International Ophthalmology and Ocular Oncology Conference

24-26 April 2025

Timisoara, Romania
Timisoara Convention Center

Abstract Book

Abstract Book

The International Ophthalmology and Ocular Oncology Conference, 24-26 Aprilie 2025

ISSN 3091 – 1184

ISSN-L 3091 - 1184

Ocular surface squamous neoplasia (OSSN): diagnostic and therapeutic approach

Amel Chebbi

The term “Ocular surface squamous neoplasia” refers to neoplastic entities ranging from dysplasia, intraepithelial neoplasia, to squamous cell carcinoma. It’s a rare tumor that affects a larger amount of people, and to the repeated solar exposition. Their management is based on surgery associated or not to topical chemotherapy and radiotherapy. This management has benefited from new ways of diagnosis and treatment.

Prevention remains an important part of the management, along with the early clinical, paraclinical or anatomopathological analysis of all the suspect lesions of the conjunctiva, in order to help improve their prognosis.

The Role of Ultrasound in Ocular Oncology

Dr. Biljana Kuzmanovic Elabjer

Ultrasound plays a vital role in ocular oncology, offering precise detection, localization, and delineation of intraocular and orbital lesions. B-scan ultrasonography, utilizing 10, 15, 20, and 50 MHz probes, is instrumental in evaluating these pathologies. The 20 MHz probe provides superior resolution for retinal and choroidal lesions, though at the expense of reduced penetration depth. For anterior segment tumors, ultrasound biomicroscopy (50 MHz) offers enhanced resolution but is limited to a penetration depth of approximately 5 millimeters. Conversely, lower-frequency probes (10 and 15 MHz) are preferred for orbital pathology due to their superior tissue penetration.

Axial, transverse, and longitudinal scans precisely delineate lesion shape and extent, facilitating the diagnosis of characteristic ocular tumors such as choroidal melanoma. When this malignancy breaches Bruch's membrane, it presents with a distinctive mushroom-shaped appearance.

For comprehensive tissue characterization, standardized A-scan echography, performed with an 8 MHz probe, remains indispensable. Pioneered by Prof. Karl Ossoinig in 1963, this technique—exclusively available in Quantel Medical Lumibird machines—enables the differentiation of ocular malignancies by assessing tissue reflectivity and unique echographic patterns. Each malignant ocular and orbital lesion exhibits a distinct echographic signature, allowing for accurate diagnosis.

Using the acoustic criteria established by Prof. Ossoinig, lesions can be distinguished based on structure, reflectivity, blood flow detectability, and consistency. For instance, a choroidal nevus appears as a solid lesion with a slightly irregular structure, very high internal reflectivity, and a single negative spike representing a dilated blood vessel, but without detectable blood flow. In contrast, malignant choroidal melanoma is a regularly structured solid lesion with low to medium internal reflectivity (2–50%) and detectable blood flow.

By integrating B-scan imaging for structural assessment with standardized A-scan for tissue differentiation, ultrasound remains an invaluable tool in ocular oncology.

Endoresection of Large Uveal Melanomas in Hungary: Results of an International Collaboration Established in 2023

Mariann Fodor[1], Nikolaos E. Bechrakis[2], Miltiadis Fiorentzis[2], Árpád Kovács3, Mihály Simon[3], Ervin Berényi[4], Éva Surányi[1]

[1] Department of Ophthalmology, University of Debrecen, Hungary
[2] Department of Ophthalmology, University Hospital Essen, Germany
[3] Department of Oncoradiology, University of Debrecen, Hungary
[4] Department of Radiology, University of Debrecen, Hungary

Background: The treatment of uveal melanoma typically includes irradiation, surgical excision, and enucleation. Managing large uveal melanomas poses significant challenges due to the severe side effects of irradiation, which is only available in specialized oncological ophthalmology centers. Since 1986, Hungary has utilized Ru-106 brachytherapy for small and medium-sized tumors, while large uveal melanomas were treated exclusively by enucleation. In 2023, a collaboration between the University of Essen and the University of Debrecen was established to develop standard operating procedures for treating large uveal melanomas using neoadjuvant radiotherapy and endoresection. The first endoresection procedure in Hungary was performed on December 7, 2023, at the University of Debrecen.

Methods: This study reports the outcomes of the newly introduced endoresection technique for large uveal melanomas at the University of Debrecen. The study cohort consisted of 18 patients treated between December 7, 2023, and February 14, 2025. Patient demographics, tumor characteristics, and post-treatment outcomes, including visual acuity and eye preservation rates, were analyzed.

Results: Eighteen patients (12 men, 6 women) with a mean age of 52.4 years underwent the combined neoadjuvant radiotherapy and endoresection procedure. All patients had large uveal melanomas unsuitable for Ru-106 brachytherapy due to tumor thickness exceeding 7 mm. The mean tumor thickness was 8.98 mm, and the mean basal diameter was 13.84 mm. After an average follow-up of 6.3 months, all eyes were salvaged, and the patients achieved a mean visual acuity of 0.28 (SD 0.27).

Conclusion: This study demonstrates the successful establishment of a new treatment approach for large uveal melanomas in Hungary through international collaboration. Although endoresection after radiotherapy cannot prevent metastasis, it provides significant quality-of-life improvements by preserving eyes with functional vision. These findings emphasize the value of international partnerships in advancing ophthalmic oncology care.

Principles for the Resection of Malignant Lesions of the Eyelids and Periocular Region

Bence Lajos Kolozsvári, Mariann Fodor
University of Debrecen, Department of Ophthalmology, Hungary

Malignant lesions of the eyelids and periocular region pose a significant risk of orbital invasion and metastatic spread. The primary objective of treatment is the early and complete surgical excision of the tumor to ensure the best oncological outcomes. However, reconstruction of the affected area presents challenges in maintaining proper ocular function while achieving satisfactory aesthetic results.

Incomplete resection carries a heightened risk of tumor spread during reconstruction, rapid recurrence, and a decreased survival rate. To mitigate these risks, histologic margin control prior to reconstruction is crucial. Intraoperative frozen section analysis has been demonstrated, both in the literature and in our findings, to be a highly effective method for ensuring complete tumor removal. This approach minimizes the risk of residual disease, improves surgical outcomes, and enhances patient prognosis.

Ruthenium-106 brachytherapy for uveal melanoma

Eva Suranyi
University of Debrecen, Department of Ophthalmology, Hungary

Uveal melanoma is the most common primary intraocular tumor in adults with an incidence of 7-9 cases per 1 million person-years. The therapy of uveal melanoma is mainly radiotherapy and European countries mostly use Ru-106, a beta-ray emitting isotope containing plaques for brachytherapy. Beta radiation is a medium-energy radioactive radiation which due to the low penetration of electrons has a rapid dose fall-off in tissues. That is why it can be used only for the treatment of small and medium-sized melanomas up to 7 mm in order to achieve 100 Gy to the tumor apex (tumoricidal dose) without exceeding 1000 Gy to the tumor base (scleral maximum). Low tissue penetration has its advantages as well: sparing the surrounding healthy tissue inside and around the eye, important for radiation protection of the medical personnel who handle the applicator, only minor safety precautions have to be undertaken, and reprocessing prior to usage can be easily performed in an autoclave. Technically, radioactive applicators can be applied to tumors in almost all locations in the eye except for tumors that grow over or into the optic nerve. Ru-106 brachytherapy for uveal melanoma provides excellent rates of local control and eye preservation, over 96% of the treated tumors respond by a decrease in tumor height. Complications can be: cataract, radiation retinopathy and maculopathy, radiation optic neuropathy, vitreous hemorrhage, iris neovascularization leading in most cases to neovascular glaucoma, scleral melting, and temporary diplopia.

Challenges in the diagnosis and treatment of Retinoblastoma

Camelia Margareta Bogdănici 1,2, Irina Andreea Pavel1,2, Vlad Constantin Donica1
1. Universitatea de Medicină și Farmacie „Grigore T. Popa" Iași, România
2. Clinica I Oftalmologie, Spitalul Clinic Județean de Urgență „Sf. Spiridon", Iași, România

Aim:
Retinoblastoma, the predominant ocular malignancy in pediatric populations, is frequently diagnosed at advanced stages due to insufficient genetic screening and inadequate case registration.

Materials and Methods:

A retrospective review was conducted at "Sf. Spiridon" Hospital in Iași, Romania. This study examined 10 patients diagnosed with retinoblastoma, analyzing variables such as gender, age at diagnosis, clinical stage of the tumor, growth patterns, histopathological features, and therapeutic interventions.

Results:
Of the 10 patients, 9 presented with unilateral tumors and 1 with bilateral involvement. The mean age at diagnosis was 25.9 months, with a distribution of 7 males and 3 females. All patients were diagnosed at stage E. Among the patients scheduled for surgical intervention, enucleation with complete tumor excision was successfully performed in 6 out of 7 cases; 2 patients underwent conservative treatment, and 1 patient was lost to follow-up. Histopathological evaluation revealed that 42.85% of the tumors were grade G2, while 57.15% were grade G3. Additionally, optic disc invasion was observed in 71.42% of cases, with further nerve involvement in 40%, and uveal invasion present in 57.14% of cases.

Conclusion:
This study delineates the clinical, histopathological, and therapeutic characteristics of retinoblastoma in a northeastern Romanian cohort. The findings underscore the critical need for improved early screening and genetic testing strategies to reduce the incidence of advanced disease at diagnosis.

Keywords: retinoblastoma, pediatric oncology, tumor staging, early detection

Refractive error after multi-focal lens implantation - surgical management

Dr. Oana Chelaru Postolache, Dr. Cristian Chelaru Postolache
Gauss Ophthalmologic Clinic - Bacau

Purpose: How to solve the refractive error in a patient operated in one eye, to extract the transparent lens in order to reduce diopters.

Results: In this patient was implanted a Multifocal Toric Lens, subsequently remaining a non-satisfactory postoperative residual refraction. Solutions were sought to solve it.

Conclusions: A human error has occurred in choosing a multifocal PK with insufficient toric component to cancel the patient's astigmatism.

The effect of back optic zone diameter on corneal refractive power and corneal higher-order aberesations in orthokeratology for juvenile miophya

Oana Chelaru-Postolache MD.
Cristian Chelaru-Postolache MD.
Ophtalmology Clinic Gauss, Bacau

Abstract

Purpose: To compare axial elongation and corneal refractive power (CRP), corneal higher order aberations(HOA) in myopic juvenil patients wearing orthokeratology lenses with different back optic zone diameters (BOZD).

Methods: Patients aged between 7 and 16 years old, were fitted with 5 or 6,2mm BOZD ortho-K lenses (first group and second group respectively). Axial lenghts (AL) and corneal topography were measured at baseline and during the annual visit. CRP and corneal HOA were compared between the two groups, after one-year treatment.

Results: After one-year treatmentm axial elongation was slower in group A with a difference of 0.15mm. Children in group A showed smaller treatment zone; a greater CRP within the pupillary area and higher increases in cornean total HOA.

Conclusions: Ortho-K lenses designed with smaller BOZD increased myopia control efficacy.

Artificial iris protesis with artificial lens in a case of eye trauma with penetrating scleral wound and posttraumatic aphakia with aniridia

Cristian Chelaru Postolache MD.
Oana Chelaru Postolache MD.
Gauss Ophtalmology Clinic, Bacau

Purpose:

This paper presents the case of a 50 year old woman who suffered a strong eye injury with penetrating scleral wound and posttraumatic aphakia with aniridia.Scleral wound and posttraumatic aphakia with aniridia.

Scleral wound suture was practiced, then in a secondary time, whasing the anterior chamber and Vitrectomy for a hemophtalmus that does not resolve with medication.

Subsequently, Trabeculectomy is performed for posttraumatic secondary Glaucoma.

Conclusion: Finally, we use an artificial lens for the visual and aesthetic rehabilitation of the patient.

Transfiguration

Alina Popa Cherecheanu

Human dirofilariosis is a clinical entity caused by infection with nematodes of the genus Dirofilaria. The traditional picture depicts the disease as a sporadic event associated with the presence of a single immature worm causing a nodular lesion.

I will present a series of ocular dirofilariosis cases in which the predominant and common clinical manifestation was the presence of the worm at the periocular level, but there is a variety of accompanying symptoms depending on the anatomical location and type of disease. Physicians' level of knowledge and distrust influenced the speed with which clinical case management was done.

PRESBYOND, alegerea noastra pentru tratamentul prezbiopiei

Andrei Filip[1]
[1]Ama Optimex Eye Clinic, Bucharest, Romania

Avem peste șase ani de experiență în utilizarea tehnicii laser PRESBYOND pentru tratamentul prezbiopiei. Vă voi explica de ce considerăm această opțiune o soluție prietenoasă, conservatoare și minim invazivă, care oferă un grad ridicat de satisfacție pacienților noștri.

We have over six years of experience using the PRESBYOND laser technique for the treatment of presbyopia. I will explain why we consider this option a friendly, conservative and minimally invasive solution that provides a high degree of satisfaction to our patients.

Diagnosis of Basal Cell Carcinoma recurrence of the orbital area using Optical Coherence Tomography followed by Mohs micrographic surgery - case series

Sinziana Istrate1, Cristina Cotruta1, Emil Ungureanu1
1Clinica Bine, Bucharest, Romania

BACKGROUND
Skin cancers of the periocular area present unique challenges to oculoplastic Mohs surgeons.

OBJECTIVE
The need for precise and high-quality Mohs micrographic surgery (MMS) is paramount because of the complex anatomy, vital structures, and potential threat to vision.

METHODS
A thorough comprehension of anatomy is essential to help predict tumor behavior and ensure successful outcomes for patients, but OCT (Optical coherence tomography) seems a new tool in carefully delineating normal tissue from tumoral bed before Mohs excision.

RESULTS
Tumors occurring at the medial and lateral canthi are of greatest concern for deeper orbital penetration and preserving lid structures are essential for a normal functioning ocular surface.

CONCLUSION
In this case report , we present our experience with OCT imaging of periocular tumors compared to its anatomo-pathological aspect after MMS, including clinical pearls and techniques to aid the Mohs surgeon.

Recurrent Retinal Detachment (Video)

Prof. M. Munteanu, Mh.d C. Rosca,

The authors present the surgical technique for a case of recurrent retinal detachment, including silicone oil removal, retinotomy, retinal reattachment, laser photocoagulation, and reinjection of silicone oil.

Interstitial 3d brachytherapy in malignant conjunctival tumors

Gabriela Murgoi, Lavinia Maria Olteanu, Simona Lupu

Institute Of Oncology Prof. Dr. Alexandru Trestioreanu, Bucharest, Romania; West Eye Hospital, Bucharest, Romania

Introduction

The primary treatment methods for malignant conjunctival tumors include topical chemotherapy and surgical excision. However, when complete excision is not possible due to tumor extension, interstitial brachytherapy is an effective alternative. This technique allows the administration of a high radiation dose to the clinical target volume while minimizing adverse effects on adjacent ocular structures.

Material and Method

We present three cases treated with interstitial brachytherapy. Following clinical diagnosis, tumor excision was performed under local anesthesia; however, due to tumor size and location, complete resection was not feasible. During surgery, two catheters were inserted into the thickness of the upper and lower eyelids, secured with sutures, and maintained throughout the radiation period. The treatment consisted of 10 consecutive fractions of brachytherapy, with a dose of 3 Gray (Gy) per fraction. After completion, the catheters were removed.

Results

This method, less invasive than external beam radiotherapy, was applied to three distinct malignant conjunctival tumors: marginal zone lymphoma, melanoma, and squamous cell carcinoma. In tumors located on the tarsal or bulbar conjunctiva, away from the limbus, treatment outcomes were favorable. However, in perilimbal tumors or those invading deeper corneal layers, prognosis was less favorable due to tumor persistence and recurrence.

Conclusions

Patients were followed up one-month post-treatment and then at three- and six-month intervals to assess scarring and recurrence. Interstitial high-dose-rate brachytherapy provides effective local disease control and excellent cosmetic results, with minimal acute or late toxicities. This technique represents a valuable conservative treatment option for selected cases of malignant conjunctival tumors.

Keywords: Conjunctival Tumors, Brachytherapy, Radiation Therapy, Ocular Oncology, Malignant Melanoma

Visible threats, invisible dangers: the story of ocular melanoma

Gabriela Murgoi, Lavinia Maria Olteanu
Institute Of Oncology Prof. Dr. Alexandru Trestioreanu, Bucharest, Romania; West Eye Hospital, Bucharest, Romania

Introduction
Ocular melanoma is the most common primary intraocular malignancy in adults, affecting the conjunctiva, iris, ciliary body, and choroid. Due to its aggressive nature and potential for metastasis, early diagnosis and appropriate treatment selection are crucial. This study presents clinical cases of conjunctival, iris, and choroidal melanomas, emphasizing modern therapeutic approaches and long-term outcomes.

Material And Method
A retrospective analysis was conducted on patients diagnosed with ocular melanoma in our centers. Treatment approaches included surgical excision, interstitial high-dose-rate brachytherapy, and Gamma Knife stereotactic radiosurgery. Patients were followed for local tumor control, recurrence, and treatment-related complications using clinical ophthalmic examinations, ocular imaging, and systemic evaluations.

Results
Conjunctival melanoma cases exhibited high recurrence rates, with adjuvant brachytherapy proving effective in local tumor control. Iris melanomas were managed with sectoral iridectomy or enucleation, depending on tumor extension. Gamma Knife radiosurgery was successfully applied in small to medium choroidal melanomas, ensuring tumor regression and eye preservation. However, complications such as radiation retinopathy, cataracts, and neovascular glaucoma were observed in some cases, emphasizing the need for close monitoring.

Conclusions
Personalized treatment strategies are essential in ocular melanoma management. While surgical excision remains the standard for conjunctival and iris tumors, interstitial brachytherapy and stereotactic radiosurgery represent effective conservative alternatives for selected cases. Regular follow-up is critical to detect recurrences and manage late complications, optimizing patient outcomes and quality of life.

Keywords: Ocular Melanoma, Brachytherapy, Gamma Knife Radiosurgery, Choroidal Melanoma, Conjunctival Melanoma

Surgical Technique for Scleral Fixation-Case Presentation-

Ovidiu Musat[1,2], Andreea Alexandra Mihaela Musat[2,3], Bianca Ioana Costache[1], Iulia Elena Ionescu[1], Marinescu Ana Maria[1], Vrinceanu Cristina Liliana[1], Stella Ioana Popescu[1],
Affiliation:
1 Central Military Emergency Hospital Dr.Carol Davila
2 University of Medicine and Pharmacy "Carol Davila" Bucharest
3 Clinical Hospital for Ophthalmological Emergencies Bucharest
Correspondence: biancacostache49@yahoo.com

Abstract Background: Numerous surgical techniques have recently been tried to correct aphakia with no capsular support. Surgical management of these cases is an excellent challenge in ophthalmology. Recently, a novel intraocular one-piece acrylic lens, called the Carlevale lens, has been created, and it is a promising safe alternative.

Aims: This paper aims by the use of video to share the clinical benefits associated with a recently introduced sutureless scleral fixation intraocular lens (IOL), called the Carlevale IOL from Soleko, Italy. The IOL is designed to treat aphakia caused by various factors in patients without capsular support.

Methods: This cases included patients who underwent pars plana vitrectomy and scleral fixation on Carlevale IOL. Every patient underwent a thorough eye examination and was monitored for at least three months post-operation. The best corrected visual acuity (BCVA) was evaluated in every patient in the first and third months. Postoperatively, for every patient was performed anterior segment optical coherence tomography (AS) -OCT to check plug positioning and IOL tilt.

Results: Overall, patients had a good position of the IOL at the end of the follow-up.Participants' vision significantly improved.

Conclusions: Carlevale lens (Soleko) is a viable option in managing complex cases of aphakia or dislocation of the artificial lens when there is no capsular support. A new surgical technique has been developed, which provides a practical and simplified method for sutureless scleral intraocular lens fixation. This technique has been shown to produce good functional and refractive results.

Keywords: aphakia, intrascleral fixation, secondary IOL implantation, dislocated crystalline

Vitreous hemorrhage – immediate or delayed surgery?

Simona Nicoara[1]
[1]"Iuliu Hatieganu" University of Medicine and Pharmacy, Cluj-Napoca, Romania

Introduction. There is no absolute consensus regarding the urgency of vitrectomy in vitreous hemorrhage. Some authors operate it immediately, while others prefer to wait for the vitreous clearing and subsequently treat the underlying retinal condition. The following three cases illustrate the importance of urgent vitrectomy in vitreous hemorrhage.

Material and method. All three patients had high blood pressure and received anticoagullant treatment. One of them had also diabetes mellitus. The hemorrhage was very dense and ultrasound revealed no additional information. We carried on pars plana vitrectomy, 72 hours after intravitreal Bevacizumab injection.

Results. The most likely cause of a vitreous hemorrhage of „unknown etiology" is the branch retinal vein occlusion which was also sustained by the systemic comorbidities. However, in all three cases, the cause of the vitreous hemorrhage was a retinal break, contrary to our first thought. The surgical treatment addressed the retinal break which was sealed by endolaser in 2 cases and cryotherapy in one case, due to its far peripheral location. The endotamponade consisted in silicone oil in 2 cases (because the retina was already detached around the break) and air in one case (the retina was completely attached).

Conclusions. Not all vitreous hemorrhages originate in the rupture of new vessels. Acute posterior vitreous detachment can lead to retinal breaks and should be considered as a possible cause in all circumstances of vitreous hemorrhage without an apparent cause. Therefore, the surgical treatment of vitreous hemorrhage should be urgent, especially in unknown patients. Preoperative anti-VEGF was pointless.

Key words: vitreous hemorrhage, vitrectomy, retinal break

Normal Tension Glaucoma –- provocations from the reverse side of an illusory normality

Vasile Potop[1], Tudor-George Potop[2]
[1] Professor Ophthalmology- University of Medicine and Pharmacy Carol Davila Bucharest
[2.]Resident doctor Ophthalmology- Eye Emergency Hospital Bucharest

Normal-Tension Glaucoma (NTG) is a form of Primitive Open-Angle Glaucoma (POAG) in which the ocular pressure is within normal statistical limits.

Although ocular pressure is within normal limits, there is an ocular pressure-dependent relationship in the determinism of the disease along with other mechanisms.

Mechanisms independent of IOP include vascular disorders, metabolic or neurodegenerative diseases, oxidative stress or abnormal biomechanics of the lamina cribrosa.

The apparent simple diagnosis is a residual one, requiring the elimination of neurologic disorders that may mimic NTG.

Beyond the appearance of normality, NTG requires complex ocular and extraocular investigations for diagnosis and the therapy in turn has an extraocular extension, targeting extraocular factors involved in the determinism of the disease

Key words- NTG, vascular disorders, normal IOP

Surgical approach

C. Rosca, M. Munteanu

Autorii prezintă tehnica de peeling cu inverted flap într-un caz de gaură maculară stadiul IV, având grijă ca, la final, membrana limitantă internă să fie poziționată peste gaura maculară.

The authors describe the inverted flap technique for internal limiting membrane (ILM) peeling in a case of a stage IV macular hole, ensuring that the ILM remains positioned over the macular hole at the end of the procedure.

Integrating digital technology with routine intraocular surgery

Horia Stanca1
1"Carol Davila" University of Medicine, Bucharest, Romania

Key words: 3D Heads Up surgery, 3D visualization systems, intraoperative OCT systems, digitally data integration

Purpose: Presentation of some particular intraoperative aspects and discussions regarding usage of 3D visualization systems and digitally integrated data in routine intraocular surgery.

Materials and methods: We are presenting our experience regarding the usage of some 3D visualization systems. We are reviewing some particular cases and We are emphasizing the advantages of digitally enhancement of image quality and the usefulness of digitally integrated real-time data in anterior and posterior segment surgery.

Results: The results were very good in all our cases using these systems and We are presenting our pearls regarding this topic.

Conclusion: These combined systems (3D visualization equipment and digitally integrated data) could provide enhanced real-time data which may improve the surgical outcome for our patients.

Interactive presentation of clinical cases out of the Macula Consultation at the Ophthalmology Department of the Innsbruck medical university

Marius Stang

Innsbruck has a population of around 130,000 and is the fifth largest city in Austria. It is known as an "Alpine city" and a winter sports centre.

At the Department of Ophthalmology, Innsbruck Medical University, we treat more than 150 patients per week with intravitreal injections (IVOM). The majority of these patients are seen in our macular consultation.

I would like to present some clinical cases of macular degeneration and the treatment regimen we use in Innsbruck. I look forward to discussing different approaches to diagnosis and treatment with the expert panel and the audience.

Tips and tricks in cataract surgery with Floppy Iris syndrome.

Adriana Stanila, Dan Mircea Stanila**, Alina Adriana Stanila***

*Dr. Stănilă Medical Centre, Ofta Total Clinic, Sibiu

**Lucian Blaga University of Sibiu, Romania

Abstract

Introduction: In this study we tried to analyse the effect of intraoperative complication in cataract surgery, like Floppy Iris Syndrome (IFIS) to the patients with chronic treatment for benign prostatic hyperplasia (BPH) with tamsulosin.

Aim: The study aimed to establish the influence of tamsulosin, used in benign prostatic hyperplasia (BPH) treatment on the iris, during cataract surgery, considering the increased incidence of both conditions in older age.

Methods: This study included 16 male patients, operated for cataract at the Ofta Total Clinic Dr. Stănilă Medical Centre, in Sibiu, in 2022. They used chronic medication for BPH more than 2 years,

Results: In all patients we noticed a medium mydriasis through pharmacological dilation, including intracameral administration of phenocaine and mechanical dilation or stripping. The floppy iris in cataract surgery tends to follow intraocular fluids, the pupil even if it dilates tends to become miotic during the surgery. The iris tends to come out through incisions. In 6 patients it was necessary to apply iris dilators.

Discussions: The topic gives rise to many discussions. Patients at risk of developing cataract should be evaluated and possibly referred to an ophthalmologist to determine surgery before starting treatment for BPH. Because it seems that stopping the administration of tamsulosin before the surgery does not help the occurrence of IFIS, because the iris lesions seem irreversible. What happens to other tissues in other organs that we don't see?

Conclusions: Collaboration between urologists and ophthalmologists is required for patients prone to the appearance of cataract since both conditions are frequently encountered in elderly patients.

Are older-generation optical coherence methods for biometry obsolete? A comparison between Argos and Aladdin

Leila Al Barri1
[1]University Of Medicine And Pharmacy "victor Babes" Timisoara, Timisoara, Romania

Introduction: Precise intraocular lens (IOL) power calculations are essential for achieving optimal refractive outcomes in cataract surgery. This study compares the predictive accuracy of swept-source optical coherence tomography (SS-OCT) and optical low-coherence interferometry (OLCI) in biometry measurements and refractive outcomes.

Materials and methods: This retrospective study included 170 eyes from 102 patients undergoing cataract surgery. Biometry was performed using Argos. (MOVU Inc., Komaki, Japan) (SS-OCT) and Aladdin. (Topcon Corp., Tokyo, Japan) (OLCI), measuring axial length (AL), anterior chamber depth (ACD), lens thickness (LT), white to white (WTW), and keratometry.

Results: Postoperative outcomes, including uncorrected and corrected distance visual acuity (UDVA, CDVA), spherical equivalent (SE), and refractive error, were assessed at one and six months. Predictive accuracy was evaluated by mean error (ME), mean absolute error (MAE), median absolute error (MedAE), and the percentage of eyes within °æ0.25 D to °æ1.00 D of predicted SE.

Results: Both technologies achieved high refractive accuracy, with 97.7% (SS-OCT) and 97.2% (OLCI) of eyes within °æ1.00 D of target SE. SS-OCT demonstrated superior axis alignment, while OLCI provided enhanced postoperative SE. Significant differences were observed in LT ($p = 0.030$) and ACD ($p = 0.009$). Postoperative UDVA of 20/20 or better was achieved in 98% of SS-OCT eyes and 100% of OLCI eyes. SS-OCT and OLCI provide comparable refractive outcomes and high reliability in cataract surgery.

Conclusions: This study demonstrates that both SS-OCT and OLCI technologies provide reliable and accurate biometry for cataract surgery, with comparable refractive outcomes in most parameters. The superior performance of SS-OCT in specific aspects, such as axis alignment underscores its potential for enhanced surgical precision. These findings support the continued use and development of advanced biometry technologies to optimize refractive outcomes in cataract surgery.

Keywords: cataract surgery; intraocular lens (IOL); biometry; swept-source optical coherence tomography (SS-OCT); optical low-coherence interferometry (OLCI); refractive predictive accuracy; axial length measurement; ocular biometry; refractive outcomes; IOL power calculation

What to do when the wound-assisted technique goes wrong? Accidental corneal intrastromal implantation of an IOL

Leila Al Barri, Mihnea Munteanu
1University Of Medicine And Pharmacy "Victor Babes" Timisoara, Timisoara, Romania

Introduction: The wound-assisted technique for intraocular lens implantation during cataract surgery is a well-established method that facilitates the insertion of the intraocular lens into the capsular bag. However, in some cases, complications can arise, leading to unintended outcomes such as accidental corneal intrastromal implantation of the intraocular lens. This case report aims to present the management and the anterior segment optical coherence tomography findings of an accidental corneal intrastromal IOL implantation.

Materials and Methods: A 74-year-old patient with mild myopia underwent routine cataract surgery using the phacoemulsification technique. During the procedure, the intraocular lens was unintentionally implanted within the corneal stroma rather than the intended location of the capsular bag. Immediate post-operative evaluation and follow-up was performed using slit-lamp examination and anterior segment optical coherence tomography. The misplaced IOL was removed and properly inserted after expanding the incision. Intracameral air injection was used as a tamponade.

Results: The anterior segment optical coherence tomography revealed the interlayer separation of the corneal stroma. At one month, the patient's best-corrected visual acuity (BCVA) was logMAR 0.50. At six months, BCVA improved to logMAR 0.20. despite the persistent opacity in the corneal stroma.

Conclusion: Accidental corneal intrastromal implantation of an IOL is a rare but significant complication of cataract surgery. Prompt recognition and surgical management are crucial to minimize the risk of irreversible visual impairment.

Keywords: wound-assisted technique, intraocular lens, cataract surgery, anterior segment optical coherence tomography

Surgical and Non-Surgical Management of Strabismus: A Case-Based Analysis

Servet YASAR[1], Ionela Iasmina YASAR[2], Mihnea MUNTEANU[2,3], Haluk Huseyin GURSOY[4]

[1]Prof Dr Munteanu Ophthalmologic Center, Timisoara, Romania,
[2]Ophthalmology Department, "Victor Babes" University of Medicine and Pharmacy Timisoara (Romania), Timisoara, Romania,
[3]Oftalmo sensory-tumor research center - ORL (EYE-ENT), Ophthalmology Department, "Victor Babes" University of Medicine and Pharmacy, Timisoara (Romania), Timisoara, Romania,
[4]Ophthalmology Departement, "Eskisehir Osmangazi" University, Faculty of Medicine, ODUNPAZARI, TÜRKİYE

Introduction

Strabismus is a prevalent ocular disorder that disrupts binocular vision and ocular alignment. The management of strabismus depends on its underlying cause, with both surgical and non-surgical treatment options available. This presentation provides an in-depth case-based analysis of various strabismus types, highlighting clinical presentations and treatment methodologies.

Materials and Methods

A retrospective evaluation was performed on patients diagnosed with accommodative esotropia, infantile esotropia, sensory esotropia, residual esotropia, intermittent exotropia, sensory exotropia, and congenital fourth nerve palsy. Each case was thoroughly examined through clinical assessment to determine deviation magnitude, functional impact, and appropriate management. Accommodative esotropia was corrected using optical therapy, whereas all other cases necessitated surgical intervention. Pre- and post-treatment photographs and videos were documented to illustrate treatment outcomes.

Results

All treated cases exhibited significant improvements in ocular alignment. The accommodative esotropia case responded effectively to spectacle correction, achieving full alignment without surgical intervention. Among surgical cases, post-treatment analysis demonstrated successful alignment correction and enhanced patient satisfaction. Pre- and post-treatment visual records provided compelling evidence of clinical improvements.

Conclusions

This case-based review reinforces the importance of individualized treatment approaches in strabismus management. While non-surgical correction proved effective for accommodative esotropia, surgical intervention remained essential for the correction of other strabismus types. The integration of visual documentation serves as an essential educational tool for clinicians, emphasizing the necessity of tailored treatment plans for optimal patient outcomes.

Keywords

Strabismus, Esotropia, Exotropia, Fourth Nerve Palsy, Case Study

Fracturing a Nucleus with High Density and Plasticity Using a Modified-Length "Nagahara" Chopper

Vlad Chercotă[1], Patricia Băneș[1], Alexandra Jianu[1]
[1]Spitalul Clinic Municipal de Urgenţă , Timișoara , Romania

Purpose of the procedure: The video demonstrates the horizontal phacochop nucleofracture technique for a nucleus with increased hardness and plasticity, utilizing two types of Nagahara choppers: one with a 2 mm cutting edge and the other (conventional) with a 1.5 mm cutting edge. The 2 mm chopper offers the advantage of enhanced transection capacity, particularly for nuclei thicker than 4.5 mm.

The video illustrates the following:

- horizontal chop nucleofracture is performed under the combined protection of dispersive and cohesive viscoelastic;

- nuclear fragments are evacuated using a torsional ultrasound platform and a 45-degree Kelman tip;

- the procedure is performed through a 2.2 mm incision;

- two types of choppers with different lengths are used.

Carotid Artery Disease and Ocular Ischemic Syndrome in Vulnerable patients

Rodica Dan
Ophtalmologic Center Prof. Munteanu, Timisoara

Keywords: ocular ischemic syndrome, atherosclerosis, carotid artery stenosis, occlusion, ocular hypoperfusion

Introduction: Ocular ischemic syndrome is one of the forms of presentations of atherosclerotic carotid artery stenosis that can result in visual loss and requires multidisciplinary, complex approach, especially cardiological (patients with multiple risk factors, multiple atherosclerotic locations, ”vulnerable” patients).

Material and methods: Ocular ischemic syndrome is a condition caused by ocular hypoperfusion, very frequently due to stenosis or occlusion of the common or internal carotid arteries, atherosclerosis being recognized as the major cause of pathological changes in the carotid arteries. Beside the fact that these patients need a complex, multidisciplinary approach (starting from the ophtalmological exam), they need an extended evaluation - carotid Doppler ultrasound (and we’ll see some of modern US approaches, different types of plaques, …), CT, MRI, angiography, to name only a few of if we speak strictly of the direct causes of hypoperfusion evaluation, but, as cardiologists know, we are talking about ”vulnerable” patients with cardiovascular risk, who can develop at any moment in time an important (sometimes severe, even fatal) cardiovascular event. So, this evaluation, ”behind” the initial approach, proves to be much more important and relevant, since it brings, many times, at surface unknown lesions/pathologies involved in the etiology and pathogenesis of this syndrome.

Results: There are presented practical facts and cases – types of patients (at high cardiovascular risk), types of paraclinical exams, even with the help of AI, types of atherosclerotic plaques (including the so called ”vulnerable” ones and ways to identify them), which can help us in better approach of this category of patients.

Conclusions: Starting from the patient’s cardiovascular and metabolic risk, with the help of all the paraclinical exams, patients with ocular ischemic syndrome have better chances of recovery and prevention of another episode of ocular hypoperfusion, thus preventing, if and when possible, the menacing visual loss.

Retinal Microvascular Alterations Detectable with Optical Coherence Angio-tomography in Young Type 1 Diabetic Patients Without Clinical Signs of Diabetic Retinopathy

Alexandra Oltea Dan1, Alin Ştefan Ştefănescu-Dima1,2, Andreea Cornelia Tănasie1,2, Andrei Theodor Bălăşoiu1,2, Carmen Luminița Mocanu1,2

[1]Department Of Ophthalmology, University Of Medicine And Pharmacy, Craiova, Romania,
[2]Department Of Ophthalmology, Clinical Emergency Hospital, Craiova, Romania

Introduction: The purpose of this study was to identify the specific alterations which precede the clinical signs of diabetic retinopathy (DR) within the retinal microcirculation of young type 1 diabetes (T1D) patients without clinical signs of DR, using the optical coherence angio-tomography technology.

Material and methods: The clinical study enrolled 119 subjects with a mean age of 13 years old: 61 T1D patients for the study group and 58 healthy age-matched subjects for the control group. The RevoNX 130 (Optopol) OCT angiography device was used for the evaluation of the following retinal parameters: foveal avascular zone (FAZ) area, perimeter, and circularity and capillary plexus vessel densities.

Results: Statistically significant differences between the two groups were identified for the following parameters: the FAZ area in the T1D group (0.42±0.17) was larger than the control group (0.26 ±0.080), the FAZ circularity (0.41±0.11) was decreased compared to the control group (0.61±0.08) and the FAZ perimeter was larger (3.63±0.97) compared to the control group (2.30±0.50). The total vessel density of the superficial capillary plexus (SCP) on an investigated area of 6 mm2 centered around the fovea was decreased in the T1D group (37.4164 ± 2.14) compared to the control group (38.0241 ± 2.44).

Conclusion: Our data suggest that specific imaging biomarkers such as FAZ perimeter, area, circularity and decreased capillary vessel densities precede the clinical diagnosis of DR and represent useful parameters in quantifying capillary nonperfusion in T1D patients without clinical signs of DR.

Evaluation of ocular melanoma cases in north east romania over a two-year period: trends in incidence, tumor characteristics, and advances in diagnosis and treatment

Miss. Francesca-Cristiana Dohotariu[1], Mr. Vlad-Constantin Donica[1,2], Mrs. Camelia-Margareta Bogdanici[1,2]

[1]Ophthalmology Clinic Emergency County Hospital "Sf. Spiridon", Iasi, Romania,
[2]"Grigore T. Popa" University of Medicine and Pharmacy, Iasi, Romania

Ocular melanoma (OM) is the most common primary intraocular malignancy in adults, with a variable prognosis depending on tumor characteristics and stage at diagnosis. This study evaluates a series of OM cases over a two-year period, analyzing tumor parameters, location, staging, and histological subtypes while also assessing the trend in incidence.

A retrospective analysis was conducted on patients diagnosed with OM at our institution between 2023 and 2024. Data on tumor size, location (choroidal, ciliary body, iris), stage at presentation, and cellular growth patterns (spindle, epithelioid, mixed) were collected. Statistical analysis identified trends in incidence and tumor progression.

Results revealed an exponential increase in OM cases over the two-year timeframe.There has been a growth rate of 25% between 2023 and 2024 in the number of OM cases. The average tumor size at diagnosis was 0,86 mm in tumor volume, with the choroid being the most frequent site. Mixed spindle-cell with epithelioid melanomas accounted for 37,5% of cases, followed by spindle-cell(A-B) melanomas which accounted for 56,25% while epithelioid ones, only for 6,25% of cases. Notably, late-stage diagnosis correlated with worse prognosis, emphasizing the importance of early detection.

Early diagnosis remains critical for improving patient outcome. Advanced imaging techniques such as optical coherence tomography (OCT), ultrasound biomicroscopy, and fundus autofluorescence enhance early detection, while molecular prognostic markers provide individualized risk assessment. Treatment options have evolved, with proton beam therapy and gamma knife emerging as highly effective modalities alongside enucleation in advanced cases. Additionally, immune checkpoint inhibitors and targeted therapies are showing promise in metastatic disease management.

In conclusion, the rising incidence of OM highlights the necessity of early screening and advancements in diagnostic and therapeutic approaches. Continued research and implementation of novel treatment strategies are essential to improving survival and preserving vision in affected patients.

Keywords: Ocular Melanoma, Incidence Trends, Imaging Techniques, Advanced Treatments

Correlation between choroidal granuloma and various clinical pathways

Alina Iasmina Dumitriu[1]
[1]Scmut, Timisoara, Romania

Abstract

Introduction: Choroidal granuloma is a rare inflammatory ocular manifestation, often associated with infectious or immune-mediated diseases. Accurate diagnosis is essential to differentiate between infectious and non-infectious etiologies and guide appropriate treatment.

Material and Methods: We present the case of a 59-year-old male with a history of prostate cancer and prior syphilis infection, who developed multiple inflammatory ocular manifestations over one year. Initial diagnosis included granulomatous anterior and intermediate uveitis, resolving with corticosteroid therapy. A choroidal granuloma appeared months later, raising differential diagnostic challenges, including syphilitic chorioretinitis, tuberculosis-related inflammation, sarcoidosis, and posterior nodular scleritis. Diagnostic workup included multimodal imaging, serological tests, and immunological screening. Quantiferon-TB and tuberculin skin tests turned positive, though no evidence of active systemic TB was found.

Results: The patient was started on tuberculosis treatment without additional ocular inflammatory episodes. The choroidal granuloma resolved within two weeks under corticosteroid therapy, supporting an inflammatory rather than neoplastic origin. Multimodal imaging played a key role in monitoring disease progression and differentiating inflammatory choroidal lesions from metastatic choroidal involvement.

Conclusions: Choroidal inflammatory lesions can sometimes resolve spontaneously, but their differentiation from neoplastic or infectious causes is crucial. Multimodal imaging and thorough clinical evaluation are essential in such cases. Understanding the intersection of inflammatory pathways helps in optimizing treatment decisions, especially in patients with multiple systemic pathologies.

Keywords: Choroidal Granuloma, Uveitis, Tuberculosis, Multimodal Imaging, Ocular Inflammation

Radiation retinopathy - long-term evolution. Presentation of cases

Stela Giuri, Mihnea Munteanu
Timisoara, Romania

Introduction: Radiation retinopathy (RR) is a side effect following exposure of the eyeball to any source of radiation (for the direct treatment of ocular tumors or by collateral irradiation of tumors of the orbit, face, or brain). RR is a late-onset microvasculopathy with chronic, slow evolution, characterized by wide areas of retinal ischemia and macular edema. Possible complications are: neovascularization, vitreous hemorrhages, rubeosis, neovascular glaucoma (proliferative RR).

Material and method: Two clinical cases of choroidal malignant melanomas (CMM) are presented, treated with transpupillary thermotherapy and brachytherapy with 106 Ru/106Rh plaque, clinically and imaging-followed for a period of 13 years, respectively 9 years.

Results: Case 1. The patient, 55 years old at the time of detection (2012), with MMC in her right eye, was periodically monitored for 13 years. In the first year, she underwent transpupillary thermotherapy, with favorable local evolution and maintaining normal visual acuity for the next 3 years. Local recurrence required brachytherapy, followed by tumor regression and normal AV maintenance for the next 2.5 years. Next, there is a marked decrease in VA (VOD=0.16) and clinical signs of radiation retinopathy, but without changes in the tumor scar. He underwent perilesional laser photocoagulant treatment, intravitreal injections with anti-VEGF and corticosteroids. In the next 7 years of surveillance, the tumor scar was unchanged, macular edema persistent. Case 2: The 54-year-old patient was detected (2016) with MMC in her left eye, for which she underwent brachytherapy treatment. Periodically assessed, there was a marked decrease in VA at 2 years after brachytherapy, from VA 1 to 0.02 in the following 4 years, while the dimensions of the post-radiotherapy scar, quantified by ultrasound, decreased steadily. At one point, a tumor recurrence was detected, which led to the repetition of brachytherapy. A significant regression of the tumor follows, but without visual recovery. Systematic OCT examination initially detected a normal macular profile, then a fluctuating macular edema in relation to irradiation therapy, peripheral hemorrhages. The patient refused anti-VEGF therapy and intravitreal corticosteroids.

Conclusions: The ophthalmological re-evaluation of patients undergoing irradiation treatment should include, in addition to the status of the tumor scar, the identification of the specific elements of radiation retinopathy. Vigilance must be constant because the onset of RR is between 2 and 10 years from the time of treatment. Early application of preventive measures (photocoagulation of the ischemic retina, injection of anti-VEGF and intravitreal corticosteroids) does not prevent the onset of RR but only a delay, its late consequences being the significant decline of vision.

Keywords: radiation retinopathy, long-term evolution

Stress-Free Techniques for Stressed Zonules: A Video Guide to Cataract Surgery Without Zonular Support

Radu Ivanescu[1]
[1]Opticlass, Timisoara, Romania

Intraocular lens (IOL) implantation is the standard of care for managing aphakia, with the ideal placement being within the capsular bag to ensure stable fixation near the eye's nodal point. However, certain cases preclude this approach, such as congenital zonular weakness, trauma, or complications during cataract surgery. This video review explores various techniques for IOL implantation when capsular or zonular support is absent. It covers the use of capsular tension rings and Cionni segments, iris-fixated lenses, as well as posterior chamber scleral-fixated IOLs, highlighting my preferred strategies for each scenario. The discussion includes an overview of available lens options, surgical techniques, benefits and drawbacks, potential complications, and visual outcomes. Given the ongoing advancements in IOL implantation methods, this review aims to provide a comprehensive and practical guide to achieving optimal results in these challenging cases.

Surgical Challenges in Optic Disc Anomalies: Mastering Optic Pit and Morning Glory Repair

Radu Ivanescu[1]
[1]Opticlass, Timisoara, Romania

Optic disc anomalies, such as optic pits and Morning Glory Syndrome, present unique surgical challenges that can lead to progressive visual decline if left untreated. While various surgical techniques have been explored, no definitive solution has been proven through large-scale randomized studies. This video-based review showcases my surgical approach to managing these rare conditions, emphasizing techniques designed to optimize anatomical and functional outcomes.

The video presentation highlights the rationale behind each technique, surgical steps, intraoperative considerations, and post-operative outcomes. Given the lack of consensus on a standardized approach, this review aims to provide valuable insights into potential strategies for improving visual prognosis in these complex cases.

Vogt-Koyanagi-Harada (VKH) syndrome

Daiana-Andreea Margarit[1]
[1]SCMUT, Timisoara, Romania, 2UMF Victor Babes, Timisoara, Romania

Introduction

Vogt-Koyanagi-Harada (VKH) disease is a rare, multisystem autoimmune disorder characterized by a combination of ocular, dermatological, neurological, and auditory manifestations. It primarily affects melanocyte-containing tissues, including the eyes, skin, hair, and the central nervous system. The hallmark features of VKH syndrome include bilateral uveitis, typically presenting with acute onset, along with symptoms such as vitiligo, alopecia, tinnitus, and neurological signs such as headache and dizziness. The exact etiology of VKH remains unclear, though it is believed to involve an autoimmune response where the body's immune system attacks melanocytes.

Material and methods

Case summary: 33-year-old patient presents to the clinic for decrease in visual acuity in the last 4 days in both eyes, sever headache, tinnitus, photophobia.

Following clinical and paraclinical investigations, the diagnosis of Vogt-Koyanagi-Harada syndrome is made. Treatment is started with systemic and topical corticosteroids and topical nonsteroidal anti-inflammatory drops.

Results

Prognosis: maintenance of good visual acuity due to early detection, aggressive therapy and slow reduction of the dose of systemic corticosteroids.

Conclusions

This case report will provide an overview of the epidemiology, presentation, diagnosis, management, and surveillance of Vogt-Koyanagi-Harada (VKH) syndrome.

Keywords: case report, Vogt-Koyanagi-Harada syndrome, uveitis, corticosteroids.

Sturge-Weber Syndrome- An Updated Review

Ana-maria Misici1
[1]Department of Pediatric Ophthalmology, Children's Emergency Hospital "Louis Turcanu", Timisoara, Romania

Background: Sturge-Weber Syndrome (SWS) is a sporadic, congenital neurocutaneous disorder caused by a somatic mosaic mutation in GNAQ; it affects 1 in every 20.000 to 50.000 newborns. It is characterized by vascular anomalies, including facial port-wine stains, leptomeningeal angiomatosis, and glaucoma. Early recognition of these manifestations is crucial for timely intervention and vision preservation. Prognosis depends on the extent of leptomeningeal involvement and the severity of the glaucoma.

Objective: This presentation aims to provide an updated review of the ophthalmologic and general manifestations of SWS, with a focus on pathophysiology, appropriate diagnostic methods, and current treatment options.

Methods: A comprehensive analysis of recent literature and case studies was conducted to evaluate the spectrum of ocular involvement in SWS, including congenital and secondary glaucoma, choroidal hemangiomas, and retinal vascular anomalies.

Results: Glaucoma remains the most common ophthalmic complication, often presenting early in life. Treatment strategies include medical therapy, laser procedures, and surgical interventions. Choroidal hemangiomas, which may lead to visual field defects and retinal detachment, require multimodal imaging for diagnosis and may benefit from photodynamic therapy or laser photocoagulation.

Conclusion: Early recognition and a multidisciplinary approach are crucial in managing the ophthalmologic complications of SWS.

Keywords: Sturge-Weber Syndrome, glaucoma, choroidal hemangioma, neurocutaneous disorders, GNAQ mutation

What has changed in the treatment of retinoblastoma in romania

Elena-Cristina Nitulescu, Emergency Clinical Hospital for Children "Maria Sklodowska Curie" Bucharest
Francis L. Munier, Jules-Gonin Hospital, Lausanne
Nathalie Cassoux, Curie Institute, Paris

Introduction

Retinoblastoma (Rb) is a malignant tumor who develops in case of biallelic alterations in the tumor repressor gene RB1 in photoreceptor cells in the developing retina. The goals in Rb management are preserving life, ocular survival, visual preservation and increasing quality of life.

Material and Methods

Until 2020, in Romania the only available treatment modalities for Rb were systemic chemotherapy and enucleation, the local treatments for consolidation or conservative treatment being done only in european centers. In March 2020, due to travel restrictions, I began examining children with Rb at "M.S. Curie" Hospital and treating relapses under online supervision from teams in Paris and Lausanne.

Results

Of the 32 children diagnosed with Rb in Bucharest from 2020 to present, 57% presented with leucocoria, 25.8% with strabismus, 6.4% with red eye, 6.4% with buphthalmia, and 3.2% were diagnosed during a routine examination. Within the given sample, the distribution of age at diagnosis was as follows: 48.5% were diagnosed under 12 months of age, 22.5% between 12 and 24 months, and 29% over 2 years. Regarding involvement, 21 children (65.6%) presented with unilateral involvement, whereas 11 children (34.4%) exhibited bilateral involvement. We performed 15 enucleations, 7 for bilateral Rb, 8 for unilateral Rb. We did transpupillary thermotherapy for 12 children, 3 with unilateral Rb and cryotherapy for 3 children. We referred 14 children for IAC abroad: 2 for bilateral Rb and 12 for unilateral Rb, aiming to save group D or E eyes or to reduce systemic chemotherapy side effects.

Conclusion

A national reference center for Rb is essential to ensure proper treatment. Modern methods allow preservation of more eyes, even in groups D and E, without risking the child's life. We must raise awareness about Rb among family doctors, paediatricians, and ophthalmologists to ensure timely diagnosis.

Keywords: retinoblastoma, conservative treatment

Demographic and environmental risk factors in uveal melanoma: insights from a cohort study in romania

Lavinia-Maria Olteanu, Alina Popa-Cherecheanu, Florentina Ligia Furtunescu, Gabriela Murgoi

West Eye Hospital, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania; Emergency University Hospital, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania; National Institute of Public Health, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania; Bucharest Institute of Oncology, Bucharest, Romania

Introduction

Uveal melanoma is the most common primary intraocular malignancy in adults, with genetic and environmental risk factors. Despite its significance, epidemiological data specific to Romania remain limited.

Materials and Methods

This retrospective cohort study analyzed approximately 1,000 patients diagnosed with uveal melanoma between 2014 and 2023, using medical records and epidemiological data. Patients were stratified based on geographic and occupational exposure to industrial pollution. Tumor characteristics, treatment modalities (Gamma Knife radiosurgery, enucleation) and survival rates were evaluated.

Results

Preliminary data indicate that Dolj, Timiș, and Suceava counties had the highest uveal melanoma incidence in 2023, correlating with high industrial pollution levels. Patients from these regions exhibited a higher risk profile, suggesting environmental influence. Survival was linked to early diagnosis and access to advanced treatments.

Conclusions

This study underscores the impact of environmental exposure on uveal melanoma incidence in Romania. Findings highlight the need for targeted prevention strategies, improved early detection, and public health interventions in high-risk regions.

Keywords: Uveal Melanoma, Environmental Risk Factors, Industrial Pollution, Romania, Epidemiology

Ice syndrome with tragic ending: a case of masquerade syndrome and uveal melanoma

Lavinia Maria Olteanu[1], Gabriela Murgoi[1]
[1]West Eye Hospital, Carol Davila University of Medicine and Pharmacy, Bucharest, Romania; Bucharest Institute of Oncology, Bucharest, Romania

Introduction
Masquerade syndromes can delay the diagnosis of life-threatening conditions. This case presents a patient initially diagnosed with Cogan-Reese syndrome and secondary glaucoma, later confirmed to have multifocal uveal melanoma with ciliary body and iris extensive seedings.

Materials And Methods
A 40-year-old female with a history of bilateral invasive ductal breast carcinoma and metastatic disease developed progressive secondary glaucoma in the left eye, initially attributed to ICE (Iridocorneal Endothelial) syndrome. The patient underwent multiple interventions, including Ahmed valve implantation and trabeculectomy. In 2022, she presented with increased intraocular pressure, iris nodules, and conjunctival melanosis. Imaging (anterior segment OCT, ultrasound biomicroscopy, and ocular echography) revealed an intraocular tumor extending from the ciliary body to the optic nerve.

Results
Despite initial hesitancy, the patient underwent urgent enucleation. Intraoperatively, a 7 mm extrascleral tumor extension was observed. Histopathology confirmed multifocal uveal melanoma with epithelioid cells and a high mitotic index, without optic nerve invasion but with significant extraocular extension. Postoperatively, she received external beam radiotherapy for orbital tumor control and systematic monitoring for hepatic metastases.

Conclusions
This case highlights the diagnostic challenges of uveal melanoma in patients with pre-existing ocular conditions and cancer history. The transformation of iris nodules in Cogan-Reese syndrome into melanoma is undocumented, necessitating genetic testing. The association between breast cancer and uveal melanoma in young patients raises concerns about shared genetic susceptibility. Early recognition and aggressive management are crucial in such cases.

Keywords: Uveal Melanoma, Masquerade Syndrome, Cogan-Reese Syndrome, ICE Syndrome, Enucleation

Ocular trauma –simple procedures with unpredictable results

Cristina Patricia Pac[1], Mihnea Munteanu[1]
1Centrul Oftalmologic Prof.Dr. Munteanu, Timisoara, Romania

Keywords: ocular trauma, simplicity, visual outcome, globe rupture, iris prolapse

Introduction:

Ocular trauma brings out the most complex surgical cases, although sometimes simple procedures can prove to be the best solutions with impressive good outcomes. We will present 2 cases of post-traumatic eyes treated with simple surgical procedures that proved to be excellent solutions with good visual acuity in the end.

Methods and results:

First patient suffered an ocular trauma few weeks before presentation, with prolonged hypotony, hyphaema and only positive light perception, representing an extended globe rupture. Scleral suturing followed by anterior chamber wash-out procedure have been performed as the first procedure, followed by cataract extraction a few months after. Final best corrected visual acuity was 0.7, result that was stable in time, until now.

The second patient reported no ocular trauma in the past, but sudden visual acuity loss 7 days before presentation, with iris prolapse through a paracentral corneal perforation area and choroidal folds. Best corrected visual acuity was 0.02. Iridectomy, suturing of the corneal perforation and placement of a conjunctival flap have been performed with a final visual acuity of 0.8, stable during first year of monitoring.

Conclusion:

Visual outcomes after ocular trauma are surely unpredictable and patient counseling in these cases can prove to be very difficult, although good results are the most fulfilling for the patient and doctor as well, definitely worth fighting for.

Evaluation of tear film stability and meibomian glands functionality after multi-session intense pulsed light treatment

Cristina Patricia Pac[1], Mihnea Munteanu[1], Nadina Mercea[1]
1Centrul Oftalmologic Prof.Dr.Munteanu, Timisoara, Romania

Keywords: IPL treatment, tear film, ocular surface, Eye Fitness Test

Introduction:

Dry eye disease (DED) represents a multifactorial disease with an increasing prevalence, aspect that raises the need for multiple and also individualised treatment plans. One of the most interesting therapy regarding way of approach, effects and results is the intense pulsed light treatment (IPL).This therapy gathered a lot of attention in the last 10 years, as a possible main treatment for DED.

Methods and results:

Our study was designed as a non-randomized and retrospective cohort study. A total of 110 patients, including 220 eyes, were assessed in the study. The study included patients who were diagnosed with symptomatic Meibomian Gland Dysfunction (MGD) and received Intense Pulsed Light (IPL) therapy, according to protocol, on day 1, 15, 45 and 75, with reassessment at 3 months, 6 and 12 months.

A questionnaire, EFT (Eye Fitness Test), was used to grade the severity of symptomatology. For analyzing tear film stability, following parameters have been studied: NIFBUT (non-invasive first break up time), NIABUT (non-invasive average break up time), TFSE (tear film stability evaluation). Tear film volume was quantified using CTMH (central tear meniscus height) and TTMH (thickest tear meniscus height). Ocular surface inflammatory evaluation (OSIE) was also performed.

As a prompt response, analyzing parameters during IPL sessions, statistically significant differences have been registered regarding EFT and tear film stability parameters, only a slight improvement regarding inflammatory evaluation and no differences regarding quantitative parameters.

On a long time run, significant improvements have been registered regarding subjective point of view, tear film stability parameters and inflammatory evaluation of the ocular surface.

Conclusion:

IPL treatment proved efficient in registering good outcomes in studied parameters, no matter the beginning severity of the ocular surface state. Our study outcomes show stable and best improved results in several studied parameters, despite of high variety of disease levels in the beginning.

Subluxated Lens – Bag Stabilization Using a Single Flange Technique

Alin Stefanescu Dima1,2,3, Dr. Andreea Tanasie1,2,3, Dr. Laura Baltoiu3, Dr. Dragos Mihai Cojocaru4
[1]Ocularius Clinics, Craiova, Romania, 2UMF Craiova, Craiova, Romania, 3SCJU Craiova, Craiova, Romania, 4Hirslanden Hospital, Bern, Switzerland

Video Presentation – A case of post-traumatic lens subluxation with zonular dehiscence exceeding 180°, affecting the nasal and inferior sectors and beyond, along with posterior capsule fibrosis and nuclear and posterior subcapsular cataract.

Intraoperatively, the capsular bag is stabilized using capsule hooks mounted on the capsulorhexis. After lens extraction, a Cionni-type capsular tension ring is inserted into the bag and secured to the sclera using a 9-0 polypropylene suture. The polypropylene suture is tied to the Cionni ring's loop with a knot and fixed to the sclera transconjunctivally by creating a flange using a low-temperature thermocautery device.

Postoperatively, visual recovery is good, and the implant remains well-centered.

'Old' choroidal melanoma – surgical sollution and outcome – hopefully not to late

Sever Septimiu Ster
[1]IMAGISTER Clinic, Satu Mare, Romania

Introduction: The purpose of the paper is to present the case of a patient with choroidal melanoma.

Material and Method: A 69-year-old female patient is diagnosed with choroidal melanoma three years before. At first she refuses treatment and visits several medical facilities but in the end she accepts treatment. Due to the consequent complications, secondary glaucoma, the patient decides to undergo the surgery. Surgery is performed and medical evaluation is extended.

Results: Complications are solved with surgery – enucleation. However, the surgery is not curative and treatment is in progress.

Conclusion: Early diagnosis and quick action are the key for successful results when dealing with choroidal melanoma.

Key words: choroidal melanoma, evolution, examinations

Preretinal membrane and it's surgical sollution – straitening things out

Sever Septimiu Ster1
1IMAGISTER Clinic, Satu Mare, Romania

Introduction: The purpose of the paper is to present the complications induced by diabetes and the surgical solutions for said complications.

Material and Method: The case of a 59-year-old patient with type II diabetes is presented. The patient suffers from ocular complications, vitreal hemorrhage, preretinal membrane, tractional retinal detachment and vascular pathology. Surgery is performed by operating the cataract and performing pars plana vitrectomy with membrane peeling, LASER photocoagulation and silicone oil tamponade.

Results: The diabetic complications are surgically solved and the visual acuity is improved but the long term outcome depends on controlling the cause of the pathology – the diabetic disease.

Conclusion: Early diagnosis, quick action the control of the cause of the disease are the key for successful results.

Key words: diabetic retinopathy, preretinal membranes, membrane excision

Performance and safety of the REVYSION medical device in the management of age-related cataract

Gheorghita Suta1, Ramona Petrita, Trevor Shields
1Spitalul Clinic CF Timisoara, Ophthalmology Department, Timisoara, Romania

Introduction. The current standard of care for age-related cataract is surgical removal of the opacified lens, typically via phacoemulsification with intraocular lens (IOL) implantation. Promising results were obtained using the first non-invasive treatment method, REVISYON, a class IIB investigational medical device that entered into the pivotal phase in Romania, Latvia and Lithuania. The European study was designed as a single arm, multicentric, open-label clinical investigation to evaluate the performance and safety of the REVISYON for the non-invasive treatment of vision loss in age-related cataract.

Material and methods. A total of 114 study participants aged between 40-85 years, with nuclear cataract, were treated with the medical device across 10 sites. Only one of the subject's eyes was treated with the REVISYON during the study. The treatment period was separated in 9 sessions during 19 days. The primary outcome measure was the change in BCVA, assessed using LogMar scale after 4 weeks. Secondary outcomes included changes in cataract severity and in Visual Function Index questionnaire. In addition, spectral data (fluorescent emission) was collected through short-time scanning of both eyes at several visits to monitor the progress of the treatment, and to determine the suitability of these measurements for future clinical diagnoses.

Results. The device showed improved visual acuity in all subjects included in our site (N=21). In some cases, early efficacy was obtained in visit 5, 6 or 7. The clinical evaluation shows the cloudiness area became clearer, typically restoring clear vision., whereby the natural lens and accommodation is retained. Minor adverse events such as yellow spots in the visual field or increased IOP pressure were manageable.

Conclusions. Reported adverse events related to the treatment were minor and usually transitory, which speaks to a high safety profile. The study and its details are registered with number NCT05396547.

Keywords: age-related cataract, N-LOCS grade 1-3, non-invasive medical device, BCVA, spectral fluorescence

Orbital Plasmablastic non-Hodgkin Lymphoma (PBL): Case Report

Elena Suvac[1], Irina Nicoleta Triantafyllidis[1]
[1]Spitalul Clinic Coltea, București , Romania

Non-Hodgkin lymphomas are clonal proliferations of mature and immature lymphocytes in different stages of differentiation of the postmedullary phase (from B cells or T cells). Common locations are lymph nodes, bone marrow, spleen, liver, gastrointestinal tract. Ocular adnexal lymphomas are rare, accounting for only 1% to 2% of all lymphomas.

We present a case of a 67-year old man HIV-negative, who firstly complained of diplopia and proptosis of the left eye. MRI showed a left orbital mass with the involvement of the medial rectus. The biopsy was performed by the neurosurgery department and the patient was referred to the hematology department, where he started chemotherapy. Evolution had been favorable during these seven months of treatment.

Previous case reports and literature review demonstrated that PBL is an aggressive lymphoma with poor prognosis and resistant with treatment. However, early clinical diagnosis may increase the overall survival of such patients.

Keywords: PBL, orbital lymphoma, HIV

Ophthalmic Manifestations of Acute and Chronic Leukemias

Elena Suvac[1]
1Spitalul Clinic Coltea, București , Romania

Leukemic patients often have ophthalmological manifestations, more common in acute forms compared to chronic forms. Ocular involvement may be present directly from the onset of the disease or as the first sign of relapse.

We present the clinical manifestations of these patients hospitalized at Coltea Clinical Hospital in the last 2 years.

The ophthalmic findings result from direct infiltration of leukemic cells, but more commonly are secondary to indirect causes. The most frequent cause are the hematologic abnormalities that usually lead to leukemic retinopathy and are more common in patients with acute myeloid leukemia (AML) compared to acute lymphocytic leukemia (ALL).

The ophthalmological exam should be done both at the time of the diagnosis and during the treatment as well, because most patients are asymptomatic. Dot/blot retinal hemorrhages are the most frequent finding at these patients and are associated with thrombocytopenia.

Keywords: leukemic retinopathy, AML, ALL, dot/blot retinal hemorrhages

Managing difficult cataracts

Adrian Teodoru[1], Emilia-Maria Cerghedean-Florea[1]
[1]Facultatea De Medicina Sibiu/ Ulbs/ Clinica Arcada, Sibiu, Romania

Introduction

The presentation will reveal different challenging situations encountered during phacoemulsification that can perturb the evolution of the surgery.

Material and method

The paper presents several cases with small pupil, Morgagnian cataracts, hard nucleus.

Results

There are solutions for solving each problem, avoiding serious complications.

Conclusions

Good functional postoperative outcomes require an attentive care of the difficult situations that can occur during cataract surgery.

Key words: Cataract, small pupil

Histological aspect relevance in idiopathic epiretinal membrane surgery

D.C. Brănișteanu[1,3], Mădălina Timofte Zorilă[1], M. Danciu[2]

1. Ophthalmology Department, University of Medicine and Pharmacy "Grigore T. Popa" Iasi, Romania
2. Pathology Department, University of Medicine and Pharmacy "Grigore T. Popa" Iasi / DMD Path Iasi
3. „Retina Center" Eye Clinic, Iasi, Romania

The purpose of the presentation is to identify correlations between the histopathological features of idiopathic epiretinal membranes (ERMs) removed during vitrectomy and the difficulty of removal during surgery, the postoperative course, and the recurrence rate.

Methods: A prospective, interventional study, from 2014 to 2020, was conducted on patients vitrectomized for ERMs with a successful en bloc ERM removal for histological analysis. The samples were routinely processed by 10% formalin fixation and paraffin-embedding. Five microns sections were stained using hematoxylin-eosine and trichormic technique (van Gieson). The pathologist independently performed the microscopic evaluation. Cases were followed up clinically and by optical coherence tomography for at least 12 months.

Results: In 11 cases ERM en bloc removal was successful and the histopathologic evaluation was performed. Microscopically, ERMs showed very similar structures with consistent differences regarding the collagen avascular structure's thickness, cellularity, spindled-shaped cells (fibrocytes), and finely granular brown pigment. The folded aspect of the histological structure was explained by quick ERM contraction after peeling. Thick membranes were associated with an easier removal while thinner membranes, more difficult to peel, revealed increased cellularity and pigment. No significant correlation was found between the histological aspect and the postoperative course, with slow improvement of the macular structure unremarkable to the histologic type. No recurrence was noted clinically or by SD-OCT during follow-up time.

Conclusions: The histologic type of ERMs does not correlate with the postoperative course or the recurrence rate. Thinner ERMs with increased cellularity and fine pigment migrated from the inner retinal structure proved more adherent to the retinal surface.

Keywords: Idiopathic Epiretinal Membrane, Vitrectomy, Histopathologic examination.

The importance of biosimilar molecules in the treatment of different degenerative retinal diseases with intravitreal anti vascular endothelial growth factor therapies

Cristian Turlea[1], Dr George Abboud
1Vasile Goldis University Arad, Arad, Romania

The standard care in treating degenerative vascular retinal diseases is represented by the anti vascular endothelial growth factor(VEGF). The role of biosimilar products begins to be of great importance especially in underdeveloped countries aiding a great relief on the medical health sector. Beginning with Razumab the first biosimilar, other products like Ximluci are available on the market. This presentation aims to highlight the role of biosimilar products emphasizing on their efficacy and safety in daily medical care with some first impressions on the use of one of the latest Ranibizumab biosimilar product released.

In conclusion after the first injections with Ranibizumab biosimilars we can say that it is a safe and cost effective treatment in different retinal vascular diseases. Further studies are needed to evaluate in time the efficacy of biosimilars in treating retinal degenerative diseases.

Keynote: Ranibizumab,biosimilars,retinal vascular degenerative diseases

Management of Persistent Hypotony Due to Ciliary Shutdown Following Uveitis: A Case Report

Ionela-iasmina Yasar[1], Servet Yasar[3], Mihnea Munteanu[1,2]

1Ophthalmology Department, ¨Victor Babes¨ University Of Medicine And Pharmacy, Timisoara, Romania,

2Oftalmo sensory-tumor research center - ORL (EYE-ENT), Ophthalmology Department, "Victor Babes" University of Medicine and Pharmacy, Timisoara, Romania, 3Prof. Dr. Munteanu Ophthalmologic Center, Timisoara, Romania

Introduction:

Persistent hypotony is a challenging complication following ocular inflammation, often leading to phthisis bulbi if left unresolved. We present a case of a uveitic eye with hypotony that required innovative management to restore intraocular pressure (IOP) and prevent ocular atrophy.

Case Report:

A female patient with a history of uveitis developed hypotony in the right eye. The patient underwent systemic and topical anti-inflammatory treatment before cataract extraction. Postoperatively, the IOP remained persistently low despite viscoelastic retention in the anterior chamber and high-dose topical corticosteroid therapy.

Following consultation with Prof. Dr. Gabor Scharioth and Senior Ophthalmologist Dr. Servet Yaşar, the patient was diagnosed with ciliary shutdown-induced hypotony, and a novel approach involving intracameral triamcinolone injection, suggested by Prof. Dr. Gabor Scharioth, was undertaken by Prof. Dr. Mihnea Munteanu. The initial post-injection period showed an immediate IOP elevation followed by stabilization within the normal range. However, at the 6-month follow-up, IOP declined again. A second intracameral triamcinolone injection was performed, leading to an initial IOP rise, followed by normalization and sustained improvement beyond 6 months.

Conclusion:

This case highlights the potential efficacy of intracameral triamcinolone in managing refractory hypotony due to ciliary shutdown. While further studies are needed, this approach may offer a promising alternative to surgical interventions in select cases. The case underscores the importance of close follow-up and repeated treatment for long-term IOP stability in uveitic eyes with hypotony.

Keywords: Hypotony, uveitis, ciliary shutdown, intracameral triamcinolone, intraocular pressure stabilization

Differential Diagnosis of the Posterior Uveal Melanoma

D.C. Brănișteanu[1,2], Mădălina Timofte Zorilă [1,2]

[1.] Ophthalmology Department, University of Medicine and Pharmacy "Grigore T. Popa" Iasi, Romania

[2.] Eye Clinic, CF Hospital, Iasi, Romania

Posterior uveal melanoma (PUM) is the most common primary intraocular malignancy in adults, significantly impacting both visual and systemic prognosis. The diagnosis of PUM is largely based on the clinical examination findings and is supported by multimodal imaging. In the current era, these tumors are diagnosed with higher accuracy. Still, challenges remain in early detection, risk stratification, and personalized treatment strategies.

Accurate and timely differentiation from other pigmented and non-pigmented choroidal-retinal lesions is crucial. Ultrasonography, angiography, optical coherence tomography, transillumination, and other ancillary imaging techniques are often needed to characterize PUM and to differentiate these tumors from other malignant and benign simulating conditions (pseudomelanoma).

This presentation aims to provide a comprehensive update on the differential diagnosis of posterior uveal melanoma, emphasizing key aspects for differentiation, thus facilitating prompt intervention.

Keywords: Posterior uveal melanoma, differential diagnosis, multimodal imaging, pseudomelanoma; timely intervention.