Results: 32 years old female was referred because of fluctuating elevations of aminotransferases (AT) (4- to 19-fold normal) known last 6 months. She had positive HCV-RNA by RT-PCR an untypable genotype. Liver biopsy revealed chronic active hepatitis grade 2, stage 2. She also had Hashimotos thyroiditis with high titres of antithyroid antibodies. After 12 weeks of treatment with Intron A 3MU TIW and RBV 1000 mg/d, HCV RNA was negative and AT fluctuated between normal and 2-fold normal. One week after completing 48 weeks of treatment, AT showed 11-fold increase, but HCV remained negative. Indirect immunofluorescence became positive for ASMA (3+) and ANA (4+). A repeated liver biopsy showed no improvement. A therapeutic trial with RBV was started and within 11 weeks of this treatment her symptoms markedly improved and AT decreased to 2-fold. Unfortunately, cessation of RBV resulted in immediate reversion of symptoms and elevation of AT to its previous state. After restarting RBV therapy no response was observed within 2 weeks and the treatment was stopped. She was then put on prednisone 30 mg/d and azathioprine 50 mg/d. Within 6 weeks her symptoms resolved and AT and IgG became completely normal. The patient remains in remission with prednisone 5 mg and azathioprine 50 mg/d. A re-evaluation of the primary diagnosis of hepatitis C was warranted because of unusually high AT activity and repeatedly negative anti-HCV using a third generation assay.

Conclusions: This case may provide support for the hypothesis that RBV may dampen autoimmune reaction induced by IFN alpha and potentiate its anti-inflammatory effects.

355 Ocular Muscles Myopathy Associated with Autoimmune Thyroiditis. Case Reports

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Background: Thyroid-associated orbitopathy is commonly associated with Graves’ disease with lid retraction, exophthalmos, and periorbital swelling, but rarely with autoimmune thyroiditis or euthyroid state. We reviewed 3 cases from our hospital whose antibodies to anti-receptor of TSH were normal.

Methods: Case 1: 60 year-old non-diabetic woman with bilateral glaucoma in treatment, recurrent media ostitis and euthyroidism, acute onset of painless diplopia, and lid ptosis in the left eye. MRI of orbit showed increased size of the III right cranial pair and high levels of thyroid autoantibodies (Tab) anti-thyroglobulin (ATG) 115.1, anti-thyroid peroxidase (ATPO) 1751 U/mL. She started oral deflazacort 30 mg each 3 days. Sixty days later, complete remission of eye symptoms correlated with lower auto-antibodies level (ATG 19 ATPO 117). Case 2: 10 year-old girl. At age 8, she had diplopia, lid ptosis and limitations of upper gaze in the left eye. The neurological study discarded ocular myasthenia; with thyroid goiter, and hypothyroidism, she started oral levothyroxin. At age 10 with normal IRM Botulinic toxin was injected, without change. High levels of Tab were found, ATG 2723, ATPO 10.7. She started oral deflazacort 30 mg each 3 days, azathioprine 100 mg daily. Actually, Tab levels are almost normal, but she remains with ocular alterations. Case 3: 56 year-old woman, Grave’s disease with exophthalmos in 1990, treated with 131I and immunosupresssion, with good outcome; obesity, hypertension and bilateral glaucoma in treatment. She suddenly presented diplopia and IV pair paresia of the right eye. A year later, ATB were found slightly elevated, ATG 100 years ATPO 227; despite prednison 50 mg, each 3 days and azathioprine 150 mg/daily treatment, a surgical procedure was required for relieve the ocular symptoms.

Results: We found only 3 cases previously reported with this type of eye thyroid disease. Is important to note that awareness of this atypical form of orbitopathy

Conclusions: Early recognition facilitates successful treatment (Case 1) or persistent disease when diagnosis is delayed (Cases 2 and 3).

356 Pulmonary Arterial Hypertension Associated to Antiphospholipid Syndrome in an Infant

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Background: Antiphospholipid syndrome (APS) is a systemic autoimmune disorder characterized by a combination of arterial or venous thrombosis and recurrent fetal loss. It may be primary or in association with an underlying systemic disease, particularly systemic lupus erythematosus. The diagnostic criteria include vascular thrombosis, complications during pregnancy with recurrent losses, positive titers of anticardiolipin and lupus anticoagulant antibodies. Vascular thrombosis can occur anywhere in the body, including lung vessels. The association of APS with pulmonary arterial hypertension has been estimated between 1.8% and 3.5%.

Methods: Case Presentation: We present an 18 month old male boy, who was admitted to our hospital with a history of 3 previous episodes of pneumonia, at arrival with pulse saturation of 69% without oxygen, improving to 100% with oxygen. Pulmonary arterial hypertension was documented with echocardiogram resulting in 100 mm Hg without structural abnormalities. An autoimmune etiology was suspected, resulting with high titers of anticardiolipin (IgG 34.6 mg/dL) and anti-b2 glicoprotein (IgG > 200 mg/dL, IgA 53 mg/dL).

Results: Treatment with acenocumarine, hydroxichloroquine and prednison was initiated. Nowadays he has evolved with clinical improvement, on its last echocardiogram the pulmonary arterial tension resulted in 65 mm Hg, without evidence of thrombosis.

Conclusions: We report an infant with pulmonary arterial hypertension as the only manifestation of antiphospholipid syndrome, with clinical improvement with anticoagulant and steroid therapy.

CONJUNCTIVITIS

357 Tear IL-4 is Decreased in Allergic Conjunctivitis Patients with Negative Skin Test After Dialyzeable Leukocyte Extracts Treatment

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Background: It has been suggested that sublingual immunotherapy induces immune regulation, however in patients with clinical ophthalmological diagnosis as allergic conjunctivitis with negative skin test reactivity (ACNST) this treatment is not useful. Dialyzable leukocyte extracts (DLE) have been used in atopic dermatitis and asthma. The aim of this work was to evaluate treatment of ACNST with DLE and to analyze the microenvironment provided by tear and serum cytokines in patients before and after DLE treatment.

Methods: 10 ACNST-patients with negative skin test were included in this study. ACNST diagnosis was based on a clinical history and full ophthalmologic examination according to the diagnosis standards of the American Academy of Ophthalmology. Coproparasitoscopic negative for parasites was documented This study was approved by Scientific and Ethics Committees if
Institute of Ophthalmology “Conde de la Valencia “, Mexico City an all subjects gave their informed consent to obtain samples. Tear and Serum Samples were collected to determine cytokines IL2, IL-4, IL-5, IFN-g, TNF-a, IL-10 by cytometric bead arrays (CBA), following manufacturer’s instructions.

**Results:** Patients showed lower significant levels of L-4 after 6 months of treatment, without changes in IL2, IL5, TNFa and IL-10. Significant Clinical improvement was also observed since 3 months of treatment and was maintained until the end of 6 months.

**Conclusions:** DLE could be an excellent therapeutic tool to improve the clinical outcome in ACNST patients; it is possible that clinical improvement could be Tear IL-4 dependent.

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**Histochemical Study of Allergic Inflammation in Conjunctiva From Ovalbumin Sensitized Rabbits after Ocular or Nasal Challenge**

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**Background:** We previously demonstrated that subcutaneous sensitization with ovalbumin (OVA) induce generation of specific IgE antibodies and quantitative modifications in immune cells populations from different mucosal sites in rabbit. The aim of the study is characterization of eosinophil infiltration in conjunctival mucosa from OVA sensitized and ocular and nasal challenged rabbits.

**Methods:** Animals were divided into 4 groups: G1 (n = 9): normal control; G2 (n = 10): subcutaneous sensitized with OVA; G3 (n = 10): subcutaneous sensitized and conjunctival challenged with OVA; G4 (n = 9): subcutaneous sensitized and nasal challenged with OVA. Four hours after challenge animals were sacrificed and obtained samples were processed for histochemistry with cromotrope 2R for eosinophil detection. Cells were counted in 200 high power fields per group.

**Results:** Data were expressed as positive cells per high power field. Conjunctival mucosa: G1: 2.3; G2: 3.4; G3: 12.2; G4: 3.3 (G3 vs G1, G2 y G4 P < 0.001). Specific anti-OVA-IgE levels were evaluated by positive passive cutaneous anaphylaxis test (PCA) at 160 fold dilutions.

**Conclusions:** We observed an increase in the number of eosinophils-positive cells after local challenge in conjunctiva as compared to normal controls and sensitized and nasal challenged animals. We conclude that systemic sensitization with soluble antigen and conjunctival challenge induces modifications in number of eosinophil populations in conjunctiva but not in nasal challenged rabbits.

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**Prevalence of Allergic Conjunctivitis in Childhood**

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**Background:** The prevalence of allergic conjunctivitis (AC) has not been established. Estimates suggest thatocular allergies affect 15 to 20% of the worldwide population yet most epidemiological studies encompasses nasal and ocular allergy symptoms together and have not been specified in AC. AC was considered when more than 3 episodes of ocular itching were reported in the past 12 months. Related symptoms as tearing, photophobia, foreign body sensation, impact on daily activities, and diagnosis of allergic conjunctivitis were analyzed.

**Results:** Questionnaires from 3120 adolescents (mean 13.3 ± 1.1 years) were analyzed. Ocular itching in the past 12 months occurred in 1,592 (51%). The most frequent associated symptom was tearing (74%) followed by photophobia (50.1%) and foreign body sensation (37.1%). The prevalence of allergic conjunctivitis was 20.7% affecting more females (56.1% vs 45.9%; P < 0.01). Moderate and severe interference in daily activities were reported by 66% and 21%, respectively. Diagnosis of AC was reported by 47% of them.

**Conclusions:** Symptoms of ocular allergy are common and cause great impact on daily activities in adolescents. Accessing risk factors and the allergic status of these patients should be the focus of future epidemiological studies on AC.

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**Effects of Omalizumab in Children with Atopic Keratoconjunctivitis: A New Treatment for Severe Ocular Allergies?—Report of Two Cases**

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**Background:** Keratoconjunctivitis is a severe form of ocular allergy, difficult to control and with poor prognosis. The purpose of this study was to verify the clinical efficacy of humanized monoclonal antibody omalizumab treatment in children with this condition.

**Methods:** Report of 2 cases of children with severe vernal keratoconjunctivitis poorly controlled by the conventional therapeutic scheme that were submitted to treatment with Omalizumab. The disease was scored according to the severity by ophthalmologic evaluation (amount of viscous mucus, giant papillae >1 mm, aspect of cornea/keratitis) and graduation of allergic symptoms (itching, tearing, photophobia), before and after the last subcutaneous administration of Omalizumab. Evaluation by Parents/ guardians using the same score, regarding to itchy eyes, runny eyes and photophobia, after Omalizumab application, was also requested.

**Results:** Case 1: MPOS (7 years) with vernal keratoconjunctivitis and atopic dermatitis since childhood, both with progressive severity. Recalcitrant ocular itching and photophobia, in addition had other atopic conditions such as mild asthma, rhinitis and egg allergy. Total IgE = 1323 IU/mL. Ocular manifestations poorly controlled with topical use of antihistamines, cromolyn, tacrolimus and cyclosporine. The use of topical corticosteroids was frequent, but resulted in brief improvement. Case 2: HCS (6 years) with vernal keratoconjunctivitis since 3 years age, and mild asthma and moderate persistent rhinitis. Continued use of topical tacrolimus 0.03% showed an initial improvement, but subsequent relapses resulted in frequent use of systemic prednisolone and eye drops antibiotics to control symptoms. Total IgE = 1530 IU/mL. After the second Oomalizumab application, good or excellent improvement in ocular symptoms of both children was observed by allergists and parents. Ophthalmologic evaluation showed moderate improvement in the amount of slime and little or no improvement in the structural changes of the eye (cornea and appearance of giant papillae).

**Conclusions:** There are few reports about the use of Omalizumab in allergic keratoconjunctivitis. Our work points to the need for further research in this area as the Anti-IgE may become a promising therapy for this difficult to control condition.

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**Giant Papillary Conjunctivitis without Associated Triggers. Report of Two Cases**

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**Conclusions:** There are few reports about the use of Omalizumab in allergic keratoconjunctivitis. Our work points to the need for further research in this area as the Anti-IgE may become a promising therapy for this difficult to control condition.