studies are needed in order to investigate the possible existence of this association.

577 CD63 Expression, IL3 Receptor, IGG Autoantibody and Autologous Serum Skin Test Accuracy in Patients with Chronic Urticaria in Brazil
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Background: Recently, a laboratory technique called basophil activation test (BAT) using flow cytometry (FC) got demonstrated through the expression of CD63 molecules that basophils of atopics donors can be activated when stimulated by serum of patients with CU (supposedly autoimmune). This paper aims to analyze the autologous serum skin test (ASST) in relation to the BAT as well as evaluating the IL3 receptor (CD123) and nonspecific autoantibodies IgG bound to basophils of patients with chronic urticaria.

Methods: We studied 33 adults (24 women) with a mean age of 22.95 months. We designed a laboratory technique called basophil activation test (BAT) using flow cytometry (FC) got demonstrated through the expression of CD63 molecules that basophils of atopics donors can be activated when stimulated by serum of patients with CU (supposedly autoimmune). This paper aims to analyze the autologous serum skin test (ASST) in relation to the BAT as well as evaluating the IL3 receptor (CD123) and nonspecific autoantibodies IgG bound to basophils of patients with chronic urticaria.

Results: We examined 50 patients with chronic idiopathic urticaria and with the help of a validated questionnaire urticaria score index was calculated. ASST with the patient’s own diluted (1:10, 1:100) and undiluted sera, and CD63 basophil activation test on atopic donor basophils were performed. Pearson’s exact test was used to analyze the correlation between the results of the CD63 assay and the urticaria score index.

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579 The Frequency of Positivity in Autologous Serum Skin Test in Patients with Chronic Idiopathic Urticaria
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Background: Describe the frequency of positive results in autologous serum skin test among patients with chronic urticaria.

Methods: Trans-sectional study of patients with CIU referred to treatment in policlinica geral do Rio de Janeiro, Brazil. Autologous serum intradermal injections were used to establish the sensitivity. Negative and positive controls were made with 0.9% intradermal saline solution and skin prick test with histamina 1:100 solution. Autoreactivity was considered positive when wheal reached 3 mm at least, 1.5 mm larger than saline solution at 30 minute interval. Antihistamines drugs were interrupted 72 hours before test. Dates on race, age, sex, and informations about length and how often the symptoms persist, personal history of atopy (PHA) and angioedema (AE), autoimmune disease (AID) and physical (PF) and not physical factors (NPF) related with the worsening of urticaria were registered during appointment. K square and t student tests were used in this work.

Results: Eighteen patients, from 2008, march to 2011, march, were investigated (15 f; 12 w; age 50.67 ± 16.93 yr). Eleven patients presented positive AAST (61.1%) with a mean wheal diameter = 9.64 ± 2.66 mm (negative control = 6.33 ± 3.63 mm; P < 0.001). All of the positive ast occurred in patients over 60 years old. The mean length of the disease was 21.78 ± 22.95 months. Continuous symptoms were saw in 83.3%, pruritus, the major one (94.4%). Angioedema and PHA were present in 61.1% and 27.8%, respectively. NPF of symptoms worsening like drugs, food, emotional stress or alcoholic beverages were complaint of 72.2% of individuals, whereas 22.2% complained about worsening with colinergic PF or dermographism. Joint pain (33.3%) were the complain the most frequent and 7 patients, mainly whose with positive ASST, had elevated thyroid antibody levels (n = 5; P > 0.05).

Conclusions: The positive ast frequency was 61%, comparable to values found in the literature. Association among social-demographic and clinical aspects was not observed. We emphasize the prevalence of joint pain and angioedema as associated symptoms and the more frequency of AID laboratory finds. The procedure proved safe and precise and worth value in the screening diagnosis of autoimmune etiology for patients with CIU.

580 Eleven Cases of Angioedema with Eosinophilia Treated in a Single Hospital in Japan
Shinichiro Nakachi, MD, Shigeiko Inokuma, MD, Erika Matsubara, MD, Kac Ohnishi, MD, Hiromitsu Asashima, MD, Kuminobu Wakabayashi, MD,
Angioedema with eosinophilia (AE) is mostly reported in allergy service, dermatologist, and Kiyofumi Hagiwara, MD, PhD. Department of Allergy and Rheumatic Diseases, Japanese Red Cross Medical Center, Shibuya-ku, Tokyo, Japan.

**Background:** Angioedema with eosinophilia (AE) is mostly reported in Japanese patients, and only as case reports. In this study, we aimed to determine the prevalence, clinical and laboratory characteristics, and courses of AE; the therapies for AE and the outcomes; and to evaluate whether steroid therapy for AE is necessary or not.

**Methods:** The patients whose blood samples showed an eosinophil count of ≥2000/μL, among the samples tested for blood cell counts and differential counts between Jan. 2006 and Oct. 2010, in Japanese Red Cross Medical Center, were first included. Among these patients with AE were extracted. The AE diagnosis was based on angioedema developing concurrently with eosinophilia and improving with the recovery from eosinophilia.

**Results:** All of the 11 patients were Japanese young females. One patient with clear arthralgia showed radioisotope accumulation in the joints by bone scintigraphy, and was diagnosed as having arthritis. The peak peripheral blood eosinophil count was 7,839 ± 6,008 (2,130–23,170)/μL after visiting our hospital. An increase in white blood cell count was only due to an increase in eosinophil count. Serum C-reactive protein and Immunoglobulin E levels remained almost normal. Peripheral blood eosinophil count decreased steadily for 8 weeks after the first visit, regardless of steroid use. Edema in all of the patients and arthralgia in 6 patients improved within 12 weeks. None of the patients had a recurrence of AE.

**Conclusions:** AE developed in Japanese young females and likely showed a single course. In AE, the count of eosinophil of 10^5/μL was observed. Only eosinophil count increased without changes in changes in the counts of other leukocyte series. Serum C-reactive protein and Immunoglobulin E levels remained almost normal. The eosinophil count in AE patients will return to the normal level within 8 weeks even without steroid therapy.

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### 581 Chronic Urticaria and Infections

Nadia Aguilar, Saul Lugo-Reyes, MD, Nora Hilda Segura Mendez, MD, and Elizabeth Mendiesta, Allergy & Clinical Immunology, Specialty Hospital Medical Center XXI Century, Mexico City, Mexico; Allergy & Clinical Immunology, National Institute of Pediatrics, Mexico City, Mexico; Allergy & Clinical Immunology, Specialty Hospital XXI Century National Medical Center, Mexico City, Mexico.

**Background:** Chronic Urticaria (CU) is a group of diseases that share a distinct skin reaction pattern. Triggering of urticaria by infections has been discussed for many years but the exact role and pathogenesis of mast cell activation by infectious processes is unclear. The remission of annoying spontaneous chronic urticaria has been reported after successful treatment of persistent infections.

**Objective:** To describe the infections found in chronic urticaria patients in our service, by performing a complete medical history, physical examination, laboratory studies and cultures.

**Methods:** Universe: Consecutive patients with chronic urticaria, with a detailed history, physical examination, laboratory studies underwent clinical viral panel, cultures, biopsy for detection of H. Pylori.

**Results:** A total of 50 patients, mostly women 82% and 18% men, mean age 41 years. 42% of the total population had salmonellosis, pharyngeal infection in 20% and 8% brucellosis. Crossed with urinary tract infection 6% of the population. Five patients had positive stool in 3 patients Eadolinax nana was isolated and 2 patients reported Giardia lambia, 5 patients (10%) had undergone cervicovaginitis 2 of them infected with S. haemolyticus, the rest was cultivated E. faecalis, and T. Gardenella vaginialis, respectively. Was isolated in 2 patients and one patient H. pylori HCV infection.

**Conclusions:** Infections may play a causal role of UC in some cases. Were identified in 42% of cases and gastrointestinal infections by most common cause Salmonellosis. As for genitourinary tract infections, intestinal parasites, Helicobacter pylori, were treated appropriately with antibiotic therapy, found a successful resolution of urticaria mainly in patients infected with Helicobacter pylori. There is growing evidence that persistent infections in chronic urticaria are important triggers, particularly in the case of infection by Helicobacter pylori, so if an infection is identified, it should be appropriately treated and it should be checked whether eradication has been achieved.

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### 582 Chronic Urticaria Associated with Thyroid Disease

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**Background:** Chronic urticaria has an incidence of 15% in the general population and sometimes is associated with chronic diseases such as rheumatoid arthritis, vitiligo and thyroid disorders. Chronic urticaria is characterized by wheals lasting more than 6 weeks, with alterations of the upper layers of the skin only. On histopathology there is a perivascular infiltrate characterized by T CD4 and CD8 lymphocytes and other inflammatory cells. Cytokines produced by lymphocytes, mast cells and other cells increase the expression of vascular adhesion molecules. Other mediators such as histamine increase vascular permeability causing edema, clinically represented by wheals. Treatment of chronic urticaria includes first and second generation antihistamines as first line treatment. Sometimes there is a poor response to there drugs and second line treatments such as immunosuppressors are indicated. A search for systemic disorders is helpful to identify associated pathology which makes chronic urticaria reluctant to therapy.

**Methods:** We performed a retrospective study considering patients with chronic urticaria attending our clinic during the last 5 years. Three hundred patients with urticaria were considered, with 16% (50 patients) with a chronic disease. Six patients with chronic urticaria were associated with thyroid disease.

**Results:** We considered 6 patients with chronic urticaria with altered thyroid function tests; 4 with subclinical hypothyroidism and 2 with subclinical hyperthyroidism. All of them had a poor response to antihistamines. When a thyroid disorder was identified, they received appropriate treatment achieving control of chronic urticaria. Treatment with antihistamines was continued.

**Conclusions:** Chronic urticaria is a disease often associated with systemic disorders including thyroid disease. We found an association with thyroid pathology in 2% of patients with chronic urticaria, with remission of cutaneous symptoms after treatment of endocrinologic disorder. No patient had clinical manifestation of thyroid disease so it is important to perform thyroid function tests to patients with chronic urticaria since identification of these disorders and appropriate treatment helps to control cutaneous symptoms.

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### 583 Epidemiology of Urticaria Cases in the Allergy Service from a Third Level Medical Center. Six Year Experience

Monica Martin Del Campo Perez, MD. Allergy service, dermatologist, General de México, Mexico City.

**Background:** The purpose of this study is to report the cases of Urticaria diagnosed in the Allergy service from a Third level medical center since its creation in July 2005.

**Methods:** This is a descriptive, retrospective, transversal study from July 2005 to February 2011. Selected medical records of patients apply for diagnostic criteria for an allergy disease. EAACI/GA2LEN/EDF/WAO guideline 2009 was used to make diagnosis of urticaria. Patients were classified by age and sex, and how many of them had skin prick test, also how many patients began treatment with immunotherapy.