

## CROATIAN INTERNATIONAL PUBLICATIONS

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Špehar M, Dodig S, Hrga I, Simić D, Turkalj M, Venus M. Concentration of IgE in children during ragweed pollination season. *Aerobiologia* 2010;26:29-34

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Genetic and environmental factors are responsible for running allergic diseases. The aim of this study was to compare the values of total- (t-IgE) and allergen-specific IgE (s-IgE) to *Ambrosia artemisiifolia* L. (Amb a) in children with sensitization to Amb a during ragweed pollination season, who experienced seasonal symptoms of allergic rhinitis (rhinorrhea, post-nasal drip, nasal congestion, itching, sneezing) and asthma (coughing, especially at night, wheezing, shortness of breath, chest tightness). Ragweed pollen grains were collected in Virovitica (rural area) and Zagreb (urban area)—cities with the same geographical width and elevation—during ragweed pollination seasons (July–October in 2006 and 2007), and their count was estimated. Concentration of t-IgE and s-IgE in pollination season was determined in serum of children with symptoms of allergic diseases. The total count of ragweed pollen grains (PG) differed significantly between Virovitica and Zagreb in both years, 2006. and 2007. In Virovitica it was significantly greater than in Zagreb. There was no statistically significant seasonal difference in both, t-IgE and s-IgE, respectively. No correlation was found between pollen grain count and the concentration of IgE's. To clarify the induction of IgE synthesis in children with sensitization to Amb a, further studies are needed.

Vukelić D, Trkulja V, Šalković-Petrišić M. Single oral dose of azithromycin versus 5 days of oral erythromycin or no antibiotic in treatment of campylobacter enterocolitis in children: a prospective randomized assessor-blind study. *J Pediatr Gastroenterol Nutr.* 2010;50:404-10.

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OBJECTIVE: To evaluate efficacy of a single oral azithromycin dose versus standard oral erythromycin regi-

men or no antibiotic for *Campylobacter* enterocolitis in children younger than or equal to 12 years of age. PATIENTS AND METHODS: Randomized parallel group assessor-blind trial testing for inequality in efficacy between treatments was done. Patients (N = 120) were enrolled at less than or equal to 48 hours since disease onset to receive erythromycin 50 mg/kg/day for 5 days, single-dose azithromycin 20 mg/kg or 30 mg/kg, or no antibiotic (no treatment control) (1:1:1). Antibiotics were commenced 8 to 10 hours after enrollment. Patients were assessed at 24-hour intervals for 6 days. RESULTS: In the intent-to-treat analysis, *Campylobacter* eradication was achieved in 20 of 30 controls and in all of the patients treated with antibiotic. Incidence of clinical cure during the observed period was 15 of 30 in the control, 14 of 30 in the erythromycin, 20 of 30 in the lower, and 25 of 30 in the higher azithromycin dose group. With adjustment for age, sex, baseline disease severity, and disease duration before enrollment, only azithromycin 30 mg/kg was superior to no treatment: incidence ratio (IR) 1.76 (95% confidence interval [CI] 1.11-2.87). It was also superior to erythromycin (IR 1.80, 97.5% CI 1.13-2.84). Regarding time to clinical cure, only azithromycin 30 mg/kg was superior to no treatment (adjusted hazard ratio [HR] 4.90, 95% CI 2.44-9.84). It was also superior to erythromycin (HR 4.17, 97.5% CI 1.91-9.09). All treatments were well tolerated. CONCLUSIONS: The administration of single oral dose of azithromycin 30 mg/kg early after disease onset effectively eradicates the pathogen and accelerates clinical cure in childhood *Campylobacter* enterocolitis. It is clinically superior to an early commenced 5-day erythromycin regimen, which apparently conveys no clinically relevant benefit over no antibiotic treatment.

Čačev T, Jokić M, Lončar B, Križanac S, Kapitanović S. Interleukin-6-174 G/C polymorphism is not associated with IL-6 expression and susceptibility to sporadic colon cancer. *DNA Cell Biol.* 2010;29:177-82.

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Interleukin-6 (IL-6) has been implicated in tumorigenesis; however, its role is still far from being clearly defined. Regu-

lation of IL-6 expression is highly complex, and additional complexity is introduced by single-nucleotide polymorphisms in the IL-6 gene. These single-nucleotide polymorphisms might influence mRNA transcription, which might in turn result in increased susceptibility to certain tumors. The aim of this study was to analyze IL-6 mRNA and protein expressions in sporadic colon cancer. Influence of IL-6-174 G/C polymorphism on IL-6 mRNA expression and sporadic colon cancer susceptibility was evaluated as well. The frequency of IL-6-174 G/C was analyzed by polymerase chain reaction-restriction fragment length polymorphism analysis. IL-6 mRNA and protein expressions were analyzed by real-time reverse transcription-polymerase chain reaction (RT-PCR) and immunohistochemistry. No statistically significant difference in IL-6 mRNA expression in tumor tissue compared with the corresponding normal tissue was observed ( $p = 0.116$ ). No correlation was found between IL-6 mRNA and protein expressions and clinicopathological features of sporadic colon tumors. There was no association of IL-6-174 G/C genotypes with IL-6 mRNA expression in colon tumors and corresponding normal mucous tissue ( $p = 0.355$ ;  $p = 0.152$ ). Finally, there was no association of IL-6-174 G/C with susceptibility to sporadic colon cancer.

**Radić M, Martinović Kaliterna D, Fabijanić D, Radić J. Prevalence of systemic sclerosis in Split-Dalmatia county in Southern Croatia. Clin Rheumatol. 2010;29:419-21.**

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This study aims to evaluate the prevalence of patients with systemic sclerosis (SSc) in Split-Dalmatia County in Southern Croatia. Patients were recruited from the medical records of University Hospital Split. Our Department of Rheumatology and Clinical Immunology is the only tertiary referral center for the Split-Dalmatia County, which has a population of 313,365 inhabitants aged over 18 years. Diagnoses were verified by medical record review. Cases of localized scleroderma (morphea and linear disease) were excluded. All patients were re-evaluated by the American College of Rheumatology (ACR) criteria for the classifica-

tion of systemic sclerosis. Prevalence of SSc in Split-Dalmatia County was estimated at 15.6 cases among 100,000 adults (95%CI 11.8-19.4). The prevalence of SSc in Split-Dalmatia County in Southern Croatia according only to the ACR criteria is higher than in other European countries. These data should facilitate research regarding the role of geographic and environmental factors for this disease in comparison populations.

**Furlan D, Pogorelić Z, Biočić M, Jurić I, Meštrović J. Pediatric tibial eminence fractures: arthroscopic treatment using K-wire. Scand J Surg. 2010;99:38-44.**

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**BACKGROUND:** Fractures of the tibial intercondylar eminence are observed mostly in children and adolescents, often after minimal trauma. The purpose of this paper is to evaluate the use of K-wire fixation for the arthroscopic treatment of tibial eminence fractures in children. **PATIENTS AND METHODS:** From January 2002 through January 2009 ten patients were treated arthroscopically because of the intercondylar eminence fracture in a Department of pediatric surgery, University Hospital Split. Arthroscopically controlled reposition was done, and using mobile X-ray two crossed K-wires were introduced percutaneously from the proximal part of the tibia to the fractured intercondylar eminence. Subjective outcome was obtained using IKDC subjective questionnaire. **RESULTS:** Average hospitalization time was 11 days. Average duration of treatment was 12.5 weeks. Average follow-up was 42 months. Follow-up radiographs showed union in all cases. The mean IKDC subjective score was 96/100. Clinically, all patients exhibited a solid endpoint on the Lachman test. The global IKDC objective score was normal in eight knees and nearly normal in two knees. **CONCLUSION:** Arthroscopic reduction and fixation by Kirschner wires or a small fragment screw is the best way for treatment intercondylar tibial eminence fractures, in the pediatric population, because is not crossing the epiphyseal plate.