

**ABSTRACTS SUBMITTED TO THE
CONGRESS OF OPHTHALMOLOGISTS IN BOSNIA AND HERZEGOVINA
Tuzla, November 11-14, 2009**

**O1:
SYSTEMIC DISEASES COMMONLY ASSOCIATED WITH THE CENTRAL RETINAL VEIN OCCLUSION**

Adžić-Zečević A.

*Eye clinic, Podgorica,
Montenegro*

INTRODUCTION: Central retinal vein occlusion is associated with many systemic diseases, although in many cases a real cause isn't discovered.

OBJECTIVE: Determine which diseases are most commonly associated with central retinal vein occlusion (CRVO)

MATERIAL AND METHODS: Patients with central retinal vein occlusion are processed by ambulatory and hospital, depending on time of CRVO appearance and time for going to ophthalmologist. In ophthalmic examination is required checking on visual acuity, intraocular pressure measurement, and then checking on wide pupilla with ophthalmoscope, Goldmann's lens and Volk's lens. Anamnesis must always be taken in detail. In diagnostic procedure does either fluorescein angiography for assessment Laser-treatment purposes.

RESULTS: Five-years monitoring of patients with central retinal vein occlusion (40) was found the most common association with hypertension in 60% of patients (24) with diabetes mellitus 37.5% (15), with atherosclerotic heart disease 15% (6), with open-angle glaucoma 15% (6) patients and 10% (4) patients with hyperlipidaemia.

CONCLUSION: In this paper, as it evidents from the results the most common is the hypertension's association with central retinal vein occlusion, and then diabetes.

**O2:
CENTRAL CORNEAL THICKNESS IN OCULAR HYPERTENSION**

Ahmedbegovic Pjano M, Ljaljevic S, Jurisic V, Lika Pranjic M

*University Eye Clinic of Sarajevo, Sarajevo,
Bosnia and Herzegovina*

AIM: To determine the effect of central corneal thickness (CCT) on the measurement of intraocular pressure (IOP) with applanation tonometer, in patients as having ocular hypertension (OHT) and normal patients or control.

METHODS: Intraocular pressure with Goldman applanation tonometry and central corneal thickness with non contact ultrasound pachymetry (HAAG-STREIT INTERNATIONAL, OLCR-Pachymeter, Pachy01-SL, Swiss) were measured in 40 patients in retrospective study.

RESULTS: Of the 40 eyes, 20 were control and 20 were OHT. There was significant difference ($p < 0.05$) in CCT between controls ($545,40 \pm 25$) and patients with OHT ($589,39 \pm 48$).

CONCLUSIONS: Patients with OHT have significantly higher CCT than control patients do. Overestimation of the IOP in normal eyes who have thick cornea, may lead to a misdiagnosis of OHT.

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O3:**USE OF PATCH GRAFT IN SPONTANEOUS CORNEAL PERFORATION CAUSED BY TERIEN MARGINAL CORNEAL DEGENERATION: A CASE REPORT**

Al Hassan N, Karčić S, Karčić HH, Šaković-Račić A, Dervišević E.

*Eye Clinic, University of Sarajevo Clinical Centre, Sarajevo,
Bosnia and Herzegovina*

AIM: To present resolving of the case of spontaneous corneal perforation caused by Terien marginal degeneration. For the first time, for reconstructing or patching we used synthetic corneal tissue Oculus gen.

METHODS: Patient of 24 years old admitted at our Clinic University Clinical Center Sarajevo with spontaneous corneal perforation and iris prolapsed on left eye. Because of inability of spontaneous closure of existing perforation by conservative therapy in general anesthesia we performed reconstruction and closing the defect by implantation of the patch graft (synthetic implant). Visual acuity on admitting was VOS: 1,0 TOS: dig N-2

RESULTS: VOS: 1,0 TOS: 17mmHg, One day postoperatively pupil is round, iridectomy basalis, anterior chamber has been formed 10 days after implant vascularisation.

CONCLUSION: Oculus gen synthetic implant has proven as good solution in processing spontaneous corneal perforation.

O4:**BINOCULAR VISUAL FUNCTION FOLLOWING SURGICAL TREATMENT OF CONCOMITANT ESOTROPIA**

Alajbegović-Halimić J, Zvizdić D, Alendar M.

*Eye Clinic, University of Sarajevo Clinical Centre, Sarajevo,
Bosnia and Herzegovina*

INTRODUCTION: Selecting of operative procedure in surgical treatment of concomitant esotropia often is very doubt and depend on the end from decision of the surgeon. We consider that unilateral resess-resect procedure provide better postoperative outcome.

AIM: According to existing dilemmas about selecting operative procedure in concomitant esotropia, the main aim of this study was to determine which type of operative procedure provided the best postoperative outcome.

MATERIAL AND METHODS: We retrospectively reviewed 264 children who underwent surgical treatment of esotropia in last 3 years (2006-2009) on the children department of our clinic. All patients was conservative treated during few years and had concomitant esotropia preoperatively. We decided to do unilateral operation of one eye retropositio-myectomy or bilateral medial retropositio.

RESULTS: In the group of patients who had retropositio-myectomy operative procedure we had better results with postoperative binocular visual function during the 6-12 months period if we compare with group of patients who had bimedial retropositio.

CONCLUSION: According to dilemmas with operative procedure we considerate that postoperative better outcome in functional field and cosmetics effect is with unilateral operative procedure.

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O5:**CORRELATION BETWEEN BULBAR AXIS LENGTH AND RETINAL RUPTURES IN MYOPIC EYE**

Alimanović-Halilović E, Karčić Hajjir H, Karčić S, Al Hassan N, Saračević Pačuka N, Pranjić Lika M, Ahmetbegović M

*Eye Clinic, University of Sarajevo Clinical Centre, Sarajevo,
Bosnia and Herzegovina*

INTRODUCTION: Retinal detachment implies separation of neurosensory retina from the pigmented epithel with serious impairment of visual functions. The most serious complication in the myopic eye is exactly the retinal detachment, which is often caused by retinal ruptures in isolation or within predisposing degenerations.

Aims of this research were to find "the critical length" of the bulbus where we will have the highest frequency of retinal rupture as a direct cause of retinal detachment incidence.

PATIENTS AND METHODS: The study analyzed 180 myopic eyes with an aim to find "the critical" length of bulbar axis related to the occurrence of retinal ruptures. Having carried out targeted ophthalmological anamnesis, ultrasonic measuring of bulbus, indirect binocular ophthalmoscopy, we analyzed the diagnosed retinal ruptures by shape in relation to the axis length. All the eyes were classified into three groups by the axis length.

RESULTS: The average age of our patients was from 48.43 to 51.60 years with SD 13.88 to 18.45. We did not find any statistically relevant age-related difference. The study covered 102 (56.6%) male patients and 78 (43.3%) female patients, and we did not find statistically significant axis-related difference in the occurrence of retinal ruptures in men and women. The most frequent were round (28.2%), then oval (25%), and the category of several small ruptures (19.2%), and horseshoe-shaped ones (15.3%), and eventually ruptures with operculum. In the group with bulbar axis length from 24.52 mm to 26.51 mm, the rupture frequency was statistically significantly different compared to the other analyzed lengths. There are positive correlations between the mentioned bulbar axis length and the frequency of ruptures.

CONCLUSION: For the purpose of prevention of retinal detachment in myopic eye, further detailed examinations of fundus are suggested for the patients having the mentioned axis length. Diagnosing retinal ruptures means possible administration of preventive therapy: laser photocoagulation, cryoretinopexis, inserting episcleral implant or expansive gas into bulbus.

O6:**USE OF THE CATHETER IN TREATMENT OF PANOPHTHALMITIS AND ORBITAL PURULENT INFLAMMATION**

¹Alimanović Halilović E, ¹Ibišević M, ²Rašić S, ¹Jurišić V, ¹Alender M, ¹Al Hassan N, ¹Zvizdić D.

*¹Eye Clinic and ²Institute for Nephrology of the University of Sarajevo Clinical Centre, Sarajevo,
Bosnia and Herzegovina*

In this study we have presented three cases with use of a catheter placed intraoperatively as a possible method of medicaments application in the retrobulbar region. Two patients developed panophthalmitis, abscess and cellulites of the orbit as a consequence of an injury afflicted during the war whereas the third patient with glaucoma developed endogenous endophthalmitis. We eviscerated the bulb, implanted small soft tubes (catheters), then brought them out and fixed to the skin of the orbit region. Through the catheters we applied antibiotics and anesthetics directly into region of surgery and controlled them.

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**07:
METASTATIC TUMOR TO THE CONJUNCTIVA FROM TRANSITIONAL CELL CARCINOMA OF THE URINARY
BLADDER: CASE REPORT**

¹Amidžić B, ²Balaban N, ²Sovilj M.

¹Clinical Center Banja Luka, Banja Luka

²General Hospital Prijedor, Prijedor
Bosnia and Herzegovina

We report the case of 77- year old man who developed metastasis to the eye, bilateral metastatic tumor to the conjunctiva from transitional cell carcinoma of the urinary tract. In the United States, bladder cancer is fourth most common type of cancer in men and ninth most common cancer in women. More than 90 % of bladder cancers are derived from transition epithelium and are thus called transitional cell carcinoma. (TCC). Most common sites for metastatic TCC are: lymph nodes in pelvis, liver, lung, bone and adrenal gland.

Ocular metastasis from transitional cell carcinomas in the urinary bladder is extremely rare. All series suggest that breast cancer accounts for the majority of ocular metastasis, but occasionally the ocular metastasis represents the first clinical manifestation of systemic cancer. Lung cancer accounted for 25 % and alimentary tract cancer accounted for about 7 % cases. Other reported cancers are: pancreatic cancer, Thyroid cancer, renal cell cancer, carcinoid tumor, melanoma of skin, prostate cancer etc. Many cases, however are never diagnosed because they occur in patients who are extremely ill so ocular examination is not routinely performed.

**08:
SCREENING FOR DIABETIC RETINOPATHY IN REGION FOČA**

Avram N.

Clinical Hospital Center Foča, Foča,
Bosnia and Herzegovina

BACKGROUND: Diabetic retinopathy is specific a microvascular complication of diabetes and is nowadays it presents leading cause of blindness in the working-age population.

AIM: To confirm that correct screening of diabetic retinopathy is possible in our conditions.

MATERIAL AND METHODS: The work presents prospective clinical study on the population of 887 persons suffering from diabetes. 713 persons were included in the screening process. Stereofunduscopy on slitlamp was used as a screening method. A special emphasis was on the group of 128 persons with vision threatening retinopathy consisting of proliferative retinopathy, clinical significant macular oedema et preproliferative retinopathy. This group presented the control group and it underwent appropriate therapy procedure.

RESULTS: 80,38% of persons suffering from diabetes were included in the screening process during the period of four years. Diabetic retinopathy was detected in 41,3% of patients:

- Mild to moderate retinopathy in 24% of patients,
- Severe, preproliferative retinopathy in 5% of patients,
- Proliferative retinopathy 8,7% of patients,
- Maculopathy in 32,1% of patients.

CONCLUSION: If adequate screening is carried out, it is possible to find persons with sight threatening retinopathy and adequate treatment can stop the progress of the disease. This could be concluded after comparison of retinal findings in vision threatening retinopathy group before and after treatment.

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**O9:
PROSTHETIC TREATMENT OF ACQUIRED ANOPHTHALMOS**

Bogdanovic M, Zikic Z

*Gama Medicine Ophthalmology and Ocular Prosthetics, Belgrade,
Serbia*

INTRODUCTION: Patients with acquired anophthalmos present a challenge for the ocular prosthetist. The method of surgical eye removal significantly influences the outcome of prosthetic treatment, which has great repercussions on the social interaction of the anophthalmic patient.

MATERIAL AND METHODS: Retrospectively we analyzed the data of 1290 anophthalmic patients, treated in our prosthetic practice in the period 2003-2008. We compared the functional-aesthetic results of patients treated with different surgical methods of eye removal.

RESULTS: There were 823 patients who did not receive a primary orbital implant at the time of surgical eye removal, whereas 467 patients received a primary orbital implant for volume replacement.

CONCLUSION: Better functional-aesthetic results of prosthetic treatment were obtained in patients with an orbital implant. In patients, in whom the lost orbital volume was not replaced, we recorded a much higher incidence of the post-enucleation syndrome and socket contraction syndrome, which makes the prosthetic treatment difficult or even impossible in some cases.

**O10:
EX- PRESS MINI GLAUCOMA SHUNT IN TREATMENT OF REFRACTORY GLAUCOMA CASES**

Čanović S, Kovačević S, Didović-Torbarina A, Sakara-Kolega M

*General Hospital Zadar, Eye department, Zadar
Croatia*

INTRODUCTION: Ex-PRESS mini glaucoma shunt is a filtration system, invented as a replacement for trabeculectomy, with less postoperative complications.

AIM: To present efficacy of ex-PRESS mini glaucoma shunt implantation in refractory glaucoma cases.

METHODS: In 10 eyes of 10 glaucoma patients, including 4 neovascular, 3 pseudoexfoliative, 1 secondary and 2 glaucoma after trabeculectomy, with poor intraocular pressure regulation ex-PRESS mini glaucoma shunt was implanted. Combined phacoemulsification and shunt implantation surgery was preformed in 3 patients with cataract as well.

RESULTS: We evaluated visual acuity, intraocular pressure, slit lamp appearance 1th, 7th postoperative day, and monthly 4 to 6 months. In all patients we saw significant intraocular pressure lowering 1st postoperative day. Visual acuity was the same or better, especially in patients with combined cataract surgery and shunt implantation. There were no new medications or other procedures needed in follow up time.

CONCLUSION: Ex- PRESS mini glaucoma shunt has proved to be an efficient method in refractory glaucoma treatment.

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O11:

SIGNIFICANCE OF INTERDISCIPLINARY APPROACH OF OPHTHALMOLOGIST AND DIABETOLOGIST IN TERTIARY PREVENTION OF COMPLICATIONS OF DIABETES MELITUS IN EYE

Drino Čaušević A, Golubičić N, Muharemović E.

*Cantonal Hospital Zenica, Zenica,
Bosnia and Herzegovina*

AIM: To show our experience in tertiary prevention of complications in diabetic eye by application of ARGON LASER photocoagulation with cooperation with diabetologists

MATERIAL AND METHODS: We chose 2 analog groups of 25 patients. similar age, gender balanced, duration of illness and individual treatment by Diabetologist. Parameters of compensation of diabetes melitus are: glycemia 4- mmol/L and HbA1C 4-6,8%. Parameters of diabetic retinopathia are: visus at close and far distance, ST ET CC, value of eye pressure, sharpness of vision field, ultrasound fundusoscopy and graphia on digital fundus camera Zeiss with fluorescein angiography if necessary. ALPC was done on coherent device, with individual dosage, in three sessions.

RESULTS: In first group with glycemia values under 8mmol/L, HbA1C under 7%, at the end of treatment ALPC we had improvement of vision at 10 patients (49,2%), stabilisation of vision at 13 (56,01%) and worsening at 1 (0,79%). In second group, with values of glycemia over 8 mmol/L and HbA1C over 7% at the end of treatment we had improvement at 5 (20%) stabilisation at 14 (56%) and worsening at 6 (24%).

CONCLUSION: Depending on stage of diabetic retinopathy we suggested corrections in general therapy and induction of insulin therapy. The effects of ALPC on diabetic retinopathy depend greatly on compensation of patient. It is achieved with interdisciplinary approach of ophthalmologist and diabetologist.

O12:

FUNGAL ENDOPHTHALMITIS AND HYDROCEPHALUS-A CASE REPORT

Ćerim A, Čalkić L, Skomorac R.

*Cantonal Hospital Zenica, Zenica,
Bosnia and Herzegovina*

Aim of examination is to present possible connection among fungal endophthalmitis and hydrocephalus. Male, age 18, was admitted to our department because of left eye endophthalmitis process which had been injured by rose thorn. He had intermittent temperature the fourth day after admitting. Infectologist advised general antimicrobial therapy (Fungizone caps.) because of mouth, pharynx and skin changes. Urine, urine culture, blood culture fungal negative. Endocranial MRI with contrast was normal. Microbiologist found Staphylococcus epidermidis and Candida albicans during examination of vitreous content of left eye. Three months after he felt weakness, neck pain, smothering. All the time tongue and pharynx candidiasis, meningeal signs negative, all the time treated with general antimicrobial therapy. Fungal liquor examination negative, BK and Lowenstein negative. Endocranial MRI indicated hydrocephalus of right brain ventricle, Chiari I, spinal cord syringomyelic process. The right side ventriculoperitoneostomy was performed, fungal liquor examination negative. A month and half after he felt weakness and started vomiting. During afternoon somnolent, unconscious and coma. Left ventriculoperitoneostomy was performed after endocranial MRI examination. The second day after surgery he died because of cardiac arrest. There are literature data about persisting subacute form of meningitis with undefined headache, high temperature several days or months before starting disease. As etiological cause are noticed: M. tuberculosis, Cryptococcus neoformans, Histoplasma capsulatum, Coccidioides immitis, Treponema pallidum. Hydrocephalus is noticed as the most common complication of fungal meningitis. All the clinical signs can be incorporated to clinic features of our patients. Objectively, we have no signs of meningitis process (negative meningeal signs, negative liquor examination), systemic fungal disease, TB process and syphilis were not proved.

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**O13:
PHACO SURGERY – OUR FIRST EXPERIENCE**

Ćerim A, Abramušić B, Muharemović E.

*Cantonal Hospital Zenica, Zenica,
Bosnia and Herzegovina*

INTRODUCTION: We started with phaco surgery experience in November 2006. Previously we made agreement with phaco surgeon from UKC Tuzla. Education process continued two year. Previously all surgeons included in education process finished successful finished Wet lab.

AIM: To show complications and dilemma during education process and selfsupporting.

METHODS: Before selfsupporting we performed 137 phaco surgeries. During education process we performed 240 surgeries. From November 2008 until July 2009 we performed selfsupporting 288 phaco surgeries. All patients were checked by slit lamp.

RESULTES: Intraoperative, early and late postoperative complications

CONCLUSION: Phacosurgery according ECCE presents as better surgery method. Transition from ECCE to phaco surgery is not easy and logic. The reason is deficit of similarity between two techniques. Excellent ECCE surgeon has to pass through difficult period of education with a lot of operative and postoperative complications. The most important is to have good and well-intentioned phaco surgeon as a teacher.

**O14:
PATIENT SATISFACTION AND VISUAL ACUITY AFTER INTRAVITREAL BEVACIZUMAB AS A TREATMENT
FOR MACULAR EDEMA IN PROLIFERATIVE DIABETIC RETINOPATHY**

Ćeklic L.

*Department of Ophthalmology "Kasindo", Clinical Center of Eastern Sarajevo, Eastern Sarajevo
Bosnia and Herzegovina*

AIM: To investigate patient assessed visual function and visual acuity after treatment with the unselective anti-VEGF inhibitor bevacizumab in diabetic macular edema after scatter laser photocoagulation due to proliferative diabetic retinopathy.

METHODS: The case series of consecutive 30 eyes of 30 patients with proliferative diabetic retinopathy and persistent diabetic macular edema were treated with a single intravitreal dose of 1.25 mg bevacizumab in 0,05mL (Avastin) in combination with scatter argon laser photocoagulation. The control group consisted of 30 eyes of 30 patients with proliferative diabetic retinopathy who received scatter laser photocoagulation alone. Main outcome measures were Snellen visual acuity, fundus clinical findings and patients self estimated quality of vision evaluated in scale of 0-100 percentages.

RESULTS: Baseline visual acuity was mean 0.48 ± 0.58 logMAR in the bevacizumab group and 0.61 ± 0.78 (n.s.) in the control group. After 6 months, visual acuity had not changed significantly to 0.33 ± 0.41 and 0.52 ± 0.68 in the bevacizumab and control group, respectively. Clinical examination showed only a trend to some improvement in macular edema. Subjective patient assessment of visual function on the visual analogue scale (VAS) showed an improvement from 60.2 ± 17.5 to 76.0 ± 15.6 ($P < 0.001$) 6 months after the injection of bevacizumab. In the control group self-assessed visual function was mean 59.6 ± 19.8 , which did not differ from the baseline bevacizumab group (n.s.) but was high significantly ($P < 0.001$) lower than after bevacizumab.

CONCLUSION: Self-assessed visual acuity and patient satisfaction were significantly improved after intravitreal bevacizumab (Avastin) as additional therapy to scatter laser photocoagulation therapy for macular edema in proliferative diabetic retinopathy than after laser therapy alone. Visual acuity did not change significantly in this comparative case series over 6 months.

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**O15:
EYELID RECONSTRUCTION FOLLOWING TUMOR EXCISION**

Despot B, Baroš N.

Clinic for Plastic, Reconstructive Surgery and Burns, Clinical Centre Banja Luka, Banja Luka, Bosnia and Herzegovina

Eyelid tumor excision and trauma are two common causes of eyelid defects requiring surgical reconstruction. The purpose of this study is to describe and analyse frequency, our experiences and eyelid reconstruction techniques. During last decade, 65 patients with eyelid defects were surgically treated at the Clinic for Plastic and Reconstructive Surgery in Banja Luka. Of the 65 cases of eyelid tumors, 31 (48%) occurred in medial canthal area, 2 (3%) in lateral canthal area, 22 (34%) occurred on the lower eyelid and 6 (9%) on the upper eyelid. 5 (8%) patients had lower eyelid ectropion.

Most commonly used flap for medial canthus and lower lid defect reconstruction is glabellar flap or its combination with other local flaps. Eyelid defects involving one quarter or less of the horizontal length of the eyelid usually can be repaired by direct closure, while defects involving more than one quarter length are reconstructed by McGregor flap with lateral canthotomy. Large eyelid defects or defects involving the entire eyelid may be reconstructed using a Mustarde cheek rotation flap (tarsus is reconstructed with a chondro-mucosal graft taken from the septum). Partial-thickness eyelid defects may be repaired with a variety of techniques, by local flaps or free skin grafts. Orbital exenteration is performed for advanced neoplasms of the eyelids that involve ocular bulb and the resulting defect is reconstructed by insular cheek flap.

Local tumor recurrence has occurred in two cases, of which one patient underwent a second operation and in the other case tumor was inoperable. Histopathologically, among the total of 65 cases, 58 cases (96%) were diagnosed as basal cell carcinoma, 1 case (2%) as squamous cell carcinoma and 1 case (2%) was malignant melanoma.

Reconstruction of full-thickness eyelid defects is one of the most complicated oculoplastic surgery procedures. Carefully planned operation and atraumatic surgical technique provides good therapeutic, functional and esthetic results for the reconstruction of eyelid defects.

**O16:
THE PRINCIPLES OF CONGENITAL CATARACT SURGERY**

¹Dizdarević A, ²Jusufović V.

¹Eye Department, Cantonal Hospital Zenica, Zenica

*²Eye Clinic, University Clinical Centre Tuzla, Tuzla
Bosnia and Herzegovina*

The term congenital cataract refers to a lens opacity present at birth. Lens opacities that develop during the first year of life are called infantile cataracts. It is difficult to determine incidence (1-2: 5500 live births). Congenital cataracts can be unilateral or bilateral. Some of them are static but some are progressive. That explains why congenital cataracts are not identified at birth. They can be classified by morphology, presumed etiology, presence of specific metabolic disorders, or associated ocular anomalies or systemic findings. Cataract surgery is the treatment of choice and should be performed when patients are younger than 17 weeks to ensure minimal or no visual deprivation. Many elements of cataract surgery in children are similar to adults. Congenital cataracts are removed by phacoaspiration or lensectomy in combination with posterior capsulectomy and anterior vitrectomy. One of the most important problem is choosing IOL is the change in the refractive state of the juvenile eye with growth. Removal of the cataract is only the beginning. Visual rehabilitation requires many years of refractive correction and amblyopia therapy, possible strabismus surgery and glaucoma screenings.

The surgical management of congenital cataract must incorporate a wide range of factors not relevant to adults.

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O17:**EFFICIENCY EVALUATION OF LUCENTIS TREATMENT IN PATIENTS PREVIOUSLY TREATED BY AVASTIN WITH EXACERBATION OF AMD CHANGES**

Hajjir Karčić H, Karčić S, Alimanović E, Šaković-Račić A, Al Hassan N.

Eye Clinic of University Clinical Center Sarajevo, Sarajevo

Bosnia and Herzegovina

AIM:To analyse the efficacy of intravitreal Ranibizumab (Lucentis) treatment combined with classic therapy in patients with exacerbation of choroidal neovascularization secondary to age-related macular degeneration after one year treatment with Avastin.

METHODS: In this retrospective, cohort study, five patients were treated monthly with Ranibizumab intravitreal injections for two months.

MAIN OUTCOME MEASURES: Visual acuity improvement for one or more lines of Snellen chart.

RESULTS: After two months, 60 % of the AMD patients had visual acuity improvement for one or more lines of Snellen chart. The most frequent Ranibizumab -associated serious ocular adverse events were not observed.

CONCLUSION/APPLICATION TO CLINICAL PRACTICE: Ranibizumab was efficacious therapy for treating exacerbations of neovascular age-related macular degeneration treated earlier with Bevacizumab. In our cohort the most frequent Ranibizumab -associated serious ocular adverse events were not observed.

O18:**LONG-TERM TREATMENT AND FOLLOW-UP OF PATIENT WITH STEVENS-JOHNSON SYNDROME/TOXIC EPIDERMAL NECROLYSIS**

¹Ibišević MM, ²Alendar F, ¹Alimanović-Halilović E, ¹Jurišić V, ¹Cerić O, ¹Saračević N, ¹Serdarević R.

¹Eye Clinic and ²Dermatology Clinic of the University of Sarajevo Clinical Centre, Sarajevo,

Bosnia and Herzegovina

INTRODUCTION: Stevens-Johnson Syndrome and toxic epidermal necrolysis are acute severe skin and most devastating ocular surface disease which lead to conjunctival scars and corneal damage and loss of vision. Mortality rate ranged between 1 to 35 %. Eyes are involved in more than 50 % of cases.

AIM: To present four cases with severe (serous) variant of Stevens-Johnson syndrome (toxic epidermal necrolysis) which were treated by dermatologist and ophthalmologist.

METHODS: In this retrospective, noncomparative, case series four patients (3 female and 1 male old between the ages 42 and 71 years) with Stevens-Johnson syndrome/toxic epidermal necrolysis were treated at the Eye Clinic and Dermatological Clinic Sarajevo in the period from may 2005 to june 2009. The diagnosis of Stevens-Johnson syndrome/toxic epidermal necrolysis was based on confirmed history of the acute onset of high fever, serious mucocutaneous illness with skin eruptions and involvement of ocular surface.

RESULTS: In all 4 cases illness appeared after administration of drugs. Extensive skin changes were followed by severe (serious) ocular inflammatory changes of anterior segment. After the long-term administration of systemic and local steroids and antibiotic therapies skin changes resolved. Long-term of ocular inflammations were controlled with administration of systemic and topical steroids (two cases) and administration of systemic and topical immunomodulating agent (Cyclosporine A).

CONCLUSION: Stevens-Johnson syndrome/toxic epidermal necrolysis require multidisciplinary treatment and follow-up. Use of antiinflammatory drugs and immunosuppression are need to control and treat skin and mucous membranes changes. After the inflammation subsided conjunctival scars and corneal changes require additional surgical treatment for conjunctivo-corneal restauration and visual improvement.

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O19:**OPTICORECONSTRUCTIVE SURGERY AFTER IRIDECTOMY (TUMOR EXCISION) IN PATIENT WITH IRIS MALIGNANT MELANOMA: A CASE REPORT**

¹Ibišević MM, ²Bilalović N, ³Kuster P, ¹Alikadić-Husović A, ¹Nišić F, ¹Saračević N.

¹Eye Clinic and ²Institute for Pathology of the University of Sarajevo Clinical Centre, Sarajevo, Bosnia and Herzegovina

*³University of Colorado
United States of America*

AIM: To present a case of iris malignant melanoma where we after excision of iris tumor performed simultaneously cataract extraction, intraocular lens implantation and iridoplasty.

METHODS: An interventional case report. A 72 y male presented at the Eye Clinic Sarajevo in September 2007 with tumor of iris and cataract on his right eye. Patient noticed changes on his iris one year before addmission. His visual acuity was RE: 1.5/50 sc, and IOP was 16 mmHg. Tumor data included location- temporal inferior quadrant, 2.5 clock hours affected by tumor (6:00 -8:30), anteroposterior epicenter and margins -pupil and midzone, configuration- nodular; basal dimension-3 mm, thickness- 1 mm,color- brown, surface-irregular, feeder vasell on tumor present. Lens was cataractous in projection of iris tumor and nucleus was condensated .Dilated direct ophthalmoscopy revealed degenerative macular changes. Gonioscopy showed that angle was open, wide, and trabecular meshwork was normal and without pigmentation or tumors. Extraocular extension was not present.Preoperative tests included laboratory blood tests (with AP, LDH, GGT,CK, bilirubine, tumor markers), B scan, MRI and CT scans of eyes and orbits and brain, x-ray of chest and x-ray of sinuses, ECHO of abdomen. Preoperative laser photocoagulation of tumor borders was performed. Surgery was performed under general endotracheal anesthesia After excision of iris tumor and after cataract extraction we implanted IOL in sulcus and performed iridoplasty.

RESULTS: Histopatologic evaluation revealed malignant melanoma of iris which stained positively with Melanin-A (+), HMB-45(+), S 100 proteine (+), while Ki-67 was low proliferative . Postoperative high intraocular pressure treated with timolol maleate while fibrin reaction disappeared after topical and subconjunctival application of steroids. 22 months after surgery visual acuity of right eye (RE) was 5/30 sc. IOP :16 mmHg. Slit-lamp examination, B-scan , direct and indirect ophthalmoscopy showed no signs of tumor in operated eye. No signs of metastasis were noticed.

CONCLUSION: In selected cases of iris malignant melanoma we can perform iris tumor excision followed with simultaneous cataract extraction, IOL implantation and iridoplasty.

O20:**TRANSPUPILARY THERMOTHERAPY (TTT) IN TREATMENT OF CHOROIDAL MELANOMA**

Jukić T, Vukojević N, Katušić D.

Zagreb, Croatia

AIM: to present the results of treatment of small choroidal melanoma with transpupillary thermotherapy.

PATIENTS AND METHODS: Six patients with small choroidal melanoma after the TTT were evaluated. Ultra-sound, fluorescein angiography were accessed. Follow up was six months.

CONCLUSION: TTT could be first line therapy in treatment of small choroidal melanoma.

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O21:**CIRRUS OCT OPTIC NERVE HEAD MEASUREMENTS FOR DISCRIMINATING BETWEEN HEALTHY AND GLAUCOMATOUS EYES**

¹Juriscic-Friberg F, ¹Ibisevic M, ¹Ljaljevic S, ¹Ahmedbegovic-Pjano M, ¹Pranjic M, ²Wollstein G, ²Xu J.

¹Eye Clinic of the University of Sarajevo Clinical Centre, Sarajevo,
Bosnia and Herzegovina

²UPMC Eye Center, Pittsburgh,
United States of America

AIM: Spectral domain optical coherence tomography (SDOCT) provides detailed volumetric assessment of the optic nerve head (ONH) region. The purpose of this study was to investigate the ability of ONH data to discriminate between healthy and glaucomatous eyes.

METHODS: Thirty-six healthy eyes (36 subjects) and 31 glaucomatous eyes (23 subjects) underwent comprehensive ophthalmic examination, visual field and SDOCT (Cirrus HD-OCT, Carl-Zeiss Meditec, Dublin, CA) imaging using the three dimensional cube scanning pattern of the ONH region. Software of our own design was developed to automatically provide the following global and sectoral ONH parameters: disc area, cup area, rim area, cup volume, rim volume, cup/disc area ratio, and vertical cup/disc ratio. Mean retinal nerve fiber layer (RNFL) thickness was computed by the device's commercial software. Global measurements were compared between healthy and glaucomatous eyes using student t-test and the area under the receiver operating characteristics curve (AUC) was computed for discrimination between groups, which were defined by visual field.

RESULTS: Visual field mean deviation of the healthy group was statistically significantly higher than the glaucoma group (-0.44 ± 0.87 and -7.82 ± 7.49 dB, respectively, $p < 0.0001$). All global parameters were significantly different between groups except for disc area ($p = 0.50$). The best discriminating global parameter was rim area with AUC=0.884 followed by cup volume (0.853). The best discriminating sectoral parameter was rim volume in the nasal superior sector (AUC=0.949) followed by rim volume in the temporal inferior sector (0.925). No significant difference was noted between RNFL AUC (0.948) and the best global and sectoral ONH parameters.

CONCLUSION: SDOCT ONH parameters are capable of discriminating between healthy and glaucomatous eyes. These parameters provide a good alternative to RNFL thickness measurements that show similar discriminatory capability. Further improvement in discrimination might be achieved by combination of multiple parameters.

ClinicalTrials.gov Identifier: NCT00343746

O22:**ASTIGMATISM AFTER CATARACT SURGERY**

Jusufović V, Mušanović Z.

Eye clinic, University Clinical Center Tuzla, Tuzla,
Bosnia and Herzegovina

This study presents the results of surgical treatment of cataract by comparing the value postoperative astigmatism and visual acuity of operated patients after cataract surgery using phacoemulsification with implantation of the intraocular lenses. During the operation there was performed corneal incision of 3.2 mm and 2.0 mm or microincision cut (so-called MICS phaco, Micro Incision Cataract Surgery). This prospective study includes 30 eyes who were divided into two groups depending on size of incision on cornea, both groups had fifteen eyes. We have analyzed visual acuity and postoperative astigmatism and axial arrangement of astigmatism preoperatively and on the three following postoperative controls (1, 7, 30 days after surgery). Cataract surgery using phacoemulsification solved the problem of cataract, but also leads to the emergence of a postoperative astigmatism, which is significantly lower in the smaller corneal incision and schedule of axial astigmatism depends on the location of the incision.

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O23:**APPLICATION OF ANTIGLAUCOMA MINI SHUNT EXPRESS IN COMBINED GLAUCOMA AND CATARACT OPERATION****Jusufović V, Mušanović Z, Vukotić V, Pilavdžić A***Eye clinic, University Clinical Center Tuzla, Tuzla,
Bosnia and Herzegovina*

Cataract and glaucoma, as ophthalmologic diseases, despite all medicament and surgically methods, represent most common causes of low vision and blindness. Dominant method of surgical cataract operations is phaco technique. Glaucoma treatment is directed at reducing intraocular pressure (IOP), which may require surgical intervention when medicament and/or laser therapy fail to control IOP. Traditional surgery technique for glaucoma is penetrating trabeculectomy, and it is the method of choice for decades. Unfortunately, there are complications such as hypotony or slow vision recovery. New implant was developed to allow better control of IOP and one of them is the EX-PRESS mini shunt, that through advances in design and method of installation becomes interesting. In western countries technology of antiglaucoma mini shunt is already known for a few years, and since recently, also in BiH, through the company OPATANOL from Israel and their mini-shunt Ex-PRESS. Operational method of installing a mini shunt is the method of choice in patients with open angle glaucoma, a specially combination of cataracts and glaucoma's operation, when is indicated to remove cataracts with implantation intraocular IOL in camera posterior. Both operations can be done in one act as a minimally invasive (microincision) and practically suturless. Our study is video presentation combined operation of cataract with IOL implantation with implantation antiglaucoma mini shunt EXPRESS.

O24:**SILICONE OIL REMOVAL THROUGH PLANNED POSTERIOR CAPSULORHEXIS COMBINED WITH PHACOEMULSIFICATION VERSUS SILICONE OIL REMOVAL THROUGH PARS PLANA SCLEROTOMY****Karčić S, Hajjir Karčić H, Alimanović E, Šaković-Račić A, Al Hassan N, Nišić F***Eye Clinic of University Clinic Center Sarajevo, Sarajevo
Bosnia and Herzegovina*

AIM: To show technique and compare retinal redetachment incidence after silicone oil removal through planned posterior capsulorhexis combined with phacoemulsification and after silicone oil removal through pars plana sclerotomy.

METHODS: We followed 20 patients with intraocular silicone oil removal and divided them into two groups: 10 candidate patients for intraocular silicone oil removal and cataract extraction underwent combined phacoemulsification and transpupillary silicone oil drainage through a planned posterior capsulorhexis, single superior corneal incision and side port incision without a pars plana infusion line.

10 candidate patients for intraocular silicone oil removal without cataract surgery underwent silicone oil removal through pars plana sclerotomy

MAIN OUTCOMES MEASURES: retinal redetachment incidence after silicone oil removal

RESULTS: In first group retinal redetachment incidence was significantly lower than in second.

CONCLUSION: Combined phacoemulsification and transpupillary silicone oil drainage through a planned posterior capsulorhexis and without pars plana infusion line is a simpler and less invasive technique that offers the advantages of diminished surgical trauma and reduced incidence of retinal redetachment. We believe that this technique should be reserved for patients with a stable retina and closed retinal breaks not in need of additional surgical maneuvers at the time of oil removal.

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O25:

TEMPORAL (GIANT CELL) ARTERITIS: CLINICAL FINDINGS. A CASE REPORT.

Knežević J, Ružić K, Stenberger H.

*Department of ophthalmology, General Hospital „ Pula“, Pula
Croatia*

We present a case of 80 years old woman with giant cell arteritis (GCA) which is manifested like fever of unknown origin with premanent visual loss.

Giant cell arteritis is diagnosed when clinical suspicion from characteristic clinical symptoms and signs is supported by simple blood test, including a raised erythrocyte sedimentation rate (SE) and C-reactive protein (CRP), and confirmed by positive temporal artery biopsy.

O26:

ORBITAL DECOMPRESSIONS IN 2008

Knežević M, Rašić D, Vlajković G.

*Eye Clinic, Clinical Center Serbia, Belgrade,
Serbia*

INTRODUCTION: Graves's orbitopathy is disease demanding joined treatment of ophthalmologist and endocrinologist. It is big problem in whole region and is not treated systematically.

METHODS: Seventeen orbital decompressions on 9 patents were performed during period of one year.

RESULTS: Operations were performed on 10 patients (17 decompressions) by trans caruncular combined with inferior fornix approach and were done on 3 and two orbital walls and fat was partially removed in 4 decompressions. For orbits in two patients were decompressed for esthetic reasons. Five patients had bilateral proptosis, two of them with strabismus and tree only unilateral proptosis, one with strabismus. Only 2 patients (4 orbits) needed tree wall decompression. After more than 3 months strabismus surgery was performed in three cases.

CONCLUSION: well prepared properly done orbital decompression is procedure with good functional and esthetic outcome.

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O27:**PENETRATION OF BASOCELLULAR CARCINOMAS IN THE ORBIT****Knežević M, Rašić D, Vljaković G.***Eye Clinic, Clinical Center Serbia, Belgrade,
Serbia*

INTRODUCTION: Basocellular carcinoma and conjunctival carcinomas are most common tumors with orbital spread and represent most common reason for exenteration.

METHODS: Retrospective review of all exenteration histopathology reports between 1. 1. 2000. and 31. 12. 2008.

RESULTS: Exenteration was performed in 35 cases and all were neoplastic. There were 16 (45,72%) lid tumors and the same number originating from conjunctiva, 2 (5,71%) primary orbital 1 (2,85%) metastasis in the orbit. Among the lid tumors there were 12 (34,29%) basocellular, 2 (5,71%) squamocellular and 2 (5,71%) adenocarcinoma sebaceum

CONCLUSION: penetration of basocellular carcinoma were reason for exenteration in 12 (34,29%) patients during 9 years.

O28:**DIAGNOSTICS OF KERATOKONUS USING „OCULUS PENTACAM II“ AND ITS INCIDENCE IN CANDIDATES FOR REFRACTIVE SURGICAL PROCEDURES****¹Kozomara R, ²Gabrić N, ¹Kozomara B, ²Bohač M, ¹Potkonjak E***¹Ophthalmology Clinic "Kozomara", Banja Luka,
Bosnia and Herzegovina**²Ophthalmology Clinic "Svjetlost", Zagreb,
Croatia*

INTRODUCTION: The purpose is to show incidence of keratokonus (KK) diagnosed by Oculus Pentacam II in candidates for refractive surgical procedures.

MATERIALS AND METHODS: The study was conducted on 2.714 patients, or 5.428 eyes who were examined on Oculus Pentacam II and who were candidates for one of the refractive surgical procedures in Eye Clinic Svjetlost, Zagreb and Eye Clinic Kozomara, Banja Luka from 2007-2009. Patients were divided into groups according to their sex, age, degree of keratokonus and whether the keratokonus affected one or both eyes.

RESULTS: We discovered keratokonus in 133 male and 99 female patients; one eye was affected in 127 and both eyes in 104 patients; keratokonus is seen in 41 cases from 18-25 years of age, 57 cases from 26-35 and 36-45, 56 cases from 46 and above; KK1 had 73 eyes, KK2 114, KK3 88 and KK4 58 eyes.

CONCLUSION: Among 5.428 examined eyes, keratokonus was discovered in 333 patients or 6.1%. Important and worrying fact is that KK4 was seen in 58 patients or 17% of those who have keratokonus. This proves that there is still need for more detailed and more effective early diagnostic of keratokonus.

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O29:**DEPARTMENT OF CATARACT SURGERY AT EYE DEPARTMENT, CANTONAL HOSPITAL ZENICA BIH,
FROM 1999 TO 2009****Kožo T.***Eye department, Cantonal Hospital Zenica, Zenica
Bosnia and Herzegovina*

AIM: To show development of cataract surgery from 1999 to 2009 at eye department Cantonal hospital Zenica

PATIENT AND METHODS: Retrospective analysis of inpatient records for cataract surgery.

CONCLUSION: The number of cataract surgery raised. A change of surgical techniques was seen.

O30:**HERPES ZOSTER AND RISK FACTORS****¹Kuralić S, ²Pavljasević S.**¹Dermatovenerology Department University Clinical Center Tuzla,²Eye policlinic, Public Health Center Tuzla,
Bosnia and Herzegovina

INTRODUCTION: Herpes zoster is the disease of elderly people and appearance with herpetic vesicles form groups in one or more dermatomes which are related with proper dorsal spinal root segments. Disease is caused by varicella zoster virus. Ophthalmological zoster appears on the first n. trigeminal branch with skin changes and eye changes, as well. Eye changes could be present even the skin changes are with little skin rash.

AIM: This study has aim to discover risk factors and their influence in herpes zoster dermatosis appearance.

PATIENTS AND METHODS: In this retrospective study, medical documentation of hospitalized patients in Dermatology Clinical University Center in Tuzla, in the period of one year (2008) chosen by random method. All patients had the same diagnose-confirm with anamnesis facts and clinical appearance.

RESULTS: From all 27 patients, average old 79.85 years, males were 14/27 and females were 13/27. The youngest patient was 1 years old. More than half remembered that suffered from varicella. Before the hospitalization, 23 from 27 patients, were started with ambulance treatment 5 to 7 days before hospitalization. According to dermatomes distribution- ophthalmic 6/27, intercostals 12/27, abdominal 7/27 and neck region 2/27. Considering co-morbidity: diabetes was in 5/27, arterial hypertension 7/27 but 4/27 patients were operated from colon carcinoma two years earlier. Ophthalmic zoster 3/6 had eye complications as keratitis and were treated simultaneously, as well. Most of patients 15/27 were ill in winter months.

CONCLUSION: Results of this study shows that elderly people are risk groups, patients with diabetes, with hypertension and oncological patients are risk groups, as well. Herpes zoster is more often in winter months. Herpes zoster is rare in children (1/27).

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O31:**POSTERIOR SEGMENT COMPLICATIONS AFTER ANTERIOR SEGMENT SURGERY*****Latinović S.****Novi Sad, Serbia*

Number of cataract refractive lens surgery increase in number of procedures, new surgery techniques and new surgeons. The most experienced and skilled anterior segment surgeon will be faced with some complications which implicate the posterior segment.

Pars plana vitrectomy strategy in retaining nucleus fragments in the vitreous 0,2-0,8 %, pseudophakic RD 1-2%, vitreous and choroidal expulsive haemorrhage 0,1-0,6% and possible complication of retrobulbar and peribulbar anaesthesia is presented. The video cases are discussed on the risk factors pathophysiology mechanisms, and results of the treatment.

O32:**INTRAORBITAL LYMPHOMA MIMICKING CHRONIC OCULAR INFLAMMATIONS - TWO CASE REPORTS*****Ler D, Baralić J, Pozder S, Muhović-Bejtić J, Pačo I.****General Hospital "Prim. Dr Abdulah Nakaš", Sarajevo,
Bosnia and Herzegovina*

INTRODUCTION: Pain and redness of the eye and adnexa, protrusion, ptosis and ophthalmoplegia are usually associated with some sort of inflammation, such as dacryoadenitis, blepharoconjunctivitis, chalazion, hordeolum or orbital cellulitis. Unfortunately, it often happens that these symptoms get misinterpreted and the real pathology stays unrecognized. This and similar cases can be described as Masquerade syndrome.

CASE REPORT: In a time period of one month, two patients with similar symptoms and almost identical clinical history were presented to our clinic. They were both treated by different ophthalmologists in the past 14 months for numerous conditions. Based on our examinations and their medical history, patients were admitted, biopsy was performed and diagnosis of malignant orbital lymphoma was confirmed.

OBJECTIVE: To emphasize the importance of biopsy and histopathological analysis and to present them as a diagnostic "Golden rule", a method of choice, for managing such medical conditions. To present orbital lymphoma as a potential cause of Masquerade syndrome.

CONCLUSION: By persisting, recurrent inflammations of the eye and adnexa it is necessary to consider other conditions such as intraocular and intraorbital tumors. Biopsy and histopathological analysis should be considered as essential diagnostic methods in cases with such medical history and clinical appearance.

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O33:**COMPARISON BETWEEN TRABECULECTOMY WITH ANTIMETABOLITE, TRABECULECTOMY WITH OCULUSGEN AND TRABECULECTOMY WITH EX-PRESS IMPLANT*****Ljaljević S, Pranjić M, Jurišić V, Ahmedbegović-Pjano M.****Glaucoma department, Eye Clinic of University Clinic Center of Sarajevo, Sarajevo
Bosnia and Herzegovina*

AIM: Based on clinical experience around the world that antimetabolites, OculusGen, Ex-PRESS implant successfully eliminates the scar formation in glaucoma trabeculectomy, our purpose is to investigate the safety and effectiveness after trabeculectomy.

MATERIAL AND METHODS: Man, 36. History of left eye: Glaucoma simplex chr. operatom decomp. O. sin, treated with two antiglaucomatous drugs and IOP was 28mmHg. He was operated with trabeculectomy with MMC. Women, 50 age, History of left eye: Glaucoma sec operatum decomp. o. sin; Pseudophakia o. sin. She was treated with 3 antiglaucomatous drugs and IOP was 33mmHg. She was operated with trabeculectomy with Oculus Gen. Man, 62 age. History of right eye: Iridocyclitis recidivans Cataract surgery and trabeculectomy previously, treated with 3 antiglaucomatous drugs. IOP was 38mmHg and he was operated with trabeculectomy with Ex-PRESS implant.

RESULTS: We followed up the results of IOP, visual acuity, depth of CA and postoperative complications for three patients. IOP was decreased in all cases but hypotony with shallow CA were presented in cases with antimetabolite and OculusGen and uveitis anterior in case operated with trabeculectomy with MMC. In case with Ex-press implant we didn't have hypotony, CA was stable and without any complications except 7 day after surgery conjunctiva on bleb was very thin.

CONCLUSION: Every way of trabeculectomy showed decreased IOP but Ex-PRESS implant showed the less complications.

O34:**EFFECTIVENESS OF ANTERIOR TRANSPOSITION OF THE INFERIOR OBLIQUE IN IPSILATERAL SUPERIOR OBLIQUE PALSY*****Branko S, Ljutica M, Stojkovic R, Bubalo D, Regoda V.****Special eye clinic „Stankov Ophthalmology“, Belgrade,
Serbia*

AIMS: to present the results of anterior transposition of the inferior oblique in a series of patients with secondary inferior oblique overaction (as a sequela of ipsilateral superior oblique palsy).

METHOD: a retrospective study on 23 patients who had unilateral or bilateral inferior oblique anterior transpositions. At 4 patients we make surgery on horizontal muscles at the same time. The patient underwent anterior transposition of the inferior oblique muscle at our institution between Feb 2006 and Jul 2007. Mean follow-up period was 1 year.

RESULTS: at 21 of 23 patient (91%) we get a satisfactory result: ortho in primary position and cover test, good motility and angle of deviation measured on Amblyoscope less than 2° in vertical and 4° in horizontal direction.

CONCLUSIONS: we found that the dosed anterior transposition of the inferior oblique was effective for treating superior oblique palsy with secondary overaction of the inferior oblique muscle.

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O35:

**USE OF BRIDGE FLAP IN RECONSTRUCTION OF PALPEBRAL SKIN DEFECT AFTER
MALIGNANT TUMORS EXCISION**

¹Marković S, ¹Ibišević MM, ²Salihagić S, ³Bilalović N, ¹Pačuka-Saračević N, ¹Hamidović E.

¹Eye Clinic, ²Clinic for plastic and reconstructive surgery, ³Clinical Institute for pathology and cythology of the Clinical Center of the University of Sarajevo, Sarajevo
Bosnia and Herzegovina

AIM: To present cases where we used bridge-flap in reconstruction of full skin defect of medial third of lower eyelid after malignant tumors excision.

METHODS: This interventional, noncomparative case series was performed in the Eye Clinic Sarajevo, in the period between April 2006 to May to June 2009. In all cases the full skin palpebral defect of medial third of lower eyelid and medial angle, created by surgical excision of malignant tumors, was covered with bridge-flap. Written informed consent was obtained for all patients accompanied with Clinical Board permission. All surgeries were performed in local infiltration anesthesia. All cases had been undergone and second surgery for excision of bridge skin (4 – 6 weeks after first surgery). Results were presented in tables and with appropriate photo documentation (preoperative, intraoperative and early and late postoperative). Excising material with tumor tissue was sent to patohistological examination.

RESULTS: Of 4 cases 2 (50 %) cases were female and 2 (50%) were male. Age of patients ranged from 55 to 74 years. In no one cases we noticed intraoperative, early or late postoperative serious complications. Results of patohistological examination: 2 (50 %) cases with basocellular carcinoma, 1 (25%) case with squamocellular carcinoma and one case had precancerosis of skin. No evident metastases noticed in all patients. No one case showed recidive of tumor in, and around of composite graft 10 - 32 months postoperatively. All cases obtained satisfactory functional, anatomical and cosmetic results.

CONCLUSION: Bridge-flap can be successfully used in the reconstruction of eyelid defect (size to 10x10 mm) of medial angle and medial third of lower eyelid with satisfactory physiological, anatomical and cosmetic results. In selected cases Bridge-flap can be combined with other plastic-reconstructive surgeries on lower eyelids. Patients with unreal expectation are not candidate for this surgical procedure. Advantage of this flap is that good vascularisation of transplant is obtained, while disadvantage is – this is two steps procedure.

O36:

**SURGICAL TREATMENT OF POSTTRAUMATIC SUBLUXATED CATARACT WITH PARTIAL
IRIDORHEXIS – CASE REPORT**

Međedović A, Jusufović V, Mušanović Z

Eye clinic, University Clinical Center Tuzla, Tuzla,
Bosnia and Herzegovina

Paper is a video clip of surgical treatment of subluxated post-traumatic cataract with partial iridorrhesis. This video presentation shows: operating technic of anterior capsule staining deslipped subluxated post-traumatic cataract, with phacoemulsification with reduced flow irrigation because of subluxated cataract, implantation of soft flexible intraocular lenses, and at the end pupilloplastic which formed the proper pupil and thereby reduced unnecessary dispersion of light which will significantly affect the final visual acuity.

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O37:**ENDOSCOPIC CYCLOPHOTOCOAGULATION COMBINED WITH PHAKOEMULSIFICATION*****Ignjatović Z, Kuljača Z, Misailović K.****„Miloš Eye Clinic“, Belgrade,
Serbia*

INTRODUCTION: Endoscopic cyclophotocoagulation (ECP) is a new method to directly photocoagulate the ciliary body under endoscopic guidance.

AIM: Video presentation of ECP at the time of phakoemulsification.

MATERIALS AND METHODS: Indication for ECP are glaucoma treated unsuccessfully with medications in patients who need cataract surgery (phakoemulsification or MICS), and refractory glaucoma or failed previous filtration surgery. The operation could be performed in parabolbar, sub-Tenon or topical anesthesia. The two main approaches to reach the ciliary processes are via a limbal or a pars plana entry. Treatment is usually between 180 and 270 degrees.

RESULTS: The mean reduction of IOP was 5-7mmHg, the operation was longer 5-10min than phakoemulsification, postoperative therapy is the same as for cataract surgery, the results are stable after 4-6 weeks. ECP has a lower incidence of operative and postoperative complications than trabeculectomy. The most often ECP is associated with transitory high postoperative IOP on the first day. Postoperative inflammation is another often complication.

CONCLUSION: ECP is an efficacious tool for the treatment of glaucoma in the time of cataract surgery and refractory glaucoma. The operation is associated with a low incidence of operative and postoperative complication.

O38:**CYCLOPHOTOCOAGULATION FOR TREATMENT OF NEOVASCULAR GLAUCOMA*****Misita V.****Eye Clinic, Clinical Centar of Serbia, Belgrade
Serbia*

INTRODUCTION: Neovascular glaucoma in diabetic retinopathy still presents a serious complication. Beside medical therapy and cyclodestructive surgery visual function can be hardly saved. In this cases diode laser cyclophotocoagulation can be a therapy of choice.

AIM: To investigate the effect of cyclophotocoagulation with diode laser 810 nm in treatment of neovascular glaucoma.

MATERIAL AND METHODS: 30 patients with neovascular glaucoma were treated with contact cyclophotocoagulation. All of them had uncontrolled intraocular pressure in spite of full medical therapy. Each eye was treated with 20 laser lesions using contact probe.

RESULTS: In all patients intraocular pressure dropped significantly and in 50% of them visual function was saved.

CONCLUSION: Diode laser cyclophotocoagulation showed good effect in treatment of neovascular glaucoma, preserving visual function in about 50% of cases.

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**O39:
SURGICAL TREATMENT OF ENDOPHTHALMITIS**

Mušanović Z, Jusufović V.

*Eye clinic, University Clinical Center Tuzla, Tuzla,
Bosnia and Herzegovina*

Endophthalmitis is a condition that usually meets after the eye injury, perforative or not, so as a condition that can occur after intraocular surgery 0.5%. The most common cause of endophthalmitis are gram positive organisms (90-95%), gram-negative after them (6%), fungi (3%). Management of endophthalmitis involves medical treatment as very intensive therapy, topical and systemic, intravitreal application of antibiotics and after all vitrectomy. Timing of vitrectomy is a stumbling point among today's vitreoretinal surgeons. EVS (Endophthalmitis Vitrectomy Study) Study from 1992. set an indication when vitrectomy is needed for endophthalmitis cases, in recent times among surgeon there is different criteria for timing of vitrectomy, so called early vitrectomy. So called. "early" or "late" endophthalmitis vitrectomy have advantages and disadvantages. This study presents cross section of current attitudes about vitrectomy "timing" in case of endophthalmitis, plus video clip of vitrectomy combined with cataract phacoemulsification with implantation of IOL, in eye with endophthalmitis after eye injury.

**O40:
IMPORTANCE OF EYE BANK FOR KPP**

Nišić F, Ibišević MM, Dervišević E, Alikadić-Husović A, Hadžić S, Kaliman M.

*Eye Clinic, Clinical Center of the University of Sarajevo, Sarajevo
Bosnia and Herzegovina*

PURPOSE: To present Eye bank establishing and necessary preconditions in the organization, legislation, technical conditions, education for the collecting, taking, control, storage and preservation of corneal transplant. To present performance of the operating procedures and postoperative treatment of KPP.

MATERIAL AND METHODS: For successful management of KPP most important are preconditions and establishing of the Eye bank. Preconditions: a) organization of education of professional team - ophthalmologist, medical technician, b) legislation (writing doctrine, certification in FMH) c) technical requirements (organization of eye banks): c1. space - eye bank; c2. equipment; c3. materials

CASE REPORT: 72 years old patient, who operated senile cataract of the left eye. Preoperative visual acuity: track the movements of the hands in front of the eye. Postoperative visual acuity 0.5 sc. One month after the surgery herpetic keratoiridocyclitis with corneal ulceration and leukomathotic blur has developed on the same eye. Visual acuity L + P +. After conducted hormonal therapy on inflammatory changes in the front segment, we performed KPP surgery. Postoperatively control of the graft transparency was achieved by administrating immunosuppressive therapy (steroids and cyclosporine A).

RESULTS: The three-month, six-month control show good position and transparency of the graft. One year postoperatively the suture were removed and laser membranectomy done. Corneal transparent graft was without signs of rejection.

CONCLUSION: Perforative keratoplasty is the method of choice for corneal inflammation disease if conservative therapy does not give a satisfactory result. Performance of this surgical procedure depends in a great deal of the fulfillment of following conditions: the formation of eye bank for the control, processing and storage of corneal transplantation.

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**O41:
CONJUNCTIVAL MELANOMA**

¹Pašić I, ¹Jusufović V, ²Rifatbegović A, ²Imamović N, ³Mujanović-Mustedanagić J.

¹Eye Clinic, ²Surgery Clinic, ³Department of Pathology of the University Clinical Center Tuzla, Tuzla
Bosnia and Herzegovina

BACKGROUND: Conjunctival melanoma is a pigmented or non-pigmented, potentially lethal tumour formation appearing in adults.

AIM: To show a way of diagnosing and treating our patients for conjunctival melanoma.

MATERIAL AND METHODS: Three patients were treated at our institution for conjunctival melanoma during 2008 and 2009.

RESULTS: The patients are all male aged 39 to 57. In one case melanoma excision was performed several times with mitomycin application. Finally we definitely decide on orbital exenteration. In the second case orbital exenteration was primarily performed, while in the third case, for now, only tumour excision was performed. In all the cases patho-hisological analysis proved that we were dealing with melanoma.

CONCLUSION: Three cases of conjunctival melanoma are presented in different clinical stages of disease. The patients were treated in three different ways. Considering the lethal character of their disease their prognoses also vary. Conjunctival melanoma (as well as chorioidal melanoma) incidence is on an alarming and great increase in our area.

**O42:
ALPHA LIPOIC ACID AND VISUAL FIELD CHANGES IN DIABETIC RETINOPATHY**

¹Pavljasević S, ²Sefić-Kasumović S.

¹Eye Polyclinic, Public Health Center Tuzla, Tuzla

²Private Eye Clinic „Sefić“ Sarajevo
Bosnia and Herzegovina

AIM: To indicate alpha lipoic acid influence on diabetic retinopathy in various stadium patients. Visual field changes could be one of predictable factors for the disease proression in patients with diabetic retinopathy.

PATIENTS AND METHODS: Study was performed from may 2006 to june 2007 in Eye Polyclinic JZU Health Center Tuzla, Bosnia and Herzegovina with patient datas. All 100 patients, with various diabetic retinopathy types, included in this study, were devided in two groups: 50 patients with alpha lipoic acid treatment and 50 patients without this remedia. Visual field changes were registrated with Goldmann kinetic perimetry with 1mm² and relative intensity from 1,00 to 0,0315 apostilbs considering patients age and spot testing characteristics. Patients younger than 50 years periphery was tested with spot same size for the central region and periphery, as well but light intensity was changed from higher in center to lower intensity for periphery. Patients older over 50 years, testing spot was bigger for periphery visual field testing and smaller in center since intensity was the same for central and periphery parts. Theese visual changes were registrated in the begining and in the end of this study.

RESULTS: Visual field changes, as diabetic retinopathy changes, could be as- scotomas, isopteras depression, hemianopsie, quadrantanopsie or some of theese in correlation. One year after this study in these two groups, testing group with alpha lipoic acid and control group without, t-test was in significant difference between these two groups and changes were registrated more often in control group (t-test=-2,437 df=49 P<0,05=0,018). Hemianopsie and quadrantanopsie were registrated more in control group.

CONCLUSION: Alpha lipoic acid in diabetic retinopathy patients therapy has influenze in visual field improvement and could be used in diabetes eye complications treatment, as well.

**ABSTRACTS SUBMITTED TO THE
CONGRESS OF OPHTHALMOLOGISTS IN BOSNIA AND HERZEGOVINA
Tuzla, November 11-14, 2009**

O43:

TECHNICAL DEVICE AND ANTIGLAUCOMATOUS THERAPY COMPLIANCE-NO LIES AND NO CHEAT

¹Pavljasević S, ²Nuhbegović S, ³Sefić-Kasumović S.

¹ Eye Polyclinic, Public Health Center Tuzla, Tuzla

² Physiology Department Medical Faculty, University Tuzla, Tuzla

³ Private Eye Clinic „Sefić“ Sarajevo
Bosnia and Herzegovina

AIM: evaluate new technical advice for antiglaucomatous therapy usage (Travalert) and if they increase patients compliance and therapy reliable usage from patients.

PATIENTS AND METHODS: Available Trivalent (Travatan, as fixed combination timolol and travoprost) could support only one remedial in device. Group of 20 patients: 17 female and male patients, average age 57,5 years (from 31. to 75. year) was selected according to their diagnose: open angle glaucoma and ocular hypertension. They were followed up for one month period of taking therapy and intraocular pressure was measured in the study beginning, 14. days and one month after taking therapy. Drops were taken once a day, in the evening and only one drop in both eyes. In the study beginning visual acuity, Goldmann perimetry and gonioscopy were taken from every patient.

RESULTS: Target intraocular pressure was achieved in 85% patients for one month therapy period. For this same period 52% of days patients did not use properly this remedial (overdose or did not use anyway). From 20 patients, 5 patients were pleased with remedial usage and application mode and other 15 patients were complained on the one of side effects from these drops usage. But the most of patients were satisfied with practical usage (one a day), useful sound signal and 5% patients were asked for same parts of this device (for sound signal or fixative device apart).

CONCLUSION: This device is useful, practical and controllable for antiglaucomatous therapy according to patients and examiner opinions. Although, it is very important to choose proper device users and to do precision explanation about device use with specific moments for use. This could be very interesting toy in the serious treatment.

O44:

**SPECIFICS OF CATARACT SURGERY ON PATIENT WITH COMBINED COMPLICATIONS OF
EYE DIABETES – VIDEO CASE**

Jusufović V, Pilavdzic A, Musanovic Z

Eye clinic, University Clinical Center Tuzla, Tuzla,
Bosnia and Herzegovina

Video demonstration of diabetic cataract surgery, using the phaco technique, performed on patient with combined complications of diabetes (cataract, diabetic retinopathy, hematovitreal) during the combined surgery of anterior and posterior eye segment. This surgery is very specific due to the multiple reasons including narrow pupil, iris neovascularization and difficult visualization of lens capsule.

**ABSTRACTS SUBMITTED TO THE
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Tuzla, November 11-14, 2009**

O45:

SURGICAL APPROACH IN TREATMENT OF CONGENITAL FIBROSIS OF THE EXTRAOCULAR MUSCLES

Popović S, Stanković B, Stojković M, Milić N.

*Clinical Center of Serbia, Clinic for Eye Disease, Belgrade,
Serbia*

Congenital fibrosis of extraocular muscles (CFEOM) is rare congenital anomaly characterized with ptosis, and changes of all extraocular muscles especially inferior rectus muscle. Normal muscle tissue is transformed to a fibrous tissue in various degrees. Inheritance of anomaly is in autosomal dominant manner with different degree of expression. Results of the surgical treatment of CFEOM are modest in general, but patients are highly motivated for it, because even minimal improvement of motility brings to a relieve of symptoms.

O46:

PRIM DR. KOSTA STAMENKOVIĆ - FOUNDER OF THE EYE DEPARTMENT IN TUZLA

Sarajlić Dž.

*Eye clinic, University Clinical Center Tuzla, Tuzla,
Bosnia and Herzegovina*

Born 1904 in Vranje. Medical degree in Belgrade. 1945 finished specialization of ophthalmology in Belgrade. From 1946 until 1949 he worked in Bitolje, where he founded the eye department. From 1949 to 1951 he worked in Belgrade Medical Center as Chief of the Dispensary for eye diseases.

In 1951 he went to Tuzla on call from Dr. Alija Karahasanović manager of the hospital. Establishes eye department (1954.) where he works as head of the department until 1961. In 1961 by the decision of the Commission for technical assistance of the government of Yugoslavia he went to Morocco, where he remains until 1971.

While working in Tuzla Dr. Stamenkovic works in ambulatory and surgical ophthalmologic practice. At the same time he is engaged in the suppression of trachoma and its eradication. With the help of UNICEF and established regional anti-trachoma clinic in Tuzla, and together with prof. Hansijadesom he was first in Europe who isolated trachoma microorganism.

**ABSTRACTS SUBMITTED TO THE
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O47:**SELECTIVE LASER TRABECULOPLASTY – A NEW APPROACH TO MANAGING OPEN-ANGLE GLAUCOMA*****Sefić-Kasumović S, Sefić M.****Eye Clinic «Dr.Sefić», Sarajevo
Bosnia and Herzegovina*

Selective laser trabeculoplasty (SLT) is simple, highly effective laser procedure that reduces intraocular pressure associated with glaucoma. It selectively targets and irradiate only the pigment cells in the trabecular meshwork with no collateral damage to its underlying structure. There is no thermal effect. SLT emits single short visible pulses with 400 μ m fixed size, pulse energies from 0.8-1.1 mJ, 50-100 shots are placed onto the nasal or temporal trabecular meshwork. 50 eyes suffered from open-angle glaucoma were tested. Intraocular pressure (IOP) was more than 22 mm Hg with a standard antiglaucomatous therapy. Intraocular pressure was checked before the treatment, a day and seven days after and a month after SLT. We found increased IOP of 5-7 mm Hg seven days after SLT but decreased IOP from the beginning values a month later. 8 patients did not have a significant changes of IOP during our monitoring. SLT represents a whole new approach to managing open-angle glaucoma, compliance issues minimized, gentle non-invasive treatment, no systemic side effects. It is the «latest» in glaucoma treatment.

O48:**BOTULINUM TOXIN A TREATMENT OF DYSTHYROID OPHTHALMOPATHY*****Stiglmayer N, Juri Miklaužić J.****Department of Ophthalmology, School of Medicine University of Zagreb, Zagreb
Croatia*

INTRODUCTION: Authors discuss the clinical use of botulinum toxin-A in the management of patients with dysthyroid eye disease. Treatment of Graves' ophthalmopathy does not always provide favorable results. Glucocorticosteroids, orbital radiotherapy and surgery are methods of choice but with a lot of side effects. The aim of this study was to evaluate the use of botulinum toxin A reversible chemodenervation as the treatment of Ophthalmopathy with "crowding syndrome" due to extraocular muscles contraction, lid retraction and motility disturbance with diplopia. The injection technique, discussion of mechanism and complications are described.

MATERIAL AND METHODS: In 62 patients with "active" phase of dysthyroid eye disease, 75 patients with diplopia due to motility disturbance and 93 patients with lid retraction only are treated with the injection of botulinum toxin A. A group of patients with "crowding syndrome" were treated with retrobulbar injection in projection of inferior rectus muscle (Botox 25-30 j/0,25 ml/) and in motility disturbances in projection of the most affected (inferior rectus muscle or into medial rectus muscle or if necessary both - 5j+25j Botox). Lid retraction was treated with botulinum toxin injection (Botox 5-10j) into levator muscle. The effectiveness and acceptability of the treatment was assessed clinically.

RESULTS: In all patients injection was tolerated well and congestion of the eye was diminished. In 72 patients ocular motility was improved and the angle of deviation was reduced. Retraction diminished in all patients and in 3 patients there was ptosis as a side effect. Follow up was for a mean of 9 months. Duration of benefit varied from 2-4 months with relapse of motility reduction and lid retraction.

CONCLUSION: It seems that there is a place for the use of botulinum toxin in Dysthyroid ophthalmopathy as well as in "acute" phase to reduce congestion and motility disturbances or in a single symptom as retraction. The majority of these patients is employed and need binocular function in everyday professional activities as well as for driving. Lid retraction reduced protection of the eye on one side and gives very disfiguring (frightened and angry) appearance. Patients with thyroid faces differ from their former appearance and all of them in this study reported a beneficial effect from botulinum toxin A treatment.

**ABSTRACTS SUBMITTED TO THE
CONGRESS OF OPHTHALMOLOGISTS IN BOSNIA AND HERZEGOVINA
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O49:**CORRELATION BETWEEN HBA1C AND DRY EYE SYNDROME IN DIABETES MELLITUS PATIENTS****Šaković-Račić A, Karčić S, Hajjir Karčić H, Al Hasan N.***Eye Clinic, Clinical Centre of University of Sarajevo, Sarajevo
Bosnia and Herzegovina*

OBJECTIVE: The aim of this study was to examine correlation between increased levels of HbA1c in the blood and emergence of dry eye disease in diabetes mellitus patients.

MATERIAL AND METHODS: In this controlled prospective case a group of 40 diabetes mellitus patients of both sexes was included (20 males and 20 females) all 20 to 50 years of age. Half of this group (20 patients) were patients with diabetes mellitus (DM) type 1 and the other half (20 patients) with DM type 2. The group also had half of the patients with diabetes lasting longer than 10 years (20 patients) and the other half having diabetes for less than 10 years (20 patients). All patients were tested for HbA1c in blood and were divided in two groups. One group had HbA1c level less or equal 8% ($HbA1c \leq 8\%$) and was taken as an indicator of good metabolic control and the other group having HbA1c level higher than 8% ($HbA1c > 8\%$) was taken as an indicator of bad metabolic control. All the patients had also general ophthalmic examination with direct ophthalmoscopy, due to find possible presence of diabetic retinopathy and its degree of severity. Clinical tests for evaluation of quality of tear film were also performed: TBUT- tear break time test, Schirmer 1 test, Schirmer 2 test and fluorescein test.

RESULTS: Correlation in findings of HbA1c and pathological (positive) results of clinical tests for evaluation tear film which would point to dry eye in patients with DM were not found ($p > 0.10$ in all cases).

CONCLUSION: Based on these results HbA1c as a parameter for evaluation of the condition of tear film (which proves dry eye) is not relevant at in the diabetic patients.

O50:**SUB-TENON'S ANAESTHESIA-ANAESTHETIC OF CHOICE FOR ANTERIOR SEGMENT OF THE EYE SURGERY****¹Tomanovic Nikac, ²Tomanovic Nikola**¹ *East Kent Hospitals University NHS Foundation Trust, Canterbury*² *Royal Free & University College Medical School, London
United Kingdom*

Operations of the anterior segment of the eye are dominant in ophthalmic surgery. It is a lesser known fact that these are the most common elective surgical procedures of all. There has been a dramatic change of anaesthetic practice for ophthalmic surgery over the last twelve years. The use of local anaesthesia (LA) has risen from around 20% in 1991 to over 75% in 1996 and 86% in 1997 and the use of sedation with LA has fallen from 45% in 1991 to around 6% in 1996. LA is the anaesthetic of choice nowadays unless contraindicated. These changes were brought about due to the fact that anaesthetists initially became involved and then took over the performance of LA in ophthalmology. Retrobulbar block used to be the local anaesthetic of choice. Due to its rich innervations a small amount of anaesthetic would provide reliable block but serious complications were more common. Nowadays peribulbar and sub-Tenon's anaesthetic, equally efficient as the former, are far more popular because of the relative absence of serious complications.

Peribulbar technique was introduced in 1986 as a safer alternative to retrobulbar anaesthesia. The needle tip is placed outside the muscle cone (in the peribulbar not in the retrobulbar space). Perforation of the eyeball is the only rare but serious complication. Sub-Tenon's anaesthesia, anaesthetic of choice, is a new method of direct infiltration of local anaesthetic into sub-Tenon's space using a blunt cannula. Sub-Tenon's technique was first described more than a century ago; it was long forgotten and then reintroduced by Stevens in 1992. The new technique was introduced because of continuous concerns over the rare but serious complications of sharp needle bulb perforation. Sub Tenon's blocks avoid blind sharp needle penetration into space of the orbit. Although still a relatively new technique, sub-Tenon's anaesthesia is becoming increasingly popular. Only 7% of ophthalmic units practiced sub-Tenon's block in 1997, over 50% in 2001 and is now the anaesthetic of choice in most hospitals in the United Kingdom. In some specialised centres it is now performed by specially trained technicians (anaesthetics technicians-ODP-s).

Sub-Tenon's anaesthesia is a simple, easy to teach method. A small volume of local anaesthetic provides excellent anaesthesia and akinesia and reliable eyelid block. Intraoperative supplement is possible.

There is no risk of bulb perforation, subarachnoid injection or intravascular injection and is particularly recommended for patients with a long globe. Real complications have not been described. Disadvantages are transient chemosis and sub-conjunctival haemorrhage.

Day care intraocular surgery under local anaesthetic is the option of choice. Patients are admitted, operated on and discharged within few hours. This effective organisation significantly reduces complications. It has powerful economic benefits. Local anaesthesia is preferred by patients and staff.

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051:**SUB-TENON'S BLOCK PERFORMED BY ANAESTHETIC TECHNICIANS - NEW ROLE DEVELOPMENT****¹Tomanović Nikac, ¹Prajapati J, ²Tomanovic Nikola**¹ East Kent Hospitals University NHS Foundation Trust, Cantrebury² Royall Free & University College Medical School, London
United Kingdom

Sub-Tenon's anaesthesia is a new method of direct infiltration of local anaesthetic into sub-Tenon's space using a blunt cannula. Sub-Tenon's anaesthesia is a simple, easy to teach method. A small volume of local anaesthetic provides excellent anaesthesia, akinesia and reliable eyelid block.

The joint committee of Royal College of Ophthalmologists and Royal College of Anaesthetists produced guidelines in 1993 that stated that 'an anaesthetist should be present in order to give resuscitation, should it be required, and to arrange for the monitoring of the patients general condition throughout the operation. The anaesthetist would also be responsible for advising where appropriate on whether or not a particular patient would benefit most from local or general anaesthesia, prescribing sedation if thought necessary, giving the local anaesthetic block and providing intravenous access, and supervising the patient's postoperative recovery'.

By 2001 it had been decided to update the joint College guidelines. The latest joint College guidelines support the concept that there is no need for an anaesthetist to be present if the surgery is being done under topical or sub-Tenon's block without sedation. Nurses, technicians and others may be trained to administer topical, sub-conjunctival or sub-Tenon's anaesthesia. In some centres, nurses/ ODPs (Operating Department Practitioner) have been trained to administer sub-Tenon's blocks, but the administration by these professionals of peribulbar injection is not recommended.

Kent & Canterbury University Hospital is amongst the first in the United Kingdom to adopt this method of practice, for anaesthetic technicians to be trained to administer sub-Tenon's anaesthesia.

052:**FACO-SURGERY IN THE EYES WITH "WHITE CATARACT"*****Veselinović D, Stefanović I, Zlatanović G, Veselinović A, Cvetanović M.****Ophthalmology Clinic, Clinical Center Niš, Niš**Institute For The Eye Diseases "Đorđe Nešić", Belgrade,
Serbia*

INTRODUCTION: A successful removal of the white matured cataract represents a special challenge for every surgeon. This paper points out the three types of the white cataract, which are different in the maturity rate, the intralenticular pressure rate and the nucleus density. The aim of the paper is to compare the results obtained by an ultrasound operation of a patient with the white cataract to the results of an operation of the different kinds of cataract by applying the same method. Simultaneously, some specific characteristics of the ultrasonic operation applied to these patients are also pointed out.

MATERIAL AND METHODS: Out of 60 patients with white cataract, 49 of them belong to the group with the matured cataract, 7 of them belonged to the intumescent cataract group and 4 of them had the hypermatured cataract. In the control group, 60 patients with the posterior subcapsular, cortical, nuclear and mixed type of the cataract were analysed. All the surgeries were performed in local anaesthesia. The anterior capsule was visualized using the colours in case of all patients. After the incision of the cornea and the capsulorexi 5.0-5.5 mm, the ultrasonic fragmentation of the nucleus was performed with the "stop and show" technique on the "Millennium" apparatus, Baush&Lomb. Intraoperative complications and the postoperative result, during the three-month-monitoring, were the subject matter of the analysis and comparison between these two groups.

RESULTS: In the postoperative result there is an obvious difference in the depth of the anterior eye chamber; its average rate was 2.81 mm in the group of patients with white cataract and its average rate in the control group of patients was 3.14 mm ($p < 0.01$). Even though the average rates of the intraocular pressure were greater in the group of patients with white cataract, comparing them to rates of the control group, no significant difference was registered. Preoperative and postoperative density of the cornea was approximately the same before and after the treatment. The frequency of complications was not statistically important. The average effective time for the ultrasound scanning and the result of the postoperative cornea oedema was significantly longer in the group of patients with white cataract ($p < 0.01$).

DISCUSSION AND CONCLUSION: One of the problems that can appear during the surgery is the performance of the continual capsulorexis, which is successfully solved by applying the colour that facilitates the visualization of the anterior capsule. The problem of the higher intralenticular pressure in some eyes with the white cataract was greatly facilitated by applying an appropriate highelastics but its performance was in some cases hampered and demanded from a surgeon to be treated with caution. Beside the higher frequency of the corneal oedema in the group of patients with white cataract, during the post surgical monitoring no significant differences in the final result of the operations between these two groups of patients were present.

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O53:

RETINOPATHY OF PREMATURITY: CAN WE ACHIEVE A BETTER FINAL OUTCOME?

Vukojević N, Jukić T, Katušić D.

*Dept. of Ophthalmology, University Hospital Center Zagreb, Zagreb,
Croatia*

AIM: We presented our last two years results in treatment of ROP, especially when the conventional diode laser therapy fails.

METHODS: A retrospective study which included 331 (662 eyes) premature infants born between 01.04.2007. and 31.03.2009. According to ETROP study, 165 eyes were treated with diode laser. 7 eyes were treated with additional intravitreal injection of bevacizumab 0,5 mg / 0,025 ml.

RESULTS: Of 662 eyes were found 381 (57.7%) with ROP. In high risk group of premature infants (<28 gestational weeks and <1250 grams) there were 258 eyes, of which 216 (83.7%) had ROP (48 eyes in zone 1). In 9 eyes unsatisfactory results of laser treatment of ROP in zone 1 were treated with intravitreal injection of bevacizumab 0,5 mg / 0,025 ml and regression of the disease was achieved. There haven't been bad outcome since we've started additional intravitreal anti VEGF therapy.

CONCLUSION: Intravitreal injection of bevacizumab should be considered as a good additional therapeutic option when the conventional therapy with diode laser fails.

O54:

PHACO IN AGGRAVATED CIRCUMSTANCES

Vukotic V, Basic H, Musanovic Z, Pilavdzic A.

*Eye clinic, University Clinical Center Tuzla, Tuzla,
Bosnia and Herzegovina*

At the Clinic for Eye Diseases Tuzla we perform cca 2500 operations annually, of which almost 2000 are operations of eye cataract. The method which we used in 90% of operations is phacoemulsification, as a "gold standard", for solving problems of cataract. Beside simple "simplex" cataract, there is more and more complicated (over 35%) including diabetic cataract. Similar as in other communities but also in available literature, most common impeding factors are related to operations of diabetic cataract with their accompanying complications. Second most common impeding factor are eyes previously operated for some other reason (ppv, operation of glaucoma, perforation wounds etc.) Very common are uveal cataract with synechia, various corneal blur, refraction deviation and extremely high number of highly myopic eyes. Additional impeding circumstance of complicated cataract very often is narrow pupilla, which can be the cause of complication during the operation itself. But the most difficult impeding factor related to narrow pupilla is the one related to pseudoexfoliation, where besides impeded visualization during the operational technique, we face also many other circumstances related to changes of eye anatomy structure, which can lead to numerous complication within or after the operation. The video shows operation of one complicated cataract with pseudoexfoliation at very narrow pupilla and on the eye which was earlier operated due to glaucoma - fistulizing anti-glaucoma operation.

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**O55:
NEURORETINITIS CAUSED BY BARTONELLA QUINTANA**

Vuković Arar Ž.
*Slavonski Brod,
Croatia*

A 57 years old woman reported to eye clinic with decreased vision in left eye past 3 months. Three weeks ago she had fever and treated outpatients. Vision loss associated with optic nerve swelling and macular star exudate should alert suspicion of systemic disease.

The patients had a positive IgM titer for Bartonella quintana . In the first sample IgG antibodies titer was 128 and IgM antibodies titer was 20. In second sample IgG antibodies titer was 64 and IgM titer was negative. After treatment with tetracyclines , azitromicin and corticosteroids , the neuroretinitis and IgM resolved.

Given the patient's history, symptoms, response to treatment, and IgM course, we believe his neuroretinitis was secondary to Bartonella quintana.

**O56:
RECONSTRUCTIVE SURGERY IN ACQUIRED ANOPHTHALMOS**

Žikić Z, Bogdanović M.
*Gama Medicine Ophthalmology and Ocular Prosthetics, Beograd
Serbia*

INTRODUCTION: Acquired anophthalmos is a consequence of surgical removal of the eye. The rehabilitation of the anophthalmic socket is significantly influenced by the surgical method and postoperative care. The most common problems are caused by the occurrence of the post-enucleation syndrome, contraction of the socket and eyelid malposition.

MATERIAL AND METHODS: We present cases of acquired anophthalmos in which adequate prosthetic treatment was not possible without previous reconstructive surgery such as secondary orbital implantation, fornix reconstruction and correction of eyelid position and apposition.

RESULTS: Reconstructive operations bear variable outcomes with respect to the extent of the disorder of the anophthalmic orbit.

CONCLUSION: More extensive disorders, as well as previous surgery have a negative influence on the postoperative functional and aesthetic effect of the prosthetic treatment.