

M1 A Prospective Audit of Food Intolerance Among Migraine Patients in Primary Care Clinical Practise

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This prospective audit was set up to investigate whether migraine sufferers have evidence of IgG-based food intolerances and whether their condition can be improved by the withdrawal from the diet of specific foods identified by intolerance testing. Migraine patients were recruited from primary care practices and a blood sample was taken. Enzyme-linked immunosorbent assays (ELISA) were conducted on the blood samples to detect food-specific IgG in the serum. Patients identified with food intolerances were encouraged to alter their diets to eliminate appropriate foods and were followed up for a 2-month period. Endpoints include identification of the specific foods that the patients were intolerant to, assessing the proportion of patients who altered their diet and the benefit obtained by these patients at 1 and 2 months. Patients reported the level of benefit on a 6-point scale, where 0 = no benefit and 5 = high benefit. Sixty one patients took part in the audit and 39 completed 2 months of investigation. The mean number of foods identified in the IgG test was 5.3 for all participants and 4.7 for those successfully altering their diet. About 90% of patients changed their diet to a greater or lesser extent following the identification of possible food intolerances. A marked proportion of the migraine patients benefited from the dietary intervention, approximately 30% and 40% reporting considerable benefit at 1 and 2 months, respectively. Also, over 60% of patients who reintroduced the suspect foods back into their diets reported the return of their migraine symptoms. This investigation demonstrated that food intolerances mediated via IgG may be associated with migraine and that changing the diet to eradicate specific foods may be a potentially effective treatment for migraine. Further clinical studies are warranted in this area.

M2 Food Allergy Mediated by IgG Antibodies Associated with Migraine in Adults

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Background: Migraine occurs with a high prevalence of 18 per cent. Management requires a tailored regimen of pharmacological and other measures based on individual clinical history. In some patients, allergen-specific IgG has been suspected to be involved in their mechanism, however, serological methods to investigate such possibility, are seldomly used. Objective: The aim of this study was to investigate allergen-specific IgG in serum of patients with migraine refractory to traditional treatment. Material and methods: Serum antibodies to specific 108 food allergens were measured by enzyme immunoassay from 56 patients with migraine and a control group without migraine. Results: In addition to statistical significant differences in the number of positives for IgG food allergens between patients with migraine and a controlled group, elimination diets successfully control the migraine without the need of medications. Conclusion: According to the results obtained, serum IgG antibodies to common food should be investigated in patients with migraine. Key words: Food allergy, migraine, IgG antibodies. Correspondencia: Dr. Carlos M. Arroyave Hernández. Calle Hacienda Buenavista núm. 322-12, colonia Jardines de la Hacienda, CP 76180, Querétaro, Querétaro, México. Recibido: agosto, 2007. Aceptado: agosto, 2007. La versión completa de este artículo también está disponible en internet: www.revistasmedicasmexicanas.com.mx

M3 Diet Restriction in Migraine, Based on IgG against foods: A clinical double-blind, randomised, cross-over trial

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Introduction: It is well-known that specific foods trigger migraine attacks in some patients. We aimed to investigate the effect of diet restriction, based on IgG antibodies against food antigens on the course of migraine attacks in this randomised, double blind, cross-over, headache-diary based trial on 30 patients diagnosed with migraine without aura. **Methods:** Following a 6-week baseline, IgG antibodies against 266 food antigens were detected by ELISA. Then, the patients were randomised to a 6-week diet either excluding or including specific foods with raised IgG antibodies, individually. Following a 2-week diet-free interval after the first diet period, the same patients were given the opposite 6-week diet (provocation diet following elimination diet or vice versa). Patients and their physicians were blinded to IgG test results and the type of diet (provocation or elimination). Primary parameters were number of headache days and migraine attack count. Of 30 patients, 28 were female and 2 were male, aged 19–52 years (mean, 35_10 years). **Results:** The average count of reactions with abnormally high titre was 24_11 against 266 foods. Compared to baseline, there was a statistically significant reduction in the number of headache days (from 10.5_4.4 to 7.5_3.7; $P<0.001$) and number of migraine attacks (from 9.0_4.4 to 6.2_3.8; $P<0.001$) in the elimination diet period. **Conclusion:** This is the first randomised, cross-over study in migraineurs, showing that diet restriction based on IgG antibodies is an effective strategy in reducing the frequency of migraine attacks.

M4 IgG-mediated allergy: A new mechanism for Migraine attacks?

Julio Pascual and Agustín Oterino. *Cephalalgia* 0(00) 1–3. International Headache Society 2010

Despite recent advances offered by modern neuroimaging and genetic techniques, the pathophysiology of migraine has not been fully clarified. As pointed out by Selby and Lance 50 years ago, a relevant proportion of patients report that their migraine attacks are usually precipitated by dietary items (1). In a survey analysing the prevalence of dietary migraine in 500 new migraine patients, Peatfield et al. found in 1984 that 19.2% of migraine patients reported sensitivity to cheese, 18.2% to chocolate and 11.1% to citrus fruit (2). The same year, Monro et al. published a paper in the *Lancet* with the categorical title 'Migraine Is a Food-Allergic Disease', describing the treatment of just nine patients with severe refractory migraine with either sodium cromoglycate or placebo after the patients ate foods previously identified as provocants (3).