with a multidisciplinar team. However, studies on this topic are still rare and a correlation is not clear yet.

**Acknowledgements:** None.

**Keywords:** Behçet Disease, Pregnancy, Uveitis, Macular edema, Venous occlusion

### PO22
### OCULAR MANIFESTATION OF MILLER FISHER SYNDROME

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**Introduction/Background:** Miller Fisher syndrome (MFS) is a variant of Guillain-Barré syndrome (GBS) that is characterized by the clinical triad of ophthalmoplegia, ataxia, and areflexia. However, this characteristic triad is not present in all MFS patients, with many patients exhibiting only two signs or only ophthalmoplegia

**Methods:** A 34-year-old man with a diplopia came to the General Ophthalmology Clinic in Lublin. The visual acuity in the right eye was 1.0, in the left eye 0.9, the intraocular pressure was 8mmHg in a both eyes. Patient had a limited abduction and convergent strabismus. Moreover, in the both eyes there were swelling of the optic nerve head with hemorrhages around. In the visual field non-specific defects were observed. The USG in the both eyes showed posthemmorhagic floaters in the lower part of the vitreous cavity. CT resulted with no abnormalities. In a neurological examination transient paresis of the lower limbs was presented

**Results:** In this case a diagnosis of MFS was confirmed by the presence of a positive anti-GQ1b antibody but presence the swelling of the optic nerve head and posthemmorhagic floaters were addicional symptom unrelated with the MFS. The patient is in the course of further diagnostic

**Conclusions:** High levels of GQ1b gangliosides are found in myelin sheathes of cranial nerves supplying the extraocular muscles. This may explain the association of anti-GQ1b antibodies with ophthalmoplegia. The prognosis of MSF is good, because after some time the symptoms disappear and normal vision returns

**Acknowledgements:** no

**Keywords:** ophthalmoplegia, Miller Fisher syndrome, Guillain-Barré syndrome



## Topic: Other retinal disorders



### PO23
### RETINAL CHANGES AND ANGIOOCT AS A POSSIBLE BIOMARKER IN THE PRECLINICAL PHASE OF ALZHEIMER DISEASE

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**Introduction/Background:** Anatomical changes in the Retina, since the pre-clinical onset of AD, represent the opportunity to identify the amyloid present in the CNS: not only the thinning of RNFL and the RCG retinal ganglion cell layer, but especially the narrowing and rarefaction of the circumfoveal vascular plexus identified and measured whit AngioOCT.

**Methods:** Patients with initial cognitive impairment submitted to: neuropsychological test, RMN and brain PET whit tracer for amyloid. The characteristic trait of AD, beta-amyloid deposits in the brain is also present in the retina of these subjects; the study, investigating retinal vascular networks whit AngioOCT highlights such alterations as possible AD biomarker

**Results:** 30 patients whit mild cognitive impairment non dementia (MCI) whit CT-PET positive for amyloid beta deposits in the brain had similar retinal deposits by examination whit AngioOCT, whit decreasing vascular flow and rarefaction of vascular tree design, whit highly significant frequency ( 100% ), when compared with healty groups of people of similar age

**Conclusions:** The authors propose the possibility that the retinal and choroidal vascular alterations highlighted with AngioOCT in subjects whit pre-AD, can represent an effective and economic biomarker to diagnose this disease at the beginning

**Acknowledgements:** PROF. Bernardo Billi Institute San Domenico - Fondazione Bietti- ROMA

**Keywords:** ALZHEIMER, OCT, RFNL and RCG, ANGIOOCT, CIRCUMFOVEAL VASCULAR PLEXUS

### PO25
### RESULTS OF ND: YAG LASER VITREOLYSIS FOR SYMPTOMATIC VITREOUS FLOATERS

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**Introduction/Background:** Symptomatic floaters are a common condition that may produce a significant impact on quality of life. Yag laser vitreolysis is a procedure to resolve the vitreous opacities via a non-invasive approach. We present our results in 10 patients using this technique.

**Methods:** We used a focused pulse of energy (Nd:YAG laser vitreolysis) to produce photo-disruption of the vitreous floaters. When targeted, the irregularities in the vitreous may either undergo fragmentation locally causing less aberrant transmission of light, or be separated to another area outside the visual axis. The exclusion criteria were: floaters located within 2 mm from the retina or the crystalline lens, any previous severe eye disease and patients at risk of retinal detachment or predisposing lesions.

**Results:** All 10 eyes improved symptoms and/or visual acuity; in 3 subjects, floaters disappeared in retinography. No severe procedure-related complications occurred in all 10 patients.

**Conclusions:** The influence of vitreous floaters may be underestimated. Nd:YAG vitreolysis was effective and safe in improving the visual symptoms with no complications in our sample. However not all vitreous opacities are adequate for laser treatment because possible subjective discomfort may occur. The treatment decision should be based on taking an exhaustive patient history thorough clinical exploration and setting realistic expectations. Further studies are needed to evaluate long follow-up outcomes and to compared this procedure with pars plana vitrectomy.

**Keywords:** YAG Laser Vitreolysis, Vitreous floaters





## Topic: Other retinal disorders

### PO26
### EFFECTS OF AUTOLOGOUS PLATELET-RICH PLASMA ON EXPERIMENTAL RETINAL DEGENERATION MODEL

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**Introduction/Background:** The aim of the study is to investigate the effect of subtenon-injected platelet-rich plasma (PRP) application on apoptosis and outer retinal thickness in an experimental retinal degeneration model in rabbit eyes.

**Methods:** 24 adult pigmented rabbits were included in the study. The rabbits were divided into 3 groups.
A retinal degeneration model was created. Sub-Tenon administration, PRP was injected in the right eyes and balanced salt solution was injected in the left eyes of the rabbits in the study group and the positive control group. No injections were applied to the negative control group. Subtenon injections were administered weekly for a total of 3 doses. At the 3rd week histopathological examination was performed.

**Results:** Apoptosis was detected in all of the left eyes and in five of the right eyes in the study group. There was a statistically significant difference regarding the mean apoptosis indexes of the centralINL, peripheral GCL, peripheral INL, peripheral ONL, and total retina in the right and left eyes of rabbits in the study group ($p < 0.05$).

**Conclusions:** Growth factor supply can be used to improve the status of retinal photoreceptors. One possible source of autologous GFs is PRP. We concluded that pre-clinical sub-Tenon autologous PRP application prevents apoptosis and increases retinal thickness in degenerative retinal diseases.

**Acknowledgements:** None of the authors have any proprietary interests or conflicts of interest related to this submission.

**Keywords:** Retinitis pigmentosa, Platelet-rich plasma, Apoptosis

### PO27
### OPTICAL COHERENCE TOMOGRAPHY ANGIOGRAPHY IN PATIENTS WITH RETINITIS PIGMENTOSA

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*[1] Department of General Ophthalmology, Medical University of Lublin, Lublin, Poland, [2] Medical Students Ophthalmology Interest Group, General Ophthalmology Clinic, Lublin, Poland*

**Introduction/Background:** To evaluate the correlation between the flow density measured by optical coherence tomography angiography and functional parameters in patients with retinitis pigmentosa.

**Methods:** Sixteen eyes of patients with retinitis pigmentosa and 16 eyes of control healthy patients were included in this study. Optical coherence tomography angiography was performed using AngioVue (Optovue Inc). In each patient the macula was imaged with a 3× 3-mm scan, and the optic nerve head scan of 4.5 × 4.5-mm was taken. Flow density data was compared in the two groups.

**Results:** The flow density (whole en face) in the superficial/deep retinal OCT angiograms and in the optical coherence tomography angiography of the optic nerve head was significantly lower in the retinitis pigmentosa group when compared with the control group.

**Conclusions:** Patients with retinitis pigmentosa show a decreased macular and optic nerve head perfusion compared to control group with healthy subjects.

**Keywords:** retinitis pigmentosa, angioOCT, optic nerve head



## Topic: Paediatric diseases



### PO29
### EARLY PRIMARY VITRECTOMY IN CHILDREN WITH AP-ROP AT THE MANIFESTATION STAGE

N. Yudina, A. Tereshchenko, I. Trifanenkova, Y. Sidorova, M. Tereshchenkova, V. Firsova, Y. Trifanenkova
*Academician S. Fyodorov «Eye Microsurgery» Federal State Autonomous Institution (Kaluga Branch), Kaluga, Russia*

**Introduction/Background:** A new one-stage approach to the treatment of manifestation stage AP-ROP by primary early vitrectomy was introduced into clinical practice in Eye Microsurgery Kaluga branch due to the developed prognostic model.

**Methods:** In 2013 to 2018, primary early 3-ports 27 g lensspared vitrectomy was performed in 34 children with manifestation stage AP-ROP who made up the main group. In 2008 to 2012, 3-ports 27 g lens spared vitrectomy was carried out as the second stage after transpupillary LC in 31 children with manifestation stage AP-ROP because of disease progression after LC. These children formed a control group.

**Results:** In the main group complete intraoperative removal of the pathological vitreous body resulted in a greater cases of complete retina adhesion (79.5% in the main group as compared with 54.8% in the control group), which contributed to the correct vitreoretinal interface formation. In the main group, the foveolar reflex was determined in 70.6%, whereas in the control group only in 38.7%.

**Conclusions:** Primary early vitrectomy, conducted on the basis of the developed prognostic model, in children with manifestation stage AP-ROP in the absence of previous transpupillary LC allows in one intervention to eliminate vitreoretinal traction, remove fibrovascular tissue, conduct dosed endolaser coagulation of the avascular retina, which creates conditions for the correct vitreoretinal interface formation and the of visual functions development.

**Acknowledgements:** No.

**Keywords:** AP-ROP, manifestation stage, early primary vitrectomy

### PO30
### PROBLEMS OF THE HEART SEEING IN THE EYES: KEARNS-SAYRE SYNDROME

M.L. Redon Soriano, M. Castellote Franco
*Clinica Oftalmologica, Castellon, Spain*

**Introduction/Background:** Kearns-Sayre Syndrome (KSS) is a mitochondrial disorder characterized by the triad of onset before age 20, chronic progressive external ophthalmoplegia and pigmentary retinopathy. Other findings can include complete heart block[1].

**Methods:** A 13-years-old Spanish girl comes to the clinic complaining of unilateral ptosis in her left eye over the past two years. She denies any history of trauma in that eye.
Visual acuity is 0,9 in her right eye (OD) and 1 in her left eye (OS). She has bilateral ptosis more pronounced in her OS and external ophthalmoplegia. The fundus examination of both eyes shows bilateral pigmentary retinopathy. Despite the fact that she doesn't complain of nyctalopia, the visual field was affected in both eyes.
Following the initial assessment, we referred the patient to the cardiologist who confirmed complete blockage of the right branch of the bundle of His. Furthermore, the Genetic test confirmed the mitochondrial disease.

**Results:** KSS is a potentially life-threatening disease and early diagnosis is crucial in preventing such an outcome. The most common cardiac feature is atrioventricular block (AVB) while pacemaker implantations are recommended for KSS patients with advanced AVB[2].

Although, there are no definitive treatments available, annual surveillance for comorbidities is required.

Ocular manifestations like diplopia can be treated with prisms and ptosis surgery (to clear the visual axis) can be done in severe cases keeping in mind the high risk of exposure keratopathy.

**Keywords:** Kears-Sayre Syndrome, Mitochondrial disorder, Pigmentary retinopathy

POSTER LIST

## Topic: Paediatric diseases

### PO31
### RARE CASE OF CHORIORETINAL COLOBOMA

K. Hrizhymalska, O. Andrushkova, N. Malachkova
*VNPMMU, Vinnytsia, Ukraine*

**Introduction/Background:** Congenital chorioretinal coloboma is a pathlogy wich appearance in the population 0.5-0.7 per 10,000 newborns. Pathology is a genetically determined disease and is inherited in an autosomal recessive manner. The diagnosis is often made by accident, as patients may not have complaints.

**Methods:** A standard ophthalmologic examination was performed: visiometry, refractometry, retinoscopy, perimetry, as well as fundus photography, OCT, ultrasound examination, examination for TORCH infections.

**Results:** A patient, a boy of 14 years old, noticed discomfort when working at close range.Complaints of visual fatigue, visual acuity of 20/20 in both eyes, mild hyperopic astigmatism, a small scotoma on the right in the field of view, OCT and ultrasound - a defect in the chorioretinal layers of 1.6 / 3.4 / 3.2 mm

TORCH- negative results.

**Conclusions:** All data indicate the presence of a chorioretinal coloboma in the patient, which was detected by chance. Defects are present on both eyes, but to varying degrees of manifestation.

As a result this pathology needed only observation.

Was prescribe glasses for correction of refraction error.

**Acknowledgements:** Since the disease is genetic in nature, it makes sense to examine the next of kin.

**Keywords:** Congenital disorders, Chorioretinal coloboma

### PO32
### CLINICAL AND IMAGING FEATURES IN RETINOCHOROIDAL AND OPTIC NERVE COLOBOMAS: A CASE SERIES

I. Garcia Basterra [1], J. Díaz Bernal [1], J. Mora Castilla [2], A. Moreno Guerrero [2]
*[1] Hospital Clínico Virgen de la Victoria, Malaga, Spain, [2] Clínica Antonio Moreno, Malaga, Spain*

**Introduction/Background:** Coloboma is though to be secondary to incomplete closure of the embryonal fissure resulting in defects or absence in the cornea, lens, optic nerve and/or uvea since birth. We report clinical and imaging features of a case series with isolated chorioretinal and optic nerve colobomas.

**Methods:** Clinical and imaging features of 7 eyes of 4 patients (3 were bilateral) with coloboma of the choroid and optic nerve were characterized. During routine eye examination, the patient underwent visual acuity test, biomicroscopic,dilated fundus examinationand optical coherence tomography (SS-OCT).

**Results:** Dilated fundus examination, retinography and optomap revealed a complete and partial coloboma in at least one eye in all patients. Swept-source optical coherence tomography analysis was performed and revealed circumscribed schisis areas and abnormal retinal thinning in all affected regions.

**Conclusions:** Although being a rare congenital disorder with low prevalence, coloboma is a sight-threatening entity. It is important to make a good differential diagnosis, which includes other entities that affect optic nerve like morning glory disc anomaly, optic nerve hypoplasia or megallopapilla. The initial effect of optic nerve colobomas on visual acuity is variable. However, visual disability can result depending on the size of the coloboma and its localization.
Future management of coloboma may be linked to new molecular pathways that control optic fissure closure that have been identified in recent research.

**Acknowledgements:** None

**Keywords:** Coloboma, SS-OCT

## Topic: Paediatric diseases

### PO34
### HAMARTOMA OF THE RETINA AND RETINA PIGMENT EPITHELIUM IN A 6-YEAR-OLD GIRL - CASE REPORT

D. Borowicz [1], K. Biela [1], W. Kedziora [1], E. Koman-Wierdak [2], K. Nowomiejska [2], R. Rejdak [2]
*[1] Department of Ophthalmology, Zamosc, Poland, [2] Department of General Ophthalmology, Medical University of Lublin, Lublin, Poland*

**Introduction/Background:** Combined hamartoma of the retina and retina pigment epithelium (CHRRPE) is a rare, benign tumor usually one-sided, which can cause significant painless loss of vision. Histologically consists of pigmented, glial and vascular cells in various proportions. CHRRPE is often located near the optic nerve (76%), macula (17%) and in the peripheral retina (17%).

CHRRPE is most commonly found in isolated form, but there have also been reports describing association with type 1 and type 2 neurofibromatosis. CHRRPE is usually characterized by varying amounts of pigmentation, vascular tortuosity and the formation of epiretinal membranes.

**Methods:** In our abstract we present the case of a 6-year-old girl who was diagnosed with CHRRPE.

**Results:** The clinical symptoms: painless vision loss and strabismus, combined with diagnostic imaging using ultrasound and optical coherent tomography make it possible to diagnose the disease.

**Conclusions:** In conclusion, patients with CHRRPE involving the macular region are at high risk of poor visual acuity. Differentiation should include retinoblastoma, melanoma, RPE adenoma, RPE adenocarcinoma.

**Acknowledgements:** None

**Keywords:** Hamartoma of the retina, Strabismus

### PO35
### BEHCET DISEASE DIAGNOSED IN 11 YEARS OLD BOY

E. Balak, B. Biziorek, R. Rejdak
*General Ophthalmology, Lublin, Poland*

**Introduction/Background:** Behcet disease is very rare in Poland systemic vasculitis. Most often persons between 20-30 years old are affected. The men two times more often than women. The symptoms are connected with many systems and organs. It's recurrent lesions of skin and mucous membrane, abnormality in: visual system, digestive system, blood vessel system and central nervous system.

**Methods:** General symptoms which appear during 3-years observation was: periodic fever, alopecia areata, imbalance, skin rash in the area of left knee, recurrent oral mucosal ulcerations, dermatography, stomachache. In laboratory tests we've found antygen HLA B51, without any abnormalities in blood tests. The pathergy test was negative. Computed tomography with contrast of central nervous system showed localised vascular anomaly in cerebral vessels in area of temporal left lobe. In ophtalmologist examination we observed recurrent settlements, exudation in aterior chamber and posterior synechiae in right eye. In right eye we observed elevated optic nerve disc and recognised drusen confirmed in ultrasound examination. In left eye we found core fibers which are connected with visual field defect and fewer nerve fiber seen in OCT scan.

**Results:** Regarding all this clinical changes and presence of HLA B51 the ocular type of Behcet disease with skimpy manifestation of skin and mucous membrane lesions was diagnosed.

**Conclusions:** Behcet disease affects children very rare.Diagnostic criteria are fulfilled by only 3%-8% of all patients below 18 years old.

**Keywords:** Behcet Disease, Uveitis, Diagnostic criteria

POSTER LIST

## Topic: RVO

### PO37
### REAL WORLD OUTCOMES OF OZURDEX FOR RETINAL VEIN OCCLUSION WITH MACULAR OEDEMA – 2 YEAR DATA

C.H.K. Wu, A. Bagchi, R. Muniraju
*Epsom and St Helier University Hospitals NHS Trust, London, United Kingdom*

**Introduction/Background:** Retinal vein occlusion (RVO) is the second most common retinal vascular disease after diabetic retinopathy. Following the introduction of intravitreal therapies, the treatment option for macular oedema (MO) in RVO has expanded. To date, we have not found studies comparing real-world outcomes of patients who have switched from Ozurdex to anti-vascular endothelial growth factor (anti-VEGF). We aim to evaluate 2 years of real-world outcomes of patients with MO secondary to RVO treated with Ozurdex alone or combined Ozurdex and anti-VEGF.

**Methods:** A retrospective analysis was carried out on patients with MO secondary to RVO. Baseline best corrected visual acuity (BCVA), central retinal thickness (CRT), intraocular pressure (IOP) were compared.

**Results:** 97 eyes (4 HRVO, 46 BRVO, 47 CRVO) were treated with ozurdex. Mean BCVA was similar in BRVO compared to CRVO at 12 months (58 vs 59) and at 24 months (60 vs 64). At 12 months, 29% gained 15 letters and 36% gained 10 letters, whilst 21% lost more than 15 letters. Less than 25.5% had a rise in IOP over 25mmHg which is similar to the GENEVA study. Two patients required cataract operation within the first year of treatment. Two patients with CRVO required PRP. 25% of patients did not respond to ozurdex treatment requiring a switch to anti-VEGF.

**Conclusions:** Our results are similar to outcomes of the GENEVA study. Although ozurdex alone can reduce risk of vision loss, one in four patients may require a change in treatment to anti-VEGF.

**Keywords:** Retinal vein occlusion, Macular oedema, Ozurdex, Anti-VEGF, Intraocular pressure

### PO38
### REAL WORLD OUTCOMES OF INTRAVITREAL ANTI-VEGF FOR RVO WITH MACULAR OEDEMA – 1 YEAR DATA

C.H.K. Wu, A. Bagchi, R. Muniraju
*Epsom and St Helier University Hospitals NHS Trust, London, United Kingdom*

**Introduction/Background:** RVO is the second most common retinal vascular disease after diabetic retinopathy. Although landmark clinical trials have shown that anti-VEGF monotherapy is a promising treatment, the number of injections required in first year of treatment and late neovascular complications especially in central retinal vein occlusion (CRVO) can be challenging. We aim to evaluate the real-world outcomes of patients with RVO with macular oedema (MO) treated with aflibercept or ranibizumab.

**Methods:** Retrospectively analysing patients with RVO with MO who were treated with either monthly 2mg aflibercept or 0.5mg ranibizumab intravitreal injection. Best corrected visual acuity (BCVA) and central retinal thickness (CRT) were evaluated at baseline and at 12 months. Progression into neovascular complications requiring PRP was also analysed.

**Results:** A total of 68 eyes (7 HRVO, 41 BRVO, 20 CRVO) were treated with anti-VEGF (56 aflibercept, 12 ranibizumab). Patients received an average of seven injections (range 2 to 9) over the 12 month period. Anti-VEGF treatment showed 19.6% improvement of BCVA in BRVO and 42.7% in CRVO. 45.4% of patients who received aflibercept had 15 letters gain compared to 66.7% who had ranibizumab. However, 16.1% had 15 letters loss after a year of treatment, all of which after aflibercept injections. 9 CRVO patients required PRP.

**Conclusions:** Our results are similar to landmark trials but requiring fewer numbers of injections. There was delayed onset of neovascular complications in ischaemic CRVO.

**Keywords:** Retinal vein occlusion, Macula oedema, Anti-VEGF, Panretinal photocoagulation, Neovascular complications

## Topic: Vitreoretinal surgery

### PO40
### CLINICAL OBSERVATION OF TREATMENTS FOR RETINAL ARTERIAL MACROANEURYSM

L. Xu [1], X. Zhiang [1], G. Zhang [1], Q. Liu [1], B. Fu [1]
*Shenyang Fourth People Hospital, Shenyang, China*

**Introduction/Background:** AIM: To analyze the treatment of retinal arterial macroaneurysm (RAM) and its efficacy.

**Methods:** A total of 26 diagnoses of retinal arterial microaneurysm made by the Fourth People's Hospital of Shenyang between June 2016 and June 2018 were reviewed following discharge. Various treatment strategies for different types, and complications, of RAM were utilised, with the clinical, anatomical, and functional outcomes being analyzed retrospectively.

**Results:** Visual prognosis and its efficacy were due to the scope and location of exudation or heamorrhage, disease duration and treatments employed. Hemorrhagic RAM, edema or hemorrhage affects the macular region and long disease duration can cause poor prognosis. Vitrectomy with subretinal air tamponade has strong functional and anatomical effects on submacular haemorrhages within 3 weeks.

**Conclusions:** A suitable, individually adapted treatment of retinal aortic aneurysm should be chosen to achieve better prognosis.

**Acknowledgements:** AIM: To analyze the treatment of retinal arterial macroaneurysm (RAM) and its efficacy.

**Keywords:** Retina arterial microaneuryzm, vitrectomy surgery

### PO41
### NOVEL TECHNIQUE FOR THE REMOVAL OF POSTERIOR INTRAOCULAR FOREIGN BODIES

G. Romeo, M. Prantera, M. Cirone
*Milazzo Hospital ASP Messina, Messina, Italy*

**Introduction/Background:** The surgical approaches for posterior segment intraocular foreign bodies (IOFB) include vitrectomy and extraction using a magnet, forceps or active suction. Some authors report an anterior approach using the posterior capsular defect in traumatic cataracts(1,2). We present a novel surgical technique.

**Methods:** A 52-year-old man with a preretinal IOFB with a scleral entry site at a distance of 4mm from the limbus and with a cataract that was not trauma-related, was admitted to the hospital. We performed phacoemulsification , a 25-g pars plana vitrectomy, a posterior continuous curvilinear capsulorhexis. Subsequentquently, using a chandelier-assisted handshake technique with forceps we removed the IOFB through the main corneal port and finally we placed the lens in the bag.

**Results:** The duration of the procedure took about 50 minutes, the IOFB was removed successfully and there were no early or late postoperative complications. The patient gained a good visual acuity.

**Conclusions:** According to our experience an anterior approach in selected patients is possible and the avoidance of extension of the scleral wound allows for minimal inflammatory reaction and prompt recovery.

**Acknowledgements:** 1. Luo Y, Wang Z, Lin X, Hu S. Removal of intraocular foreign bodies with intraocular magnet. Yan Ke Xue Bao. 2003;3:142–145.

2. J. H. Gonzalez-Cortes et al..Invasive Surgery for the Removal of Posterior Intraocular Foreign Bodies. J Ophthalmic Vis Res. 2017 Apr-Jun; 12(2): 236–240.

**Keywords:** INTRAOCULAR FOREIGN BODY, VITRECTOMY,ANTERIOR APPROACH, CHANDELIER, HANDSHAKE TECHNIQUE

POSTER LIST

## Topic: Vitreoretinal surgery

### PO42
### POSTOPERATIVE EPIRETINAL MEMBRANE AFTER INTERNAL LIMITING MEMBRANE PEELING IN PARS PLANA VITRECTOMY

J. Providencia [1], J. Chaves [1], M. Neves [1], P. Fonseca [1], F. Henriques [1], M. Alfaiate [1], J. Figueira [1,2]
*[1] Centro Hospitalar e Universitário de Coimbra, Coimbra, Portugal, [2] Faculdade de Medicina da Universidade de Coimbra, Coimbra, Portugal*

**Introduction/Background:** To compare the incidence of postoperative epiretinal membrane (ERM) after pars plana vitrectomy for rhegmatogenous retinal detachement with and without primary internal limiting membrane peeling (ILM).

**Methods:** Retrospective analysis of consecutive cases of rhegmatogenous retinal detachment in which pars plana vitrectomy was performed between January and June 2018. Pars plana vitrectomy was combined with ILM peeling in selected cases. Tamponade was performed with 20% SF6 or Silicone Oil. In both study groups, in case of proliferative vitreoretinopathy, retinectomy and subretinal membranes' extraction were performed if necessary. Main outcome was the ERM formation during the follow up period.

**Results:** Sixty-seven patients were included (43 ILM peeling group and 24 controls), mean age 65,4±12,6 years and 56,5±13,3 years, respectively. The mean follow-up was 10.2 months ± 2.3 in the ILM group and 11.4 ± 2.3 months in the control group. The macula was detached in all cases. There were no significant differences between the two groups with regard to sex (p=0.56), mean duration of retinal detachment (p=0.34), mean number of retinal breaks (p=0.48), and grade of proliferative vitreoretinopathy (p=0.45). ERM formation was observed in three eyes of the control group. No ERM formation was seen in the group in which ILM peeling was performed (p=0.05).

**Conclusions:** ILM peeling during pars plana vitrectomy for the treatment of retinal detachment may prevent ERM formation without negatively affecting the surgery success.

**Keywords:** Peeling, Epiretinal membrane, post vitrectomy

### PO44
### SURGICAL ALTERNATIVE FOR A REFRACTORY MACULAR HOLE

S. Mora Sáez, M. Mascarell Vidal, E. Etxabe Agirre, M. L. Sandino Pérez, F. Ramos Martí
*Hospital General Universitario de Castellón, Castellón, Spain*

**Introduction/Background:** Using platelet-rich plasma (PRP - Endoret®) as surgical alternative to treat refractory macular hole (MH) after failing traditional procedures as pars plana vitrectomy with internal limiting membrane (ILM) peeling and gas tamponade or the inverted ILM flap technique.

**Methods:** This is a retrospective study which includes two patients with refractory MH treated with PRP. To develop it blood must be drawn from the patient and centrifugate before surgical intervention. After checking ILM had been correctly removed, an ILM autograft was done and Endoret® was introduced into MH. One patient spent ten minutes in supine position, while the other one spent two hours.

**Results:** Macular hole remained open in the patient who spent ten minutes in supine position. However, in the other patient who spent two hours, MH was closed next day until today.

**Conclusions:** In our case using Endoret® and remaining in the supine position during 2 hours may be a real surgical alternative to resolve refractory macular holes. It would be interesting to go on with this surgical technique in this type of patients to verify it.

**Acknowledgements:** Dr. Ramos for his dedication and valuable review.

**Keywords:** refractory macular hole, platelet-rich plasma, ILM autograft

## PO45
## STAGED TREATMENT OF OCULAR TRAUMA IN ELDERLY

E. Dhrami-Gavazi [1], J. Gavazi [1], W. Lee [2], I. Moradi [1], J. Chess [1]
*[1] Retina Group, PC, New York, USA, [2] Columbia University, New York, USA*

**Introduction/Background:** Globe ruptures could be complicated by suprachoroidal hemorrhage, which is treated 1-2 weeks after the primary globe repair, via external drainage sclerotomies and pars plana vitrectomy with gas or silicone oil tamponade.

**Methods:** Analysis of clinical-surgical course.

**Results:** A 71 year old lady with diabetes, hypertension, anxiety and panic attacks fell at home, hitting the left side of her face on concrete. A head CT scan revealed orbital floor fracture without entrapment, nerve contusion, retrobulbar and suprachoroidal hemorrhage. Visual acuity was possible light perception in her left eye, intraocular pressures was 31 mmHg, slit-lamp evaluation revealed chemosis, uveal protrusion superiorly, hyphema, flat anterior chamber and subluxed, iris fixated intraocular lens. Patient was deemed inoperable by the maxillofacial team. She underwent primary globe repair, suturing what appeared to be a previous phaco-trabeculectomy wound. Anterior chamber re-formed and ultrasound revealed total suprachoroidal hemorrhage with absence of vitreous cavity. Patient underwent drainage of liquified blood 10 days later via 2 vertical sclerotomies. Visual acuity improved to 20/200 but inferior retina remained detached. She underwent vitrectomy with gas tamponade. Retina flattened and acuity remains 20/40 5 months later.

**Conclusions:** Treatment of globe rupture, suprachoroidal hemorrhage and retinal detachment in this patient with a complicated psychiatric history was individualized by staging it into brief interventions.

**Acknowledgements:** N/A

**Keywords:** Ocular trauma, Suprachoroidal hemorrhage, Retinal detachment, Staged

## Topic: Other retinal disorders

### PO49
### RETINAL DETACHMENT IN THE COURSE OF LONG-TERM EYE SARCOIDOSIS - CASE REPORT

Jan Ostrowski [1], Karolina Katska [5], Beata Gajda-Derylo [1], Dominika Wrzesinska [1], Katarzyna Nowomiejska [1,3], Robert Rejdak [1,2,4]
*[1] Department of General Ophthalmology, Medical University in Lublin, Lublin, Poland, [2] European School for Advanced Studies in Ophtalmology (ESASO), Lugano, Switzerland, [3] Centre of Ophthalomlogy, Institutefor Ophthalmic Reserch, University of Tubingen,, Thubingen, Germany, [4] Mossakowski Medical Research Center Polish Academy of Science, [5] Department of Diagnostics and Microsurgery of Glaucoma, Medical University in Lublin, Lublin, Poland*

**Introduction/Background:** Background Sarcoidosis is a chronic systemic granulomatous disorder of unknown etiology. According to the literature the prevalence of ocular manifestation of sarcoidosis ranges from 13 to 79%. The main symptoms include dry eye, uveitis and conjunctival nodules.

**Introduction** The aim of our study is to present two clinical cases of the retinal detachment in young patients (23-30yo.) with a history of sarcoidosis.

**Materials And Methods** A retrospective analysis was made of clinical data of two patients diagnosed with uveitis in a course of long term sarcoidosis.

**Results** Both patients reported deterioration of the visual acuity (VA). They were diagnosed with sarcoidosis. The clinical examination revealed uveitis. In order to exclude other causes of inflammation, laboratory tests were carried out and the results was negative. Systemic corticosteroids therapy was applied. The examination showed exudative retinal detachment in both cases. Patients were selected for vitrectomy combined with cataract surgery. Postoperative stabilization of visual acuity was achieved. Patients are still under clinical observations.

**Conclusions** Sarcoidosis is a systemic disease that requires multi-disciplinary approach in order to achieve the best treatment results. The primary aims for management of ocular sarcoidosis are to restore vision and to prevent complications from related inflammation. Sarcoidosis can affect all parts of the eye, and in rare cases may cause retinal detachment, which requires surgery to prevent permanent vision loss.

**Keywords:** sarcoidosis, uveitis, retinal detachment, vitrectomy

# 19th ESASO RETINA ACADEMY

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USEFUL INFORMATION

## Organizing Secretariat

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**General information, registration and abstract:** congress.retina@esaso.org
*(Accommodation is not included in the registration fee)*

## Congress venue

Medical University of Warsaw
61 Zwirki i Wigury Str.
02-091 Warsaw – Poland

**Banacha Campus - Didactic Centre entrance**

Banacha Campus, most often identified with the Medical University of Warsaw, is located in a large area between Banacha, Żwirki i Wigury, Księcia Trojdena and Pawińskiego streets.
Here is the Rectorate Building that houses Dean's Offices for the First and the Second Faculty of Medicine, The Faculty of Medicine and Dentistry and the Faculty of Health Sciences.
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### Registration desk opening hours

| | |
|---|---|
| Friday 15, November 2019 | 08.00-17.00 |
| Saturday 16, November 2019 | 08.30-13.00 |

### Slide preview room opening hours

| | |
|---|---|
| Friday 15, November 2019 | 08.15-17.00 |
| Saturday 16, November 2019 | 08.30-13.00 |

## Registration Information

| | |
|---|---|
| DOCTORS | € 450,00 |
| RESIDENTS and PHD STUDENTS | € 250,00 |
| POLISH PHD/OPTIC CONGRESS FEE | € 350,00 |
| MASTERCLASS | included |

Registration fees include:
- Admission to the scientific sessions
- Masterclasses
- Congress kit
- Certificate of attendance and UEMS certificate (sent by email)
- Access to the exhibition and poster area
- Box Lunch and Coffee breaks

## Payments

Payments onsite are possible in cash (in Euro) or by credit card (American Express, VISA, Eurocard/Master Card).

# 19th ESASO RETINA ACADEMY

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## Attendance Certificates

Complete our customer satisfaction that you will receive by email after the Congress! You will be able to download your certificate of attendance and your UEMS certificate.

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Free Wi-Fi is available in the Congress area.
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After connecting to the network please open the browser and then any website.
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Please report to the registration desk first to collect your delegate badge. Posters should be hung between 8:00 am to 9:00 pm on Friday 15th November 2019, they should remain hung and available to be viewed until the end of the Congress. Please remove your poster by the end of the Congress on November 16th, 2019. After this date, remaining posters will be removed.

## Accepted Abstracts

Accepted abstracts to the ESASO Retina Academy will be published on the final programme.

- Accepted abstracts will be presented as posters
- All posters must be available for delegates to be viewed during the whole congress
- Winners of the 1st place for the best poster and the best case study will make a brief oral presentation
- The three best posters and the three best case studies will be awarded with a Certificate.

## Congress language

The official congress language is English.

## Coffee and Lunch breaks

Coffee breaks will be offered at the Exhibition/Poster area (Foyer, floor 1) .
**Friday 15 November 2019**
11.00-11.30 Coffee Break
12.30-13.30 Lunch Sponsored sessions
**Saturday 16 November 2019**
10.21-10.51 Coffee Break

## Insurance

Organizers are not responsible for individual medical, travel or personal insurance. Delegates are advised to make their own personal insurance arrangements.

## No-Smoking

Smoking in the meeting area is not allowed.

## Mobile phones

Delegates are kindly required to set their mobile phones on silent mode in the halls where scientific sessions are being held.

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I. Chowers,Israel, R. Rejdak, Poland, A. Matysik-Wozniak, Poland
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### EVERYTHING ABOUT CSC
T. Avitabile, Italy, M. Battaglia Parodi, Italy, B. Falcomatà Italy

### INTEGRATION OF NGENUITY AND CVS: DATAFUSION
A. Kaminska, Poland, K. Nowomieska, Poland, R. Rejdak, Poland, M. Toro, Poland
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### SUBTHRESHOLD MICROPULSE LASER APPLICATIONS
F. Boscia Italy, P. Lanzetta, Italy

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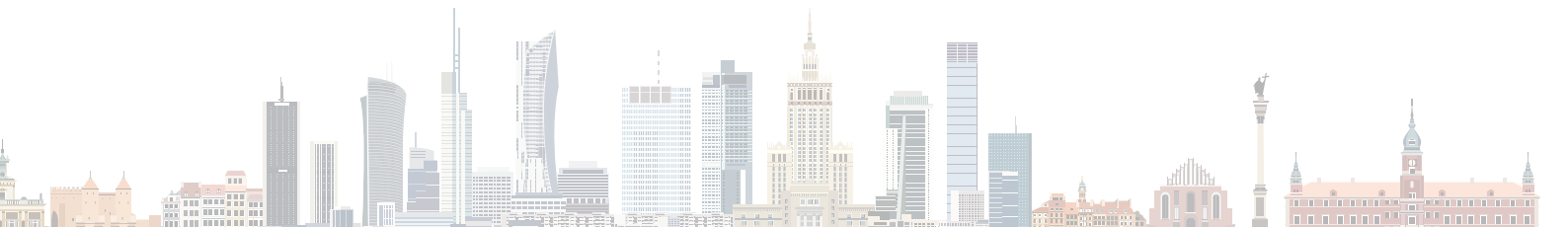

# 19th ESASO RETINA ACADEMY

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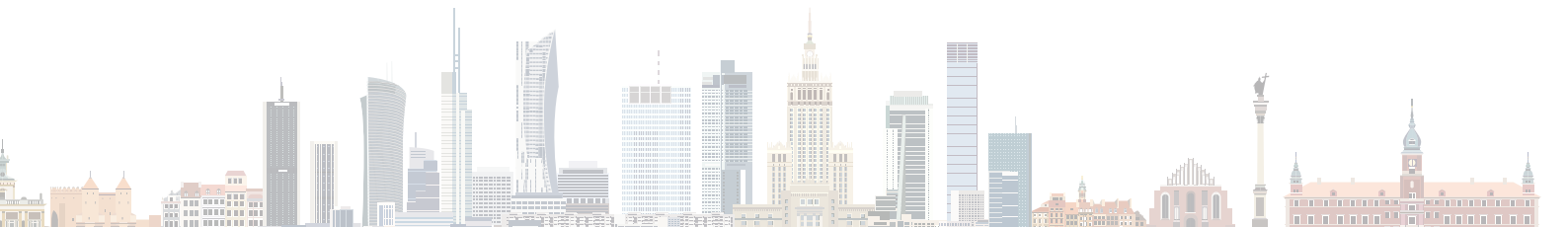



# Thank you from ESASO



This event would not have been possible without the dedication, commitment and enthusiasm of speakers, delegates, grant givers and organisers.

The Session Chairs provided an exceptional contribution in terms of scientific content, by developing an outstanding programme and liaising with speakers in the preparation of their presentations. As leading retina specialists, their expertise has been paramount in the preparation and execution of this meeting.

ESASO would also like to thank the speakers for their dedication in developing and delivering their presentations, chairing the overall congress and the individual sessions.

Their entire contribution has been of the utmost quality and it is an honour to host so many talented retina specialists here in Warsaw.

A special thanks goes to those authors who submitted their abstracts and case studies to share their experience and to enrich the scientific programme for all delegates.

At last, ESASO thanks all the delegates for travelling from all over the world to attend this congress: we hope to see you again!

## Delegate Countries

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