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Spectrophotometry of organic ophthalmic lenses of simple vision submitted to ultraviolet A and B radiation and visible light

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**PURPOSE:** To verify, by spectrophotometric study, the filtration power of A and B ultraviolet radiation and transmittance of visible light in colorless lenses of simple vision. **METHODS:** Spectrophotometric analysis (Model Humphrey Lens Analyzer LA 360 spectrophotometer) of 14 types of colorless ophthalmic lenses, made of organic material of different characteristics. Each lens type was represented by 20 copies, totaling a sample of 280 studied lenses. Later, the analysis of the transmittance curve in the spectrum range of 290 to 700 nm was performed. **RESULTS:** In relation to UVB radiation, all of the studied lenses presented transmittance from 0 to 1%. The ones that had a better performance (0% transmittance) were: Trivex, Rugged Fashion Wear, AO Lite, Hard Resin, Sola Light 1.56, MAR 1.56, MAR CR39, Stylis Crizal, Crizal, Air Wear, Orma 15. As for UVA rays, the transmittance oscillated from 1 to 18%. The ones that had a better performance (1% transmittance) were: Miolight Anti Reflex 1.56, Trivex, Miolight Excellence, Rugged Fashion Wear, Sola Light, MAR 1.56, Stylis Crizal e Air Wear. None of studied lenses completely filtered UVA radiation. All of the studied lenses presented transmittance over 95% in relation to the visible spectrum, with a variation from 95 to 100%. **CONCLUSIONS:** The studied colorless lenses present a real capacity of filtration of UV radiation, especially regarding the UVB spectrum, which is favorable since this is the main portion of the spectrum related to ocular damages. All of the studied lenses presented UVB filtration power from 99 to 100%, UVA from 82 to 99% and 95 to 100% of transmittance of visible light. The presence of such filters in colorless lenses increases the possibilities of prescription of this resource of ocular protection.

Keywords: Spectrophotometry, ultraviolet [methods]; Lenses; Radiation; Light.

# Therapeutic effect of intraocular application of ozone in experimental *Staphylococcus epidermidis* endophthalmitis

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Cristina; Dantas, Paulo Elias Correa

**PURPOSE:** To evaluate the anti-inflammatory and antimicrobial effect of intraocular ozone diluted in BSS on experimental Staphylococcus epidermidis endophthalmitis. METHODS: We injected 0.1ml of S. epidermidis colonies (10<sup>5</sup> colonies/ml) to produce experimental endophthalmitis in the right eyes of 17 New Zealand rabbits. Seven rabbits were assigned to a control group and received an intravitreal injection of 0.1ml BSS. Ten rabbits were treated with intravitreal injection of 0.1ml BSS-diluted ozone (2 ppm). Data were distributed according to clinical and histological findings after 24 hours, each rabbit receiving a score. Mean scores and standard deviations were compared using the two-sample t test. **RESULTS:** Mean clinical score for the control group was  $11.14 \pm 1.04$ . Mean clinical score for the treated group was  $4.90 \pm 1.29$ , which was significantly lower (p<0.01). Mean histological scores were, respectively,  $17.00\pm0.57$  and  $10.20\pm1.30$  for the control group and the treated group. The histological scores were significantly lower for the treated group (p<0.01). All cultures in both control and ozone groups were positive after 24 hours of experiment. CONCLUSION: Treatment with diluted ozone significantly reduced the inflammatory reaction in our model of experimental endophthalmitis. This probably occurred due to a decrease in bacterial content after ozone injection. It is necessary to study other ozone concentrations in different experimental models in order to determine ozone efficacy with a higher precision.

Keywords: Ozone [therapeutic use]; Endophthalmitis [chemically induced]; *Staphylococcus epidermidis*; Saline solution [hypertonic]; Ophthalmic solutions; Rabbits.

### Comparison between the full cylindrical correction and the spherical equivalent in the execution of automated perimetry

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PURPOSE: To compare the results in subjects undergoing visual field testing using the full cylindrical correction and the spherical equivalent. METHODS: Twenty patients (35 eyes) underwent visual field testing with Humphrey (SITA 24-2) perimetry using the full cylindrical correction and the spherical equivalent at a random sequence. Mean Deviation, Standard Pattern Deviation, fixation loss, false positive and false negative results and test duration were compared. RE-SULTS: No difference was found regarding Mean Deviation, Standard Pattern Deviation, false positive and false negative results and test duration. Fixation loss was significantly higher with the full cylindrical correction. CONCLUSION: Visual

fields performed with the spherical equivalent show no change in the retinal sensitivity when compared to examinations done with the full cylindrical correction for the same eye.

Keywords: Perimetry [methods]; Visual fields; Glaucoma [diagnosis]; Sensorial thresholds; Refractive errors [diagnosis]; Comparative study.

### Tensional results of non-penetrating deep sclerectomy in the treatment of primary open-angle glaucoma

Guedes, Ricardo Augusto Paletta; Guedes, Vanessa Maria Paletta

**PURPOSE:** The aim of this study is to assess the efficacy, of the non-penetrating procedure for surgical treatment of primary open-angle glaucoma, by the analysis of its tensional results. METHODS: Retrospective study of 104 eyes with primary open-angle glaucoma submitted to a non-penetrating deep sclerectomy from 1999 to 2002. Mitomycin C was used in cases with high risk for bleb failure, such as, age under 45 years, blacks, previous ocular surgery. Final mean intraocular pressure was observed and success rate was calculated for the whole population and for each group (with and without mitomycin C) RESULTS: For a mean preoperative intraocular pressure of 22.57±4.92 mmHg, the authors found a mean final intraocular pressure of 14.22±2.89 mmHg. Mitomycin C was used in 80 eyes. Absolute success (intraocular pressure <18mmHg without medication) for the entire group was 82.7%, with a follow-up of 19.4 months on average. Success rate after 3 years of follow-up, by the Kapplan-Meier method, was 79.3% for the mitomycin C group and 67.9% for the other group. CONCLUSION: Although there is a lack of prospective randomized studies in order to evaluate the real value of this recent procedure, these results demonstrate its efficacy in a long-term follow-up.

Keywords: Sclera [surgery]; Glaucoma, open-angle [surgery]; Prospective studies.

### Möebius sequence: clinical ophthalmological findings in 28 cases

Santos, Laura Patrícia Ferreira; Ventura, Liana Maria V. de Oliveira; Almeida, Henderson Celestino de; Miller, Marilyn; Colier, Ana Carolina

**PURPOSE:** To evaluate the clinical ophthalmological findings in Möebius sequence patients. Methods: Twenty-eight Möebius sequence patients were studied at three ophthalmological centers in Pernambuco state, Brazil. **RESULTS:** Bilateral epicanthus was found in 25 patients (89.3%), ptosis in 14 (50.0%), corneal opacities from exposure in 5 (17.8%) and diminished Bell's reflex in 3 (10.7%). Monocular visual acuity varied from 0.03 to 1. Visual acuity deficiency was detected in 13 patients (46.4%). The most frequent refractive error was astigmatism. It was observed in 33 eyes (58.9%). At the primary position, 16 patients (57.2%) had esotropia, 2 (7.1%) had exotropia and 7 (25.0%) had orthotropia. Fundoscopic examination was normal in 26 patients (92.8%). **CONCLUSIONS:** It was observed that Möebius sequence

patients presented important ophthalmological disorders, like visual acuity deficiency, incomitant strabismus, exposure keratitis and refractive errors. It is suggested that these patients should be evaluated early by an ophthalmologist for the diagnosis and treatment of these problems.

Keywords: Möebius syndrome [complications]; Eye diseases; Eye [pathology]; Visual acuity; Child.

#### Visual loss: prevention strategies

Temporini, Edméa Rita; Kara-José, Newton

INTRODUCTION: Visual loss represents an adversity for the affected person and society as a whole. As the world's population increases and as a greater proportion survives into late adulthood, the number of people with visual loss will inexorably rise. The control of blindness in children is a priority within any blindness prevention programme. Preventive measures have to be planned and established. COMMENTS: The World Health Organization estimates on blindness and low vision are discussed and some strategies and planning of preventive programs are pointed out. Epidemiological and operational researches would contribute to health system needs, assessment and program management. Identifying social and cultural factors would better direct interventional efforts of blindness prevention.

Keywords: Blindness [prevention & control]; Eye diseases [diagnosis]; Health education; Health planning; Delivery of health care.

## Phacoemulsification in hard cataracts: the «chop, trip and free» technique

Gonçalves, José Marcos S.

Very hard cataracts continue to be a challenge to phacoemulsification due to the difficulty in breaking the nucleus and also in separating the broken nucleus from the adjacent epinucleus. The present technique is the presentation of a surgical maneuver which uses the Nagahara chopper and the phaco tip to divide the nucleus (including the epinucleus) as a whole and then emulsify it using little time and not very much phaco power.

Keywords: Phacoemulsification [methos]; Cataract; Lens nucleus, Crystalline [surgery]; Capsulorhexis [methods].

### Compliance of the contact lens wearing patient with medical advice

Oliveira, Paulo Ricardo de; Kara-José, Newton; Alves, Milton Ruiz; Temporini, Edméa Rita

**PURPOSE:** To evaluate compliance with contact lens wearing and care procedures among wearers who were health-care providers; to provide information for the planning of educational programs and to contribute to comfortable contact lens wearing and prevention of complications. **METHODS:** A survey was performed among contact lens wearers engaged in profes-sional activities at the «Hospital das Clínicas da Universidade Federal de Goiás». Individual interviews

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were conducted by means of a structured questionnaire in a non-probabilistic sample consisting of individuals who consented to participate in the study. **RESULTS:** Two hundred one contact lens wearers were interviewed. The respondents' age averaged 23.5 years. Their majority consisted of women (69.2%). 85.1% of the interviewees were employed in medical services. Of the individuals, 172 (85.6%) stated having received medical instructions, but 54.2% did not consider themselves good wearers, because of inadequate cleaning of the contact lenses or their case and also because noncompliance with medical advice. CONCLUSIONS: Providing mere information to patient does not mean automatic compliance. Wearer's understanding and handling the lenses must be checked at every visit. Safe and comfortable contact lens wearing and the important of compliance should be fostered by educational campaigns.

Keywords: Contact lenses; Contact lenses [adverse effects]; Attitude to health; Health education; Patient education; Patient compliance.

# Epidemiological profile of the patients on the waiting list for cornea transplantation in the State of Sergipe, Brazil

Araújo, Ângelo Augusto; Melo, Gustavo Barreto de; Silva, Renata Lemos; Araújo Neta, Vitalina Martins de

**PURPOSE:** To define the epidemiological aspects of the patients on the waiting list and those submitted to corneal transplantation in the state of Sergipe, Brazil and the main indications for this procedure. METHODS: The data of 320 patients who were on the waiting list and those who had their corneas transplanted from May 2000 to November 2002 were collected at the Transplantation Center of Sergipe. The analyzed data were: corneal disease, age, sex, visual acuity and the time spent on the waiting list until the transplantation was performed. **RESULTS:** Pseudophakic and aphakic bullous keratopathy was the most common disease (39.1%), followed by leukoma (22.5%), keratoconus (14.1%), «other diseases» (10.6%), regraft (7.8%) and ulcerative conditions (5.6%). Mean age was 52.16 years and there was no significant difference between the sexes. «Hand motion» and «light perception» were the most common visual acuities. The 110 patients who had their cornea transplanted waited, on average, six months. The ones who were indicated for transplant due to ulcerative conditions and regraft had priority and waited less time. Those who had bullous keratopathy were 68.5 years old on average whereas the ones with keratoconus were 23.6 years old. **CONCLUSIONS:** It is possible to conclude that bullous keratopathy is the main indication for corneal transplant in our state. There is no difference in the frequency concerning sex; the mean age of the most common disease is in agreement with the time of its development. Visual acuity is as expected and the time spent on the waiting list is long and inappropriate.

Keywords: Corneal transplantation; Epidemiological profiles; Keratoplasty [penetrating]; Keratoconus; Epidemiology.

## Clinical, surgical and laboratorial analysis of patients with conjunctivochalasis

Souza, Carlos Eduardo Borges; Engel, Dinorah Piacentini; Branco, Bruno Castelo; Höfling-Lima, Ana Luiza; Souza, Luciene Barbosa de; Barros, Jaison; Freitas, Denise de

**PURPOSE:** To evaluate clinical, surgical and laboratorial findings in patients with conjunctivochalasis. **METHODS:** Ophthalmologic examinations using 1% rose bengal, Schirmer test and impression cytology were performed in ten patients and after surgery. **RESULTS:** Sintomatology improved in all patients on surgery. Impression cytology revealed metaplasia in eight patients. **CONCLUSION:** Surgical treatment may improve signs and symptoms in patients with conjuctivochalasis. Scamous metaplasia was a frequent finding in these patients.

Keywords: Conjunctival diseases [surgery]; Conjunctival disease [therapy]; Conjunctiva [pathology]; Dry eye syndromes [pathology]; Eye [pathology].

# Scotopic fast wave retinal dystrophy (SFWRD) associated with loose anagen hair syndrome (LAHS). Part II: Genetics

Sato, Mário Teruo; Marzagão, Rodrigo; Pagnan, Nina Amália Brancia; Freire-Maia, Newton; Moreira Júnior, Carlos Augusto

**PURPOSE:** To propose the complementation of present classification of the electroretinogram (ERG) with the inclusion of this new kind of wave, to discuss the possible mechanisms for the scotopic fast wave retinal dystrophy (SFWRD) associated with the loose anagen hair syndrome (LAHS) and to analyze the pedigree of the studied family. METHODS: Were described in part I of this study. **RESULTS:** The pedigree analysis of the family showed to be an autosomal recessive form of inheritance with partial expression in the heterozygote; other results were described in part I of this study. **CONCLUSION**: Being the first account in the literature, the described finding strongly suggests that scotopic fast wave retinal dystrophy associated with the loose anagen hair syndrome can be a new nosological entity. In this study, we propose an unpublished classification of all macular dystrophies and retinal degenerations associated with hair disorders in group B of ectodermal dysplasias.

Keywords: Electroretinography; Retinal degeneration; Ectodermal dysplasia; Hypotrichosis [congenital]; Alopecia; Pigment epithelium of eye.

# Multifocal ERG in patients treated with low-dose tamoxifen

Berezovsky, Adriana; Salomão, Solange Rios; Pereira, Josenilson Martins; Sacai, Paula Yuri; Chojniak, Márcia Maria Motono

**PURPOSE:** Tamoxifen, an antiestrogen, has been used as an effective therapeutic agent in the treatment of breast cancer. The drug has been shown to cause ocular toxic effects.

The purpose of this study was to determine possible central retinal toxicity by multifocal electroretinograms (mfERGs) in a cohort of patients treated with low-dose tamoxifen (20 mg/day) for breast cancer. METHODS: Multifocal electroretinograms of the central 30 degrees of the retina were obtained of 3 different groups: Experimental group - 15 females (41-59 years, mean  $48.6 \pm 4.5$ ) with normal fundus, treated with low-dose tamoxifen for 1 to 55 months. Control group - 6 females (30-76 years, mean  $49.9 \pm 18.8$ ) with previous breast cancer diagnosis who had not received tamoxifen as treatment until ERG testing. Normal control group - 15 normal female volunteers (30-71 years, mean  $47.7 \pm 12.9$ ). The multifocal amplitude and latency for N1-P1 were measured and statistically analyzed (one-way ANOVA). RESULTS: Mean amplitudes N1-P1 (nV/deg2) were comparable for responses of different eccentricity (0 to 25 degrees). There was no statistically significant difference for implicit time of N1 and P1 (ms) in multifocal electroretinograms between the 3 groups. CONCLUSIONS: Low-dose tamoxifen showed no retinotoxic effect in this small group of women with breast cancer. Follow-up investigation could provide a better understanding of these effects.

Keywords: Breast neoplasms [drug therapy]; Tamoxifen [adverse effects]; Tamoxifen [administration & dosage]; Retina [drug effects]; Electroretinography.

# Resection of overfiltration bleb for the treatment of chronic ocular hypotony: case reports

Cronemberger, Sebastião; Santos, Daniel Vítor de Vasconcelos; Oliveira, Ana Cláudia Monteiro; Maestrini, Heloísa Andrade; Calixto, Nassim

To present the results of bleb resection for the treatment of overfiltering bleb after trabeculectomy with mitomycin C (MMC) associated with chronic ocular hypotony. Five patients with chronic ocular hypotony caused by overfiltering bleb underwent bleb resection. The authors established the criteria for the diagnosis of overfiltering bleb. Ocular hypotony was reversed in all patients without medication. The mean follow-up was  $14.0 \pm 7.9$  months. Bleb resection is a good approach for the treatment of chronic ocular hypotony secondary to overfiltering bleb.

Keywords: Ocular hypotension; Trabeculectomy; Glaucoma; Mitomycin [therapeutic use]; Injections; Intraocular pressure; Postoperative complications; Treatment outcome; Case report.

# Corneal edema caused by a pyramidal anterior polar cataract dislocated to the anterior chamber: case report

Ghanem, Ramon Coral; Ghanem, Vinícius Coral; Ghanem, Emir Amin

Pyramidal anterior polar cataracts are conical opacities that project into the anterior chamber from the anterior capsule of the lens. In the vast majority of patients the opacity remains bound and stable throughout life. We report an unusual complication of this type of cataract: spontaneous dehiscence of

the pyramids to the anterior chamber causing bilateral endothelial damage and corneal edema. 66-year-old white woman presented with inferior corneal edema in the right eye and diffuse corneal edema in the left eye. A white nodular lesion was observed in the inferior angle in both eyes compatible with the pyramidal pole of the anterior polar cataract. The anterior pyramid can remain unabsorbed in the anterior chamber for long periods because it is composed of dense collagen, causing progressive endothelial cell loss and corneal edema. Therefore, it is an indication for extraction of the cataract and its anterior pole. In addition, we remind of the possibility of ambliopia, which is related to the size of opacity, symmetry of opacities, and superimposed cortical component.

Keywords: Cataract [congenital]; Corneal edema; Anterior eye segment; Epithelial cells [pathology]; Lens [crystalline]; Lens [pathology]; Amblyopia [prevention & control]; Case report.

## Microphthalmos with colobomatous orbital cyst: case reports

Nunes, Tânia Pereira; Ben-Ayed, Houyem; Hamedani, Mehrad; Morax, Serge; Matayoshi, Suzana

Microphthalmos with colobomatous orbital cyst is a rare differential diagnosis of congenital orbital tumors. Early diagnosis and adequate treatment are important for orbital and eyelid growth. We present three cases of microphthalmos with colobomatous orbital cyst and demonstrate the importance of imaging techniques. Ultrasonography, computed tomography, magnetic resonance and histological study of the ablated mass established the correct diagnosis of colobomatous cyst.

Keywords: Exophthalmos [congenital]; Cysts [ultrasonography]; Coloboma [diagnosis]; Orbital neoplasms [congenital]; Differential diagnosis; Case report.

### Septo-optic dysplasia: case report

Pierre Filho, Paulo de Tarso P.; Bovo, Lucas Borelli; Marcondes, Ana Maria

The clinical triad of septo-optic dysplasia (SOD) comprises the absence of the septum pellucidum, congenital optic nerve dysplasia, and multiple endocrine disorders. When any two of these factors are present, the condition is defined as an incomplete form of SOD. The authors report the case of an incomplete form of SOD in a 9-year-old boy with low vision and nystagmus present from birth. The bilateral ophthalmoscopic examination revealed small papillae with double contour images. Magnetic resonance imaging showed hypoplasia of the optic nerve bilaterally, chiasm and absence of the septum pellucidum.

Keywords: Optic disc [pathology]; Optic disc [abnormalities]; Optic nerve [pathology]; Optic nerve [abnormalities]; Optic nerve diseases [diagnosis]; Septo-optic dysplasia [congenital]; Septum pellucidum [abnormalities]; Case report.

#### Lupus choroidopathy: report of 2 Cases

Brasil, Oswaldo Ferreira Moura; Barreto, Danielle de Pinho

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Paes; Oliveira, Maria Vitoria Fernandes de; Japiassú, Ricardo Miguel; Moraes Jr., Haroldo Vieira de

We describe 2 cases of lupus choroidopathy, an unusual ocular manifestation of systemic lupus erythematosus, characterized by serous elevation of the retinal pigment epithelium and/or sensory retina and pigment epithelium mottling.

Keywords: Lupus erythematosus [systemic]; Lupus erythematosus [complications]; Eye manifestations; Choroid diseases [etiology]; Choroid [pathology]; Choroid [physiopathology]; Case reports.

# Retinal vascular occlusion and neovascularization in acute toxoplasmic retinochoroiditis in a patient with AIDS: case report

Ewert, Vânia; Finamor, Luciana Peixoto; Dimantas, Maria Angélica; Muccioli, Cristina

To present a case of an HIV-infected patient, who presented with active chorioretinal inflammatory lesion suggestive of toxoplasmosis, that during the specific treatment developed a retinal vascular occlusion, and adjacent neovascularization. 35-year-old AIDS patient that, presented with toxoplasmic retinochoroiditis and after 4 weeks of the specific therapy (pyrimethamine and sulfadiazine) developed a vascular occlusion and retinal neovascularization that healed without the need for phototocoagulation or other adjunctive therapy. This case demonstrates that acute toxoplasmic retinochoroiditis that develops vascular complications may present a good result with the specific treatment without the need for adjunctive therapy.

Keywords: Acquired immunodeficiency syndrome [complications]; Ocular toxoplasmosis [complications]; Aids-related opportunistic infections; Chorioretinitis; Retinal neovascularization [etiology]; Retinal artery occlusion; Case report.

### Noonan's syndrome: case report

Dias, Vanderson Glerian; Gigante, Edmilson; Valério, Fátima Jesus Passador; Gonçalves, Flávia Fauaz; Bezzon, Ana Karina Teixeira; Aguni, Joran Seiko

The authors present the case of a 14-year-old child with Noonan's syndrome, diagnosed by clinical genetic examination, demonstrating ophthalmologic alterations such as: hypertelorism, eyelid fissue changes, right hypotropia with a small V anisotropy, nystagmus, bilateral eyelid ptosis and amblyopia in right eye. The importance of the ophthalmologist in this syndrome and the need for a follow-up by a multidisciplinary medical group are discussed.

Keywords: Noonan syndrome [diagnosis]; Eye diseases; Case report; Child; Adolescent.

# Deep lamellar endothelial keratoplasty in Fuchs' dystrophy: case report

Komatsu, Fernando Trench de Oliveira; Noletto, Stephan; Oliveira, Gilvan Amorim; Ribeiro, Luis Eduardo; Komatsu, Maria Claudia; Moro, Fernando; Cvintal, Tadeu

To report a case of deep lamellar endothelial keratoplasty

(DLEK) technique applied to a patient with Fuchs' dystrophy. The surgical procedure was performed on the right eye for a case of Fuchs' dystrophy with endothelial failure. Through a 9 mm self-sealing scleral tunnel incision, a stromal pocket was dissected at 0.35 mm depth. A 8.5 mm lamellar donor disc with 0.150 mm thickness, containing posterior stroma, Descemet's membrane and endothelium, was transplanted without corneal suture. Best spectacle-corrected visual acuity, biomicroscopy, topography, ultrasound pachymetry and endothelial cell density were evaluated. Before surgery, the patient presented best spectacle-corrected visual acuity of 20/100 (+4.00 -3.25 x 60°), astigmatism of 6.60 D (37.5 a 12° x 44.1 a 102°), ultrasound pachy-metry of 0.625 mm and endothelial cell density of 720 cel/mm<sup>2</sup>. Three months after surgery, best spectacle-corrected visual acuity was 20/30 (-1.25 -0.50 x 45°), astigmatism was 1.00 D (37.2 a 75° x 38.2 a 165°); ultrasound pachymetry showed 0.503 mm and endothelial cell density showed 2447 cel/mm<sup>2</sup>. Complications: intraoperative iris cut, disc edge dislocation, wrinkled disc and interface nebula. The preliminary results suggested that deep lamellar endothelial keratoplasty is an alternative to surgical treatment of Fuchs' dystrophy with endothelial failure. A greater number of cases and longer follow-up are necessary to better understand this keratoplasty technique and its outcome.

Keywords: Corneal transplantation; Fuchs' endothelial dystrophy [surgery]; Case report; Adult; Female.

## Corneal and scleral destructive involvement associated with connective tissue disease: report of 9 cases

Santos, Namir Clementino; Sousa, Luciene Barbosa de; Trevisani, Virginia Fernandes Moça; Freitas, Denise de; Vieira, Luis Antonio

**PURPOSE:** To study the clinical features, diagnosis, treatment, and outcome of nine patients with corneal and scleral involvement associated to connective tissue disease. **METHODS:** Description of anterior segment abnormalities observed in nine patients with connective tissue disease, five of them previously diagnosed and four with the ocular involvement being the first manifestation of the disease. All patients were evaluated at the Corneal and External Diseases outpatient clinic of the Federal University of São Paulo - Escola Paulista de Medicina (UNIFESP-EPM) between July/1999 to December/2000 and were submitted to a complete ophthalmologic examination, clinical evaluation and laboratory investigation. Clinical or surgical treatment was indicated according to the ocular disease evolution. RESULTS: The clinical diagnoses of the patients with anterior segment inflammatory disease were rheumatoid arthritis in seven patients (77.8%), systemic sclerosis and Wegener's granulomatosis in each of the remaining patients (22.2%). The most frequent ocular manifestation was scleritis (66.6%), followed by peripheral ulcerative keratitis (55.5%) and dry eye syndrome (44.4%). Eighty-nine percent (89%) of the patients required immunosuppressive therapy to control the ocular inflammatory disease. Remission of the ocular symptoms were observed after 3 months of the beginning of imunossupressive therapy on average. In 55.5% of the patients a surgical approach (conjunctival resection, application of cyanoacrylate tissue adhesive, penetrating keratoplasty and scleral patch graft) was necessary. **CONCLUSION:** The finding of corneal and scleral involvement associated with connective tissue disease is a sign of the disease activity and usually requires imunossupressive therapy. The ophthalmologists should be aware of these conditions in order to early diagnose and apply the appropriate treatment.

Keywords: Scleritis [diagnosis]; Scleritis [therapy]; Corneal ulcer [therapy]; Corneal ulcer [diagnosis]; Connective tissue [pathology]; Immunossupression; Case report.

#### Myogenic satellite cells

Foschini, Rosália Maria Simões Antunes; Ramalho, Fernando Silva; Bicas, Harley E. A.

The article describes myogenic satellite cells, their markers, quantification and distribution, growth factors and hormones involved in their regulation, interaction with macrophages and monocytes, functional answers to physiologic stimuli/ disease states, genetic models of myopathies and muscular regeneration, ectopic muscle formation, muscle formation and precursor cell, satellite cell origin, peripheral cells, extraocular muscles and satellite cells.

Keywords: Satellite cells [Skeletal muscle]; Muscle fibers; MyoD protein; Regeneration; Growth substances; Myogenic regulatory factors

## The new Vancouver style: what has changed regarding references

Rother, Edna Terezinha; Braga, Maria Elisa Rangel

The article presents a brief report on the «Uniform Requirements for Manuscripts Submitted to Biomedical Journals», with emphasis on bibliographic references updated November 2003.

Keywords: Periodicals [standards]; Publishing [standards]; Editorial Policies.

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