Background: There is a clinical perception that Chronic Fatigue Syndrome (CFS) subjects have greater drug sensitivity and "allergy" than the rest of the population. This perception was tested by assessing the symptoms associated with medication use in a group stratified by CFS status and gender.

Methods: 194 subjects answered a binary (yes-no) questionnaire (Simon GE et al, 1993) to determine if "medications" (not further subdivided by drug class) caused any of 25 symptoms from the neurological (6 symptoms); musculoskeletal (5); airways (7); gastrointestinal (5); and skin (2) systems. Subjects used our CFS Severity score to estimate the severity of fatigue and the 8 minor criteria for the previous 6 months.

Results: The subgroup of ALL CFS females had more frequent nausea (32% vs 13%; P = 0.013) and visual changes (19% vs 4%; P = 0.018) than ALL non-CFS females. ALL CFS males had nausea (26%; P = 0.003) and dizziness (23%; P = 0.006) compared to zero in ALL non-CFS males. However, these differences were misleading because many individuals had no symptoms, and so would not have adverse complaints or contact their physicians. Therefore, the 47% of CFS and 72% of non-CFS subjects with zero symptoms were removed. The remaining 65 CFS subjects had 5.6 symptoms (95% CI, 4.2- 7.0). The 20 non-CFS subjects had 3.5 symptoms (1.8 to 5.2; not significant by *t* test). Females in these subsets had no significant differences in symptoms frequencies. However, CFS males (n = 22) had more nausea (54.5% vs 0%; P = 0.067) and dizziness (50% vs 0%; P = 0.091) for non-CFS males (n = 4).

Conclusions: The apparent higher prevalence of medication-related symptoms in CFS than non-CFS was biased by the large number of subjects with zero symptoms. When subjects with no complaints were excluded, there was no difference between CFS and non-CFS females, but a trend for CFS males to have had more gastrointestinal and neurologic symptoms than the non-CFS males. Overall, the equivalence of symptoms in CFS and non-CFS suggests that Multiple Chemical Sensitivity (MCS) may be an independent syndrome. These methods will direct our analysis of other irritants in this multiple chemical sensitivity questionnaire.

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Psychogenic Intractable Sneezing. Case Report

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Background: Sneezing is a coordinated protective respiratory reflex which occurs due to stimulation of the upper respiratory tract, and frequently accompanies allergic or nonallergic rhinitis. Sneezing can also arise due to bright light or sun (ACHOO syndrome), physical stimulants of the trigeminal nerve, psychogenic or central nervous system pathologies, sexual ideation and psychogenic sneezing. There are few case reports in the literature of patients with psychogenic sneezing.

Methods: 14-year-old girl who had incessant sneezing for over 4 days. The patient was initially seen in a rural hospital, were it was prescribed prednisone and antihistamines but the patient did not show any improvement. She was refered to 3rd level Hospital and treated with nasal steroids, antihistamines, and isotonic sodium chloride solution nasal spray; sneezing remitted in 2 hours. During a follow up visit nasal endoscopy was normal. Had a similar episode a month after that, and was referred to our service. She didnt have either personal or family history of allergies.

Results: There were not abnormalities in physical examination but obesity; nasal cytology and skin tests to aeroallergens were negatives. Received the same management with isotonic sodium chloride solution nasal and the symptoms remitted. Consultation with psychiatry is requested by probable psychogenic sneezing. The interrogation relates to the loss of father 3 years also suffered from bullying for obesity. Combined treatment was initiated by psychiatry and psychology.

Conclusions: Psychogenic Sneezing is a rare disorder, but should be considered in the differential diagnosis of sneezing. May have suspect if

inspiratory phase is quite short and the amount of nasal mucosal secretion expelled very low. Eyes may remain open during sneezing. It usually develops due to psychogenic factors and is refractory to medical treatment. It is important to assess the patient in a holistic manner through a medical history and physical examination. Psychosocial environmental conditions should be investigated, and once identified the trigger requires a multidisciplinary treatment.

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GERD Screening by the Use of F-Scale and Allergy Screening for Diagnosis and Treatment of Chronic Cough

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Background: Allergy and gastro-esophageal reflux (GERD) are main causes of chronic cough, and simple, easy and rapid screening is desired for diagnosis of these symptoms.We used F-scale (Frequency Scale for Symptoms of GERD: FSSG) for GERD screening, developed by Japanese gastro-enterologist, did general allergy screenings, and investigated clinical outcome after treatment retrospectively.

Methods: GERD was screened by F-scale questionnaire, composed in twelve questions concerned with reflux symptoms, and scored 5 grades in each symptom. General allergy screening was defined as asking history of allergy, serum immnogloblin E (IgE) test (total, fourteen kinds of specific allergens) and measuring fraction of exhaled nitric oxide (FeNO),its positive range was greater than or equal to 20 ppb. Allergy positive was defined as at least one positive finding of allergy screening test. GERD was treated with proton pump inhibitor (PPI), and allergy was treated with inhaled corticosteroid or histamine H1 receptor blocker or leukotriene receptor antagonist.

Results: Fifty-four consecutive chronic cough patients were screened in GERD and general allergy screening. Thirty-seven patients (69%) were F-scale positive and 43 patients (80%) were positive in both F-scale and general allergy screening. Thirty patients (56%) were positive in both F-scale and general allergy screening. All patients were treated with allergy medicine or PPI, or both medicines. In all patients screened and treated with both GERD and allergy concurrently, cough improved within 2 weeks, and in patients whose positive finding was either GERD or allergy, cough improved by treatment with PPI or allergy drugs similarly. Delayed screening or treatment of either GERD or allergy was related to delayed improvement of cough. Cough finally improved in all patients in visit within 3 times.

Conclusions: In examination of chronic cough, adding GERD screening by use of F-scale to general allergy screening is beneficial to proper diagnosis, treatment and rapid improvement of symptom.

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Diagnosis of Gastroesophageal Reflux Disease in Patients with Chronic Cough

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Background: A major cause of chronic cough is gastroesophageal reflux disease (GERD). Its diagnosis is based on symptoms and diagnostic tests, such as