Abstracts

TRENDS IN PREVALENCE OF OBESITY AND MEDICAL COSTS IN ASTHMA PATIENTS IN THE UNITED STATES

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OBJECTIVES: To investigate trends in the prevalence of obesity and annual medical costs in normal and obese patients with asthma from 2001–2006. METHODS: This cross-sectional analysis utilized data from the 2001–2006 Medical Expenditure Panel Surveys. Self report of a diagnosis of asthma or ICD-9-CM code: 493, with exclusion of patients with pregnancy, malignancy, kidney dialysis, immunodeficiency, age <18 or ≥75 years old, or body-mass-index(BMI) of ≥18.3, identified 10,402 asthma patients. Patients with BMI of ≥30 and 18.5 ≤BMI ≤25 were classified as obese and normal, respectively. Medical costs included all treatment costs, except dental or injury costs, with costs related to the respiratory system being those associated with ICD-9 codes 460–516. Bootstrap method was used to calculate the standard error (SE) of medical costs, while t-test was used to compare medical costs. All costs were converted to 2006 U.S. dollars. Data were analyzed using SAS and STATA. RESULTS: Age adjusted prevalence of obesity was 25.9% and 26.4% among the total population, but 35.1% and 35.6% among asthma patients in 2001 and 2006, respectively. While average medical costs in asthma patients with normal BMI maintained a steady level from $2711 (SE:$492) in 2001 to $2630 (SE:$536) in 2006, those costs increased by 30% from $4442 (SE:$371) in 2001 to $5776 (SE:$540) in 2006 (P < 0.0101) in obese asthma patients. Costs related to the respiratory system in obese asthma patients did not change over time, with increases in medication costs but decreases in inpatient costs. CONCLUSIONS: Even though the prevalence of obesity remained consistent from 2001 to 2006, the average medical cost in asthma patients with obesity increased significantly, suggesting an upward trend in the economic burden of obesity. Effective strategies to prevent or reduce obesity should be introduced as a cost-effective intervention in asthma patients.

RESPIRATORY-RELATED DISORDERS – Patient-Reported Outcomes Studies

CAN OLDER, CHRONICALLY ILL ADULTS USE ELECTRONIC DIARIES? COMPLIANCE RATES IN A PROSPECTIVE STUDY OF PATIENTS WITH COPD

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OBJECTIVES: Electronic data capture for daily diary and survey-style patient-reported outcomes (e-PRO) is becoming widespread. Concern has been expressed that older adults may have difficulty with this methodology, particularly e-diaries requiring independent completion and data transmission at home. Objective: To evaluate e-diary compliance rates in adults with stable and acute chronic obstructive pulmonary disease (COPD) using data from the EXACT (Exacerbation of Chronic Pulmonary Disease Tool) prospective item-reduction and validation study. METHODS: N = 418 stable patients were asked to complete an e-diary for 7 days; 222 acute patients were to complete the e-diary for 28 days and again on days 60–67. Site coordinators provided standardized training, take-home instructions, and a toll-free helpdesk number. Patients were instructed to complete the 30-item diary each evening during a 6-hour free variable window (based on bedtime) and upload data daily. Audible alarms were used as reminders. Compliance feedback (%) was provided via PDA each entry day. Site coordinators tracked compliance via web portal, contacting patients after two missed entries. Centralized compliance monitoring was performed to detect low rates and re-train sites. RESULTS: Mean age = 65 years (+ 10); 48% male; 77% retired or disabled; 64% high school education; mean FEV1 predicted = 51% (+ 20); 92% moderate to severe disease; 73% of acute patients had moderate to severe exacerbations based on clinician rating. Study retention was 99% and 88% for the stable and acute groups, respectively; compliance rates were 96% for days 1–7 in stable patients and 94% for days 1–28 in acute patients. CONCLUSIONS: High compliance rates were observed in stable and acute patients with COPD participating in a study that included patient training, real-time reminders, and daily monitoring. Further study of compliance over longer periods of time and an evaluation of the most effective compliance enhancement methods within and across patient populations is warranted.

ADJUSTING THE NICOTINE DOSE: THE KEY TO A SUCCESSFUL, “TAILored” METHOD OF QUITTING SMOKING

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In a recent report, AFSSAPS (the French Health Products Safety Agency) discussed to what extent the dose selected constitutes an important success factor. OBJECTIVES: Assess the impact of quitting smoking in subjects receiving treatment by nicotine patches, combined in some cases (and others not, depending on the practitioners’ approach) with nicotine pastilles to suck. METHODS: Each of the subjects was included after they had expressed, during the spontaneous consultation, their desire to quit smoking. The cohort being pragmatic, no prescription advice was given, and the patch was prescribed directly or indirectly, to the investigating doctors. The doctors were recruited by an independent service provider. RESULTS: A total of 215 subjects were recruited by 67 general practitioners. Two analysis groups were organised, the first group being treated with a transdermal device or skin patch (n = 93) and the second with a transdermal device combined with pastilles (n = 122). After 6 months, the rate of abstinence in the “Patch + Pastille” group was 62.1% versus 39.7% in the “Patch only” group, the difference observed being significant (p < 0.008). CONCLUSIONS: This cohort, carved out in real conditions, highlighted in subjects wishing to use nicotine pastilles, the relevance of adjusting the dose with the help of pastilles. Therefore, it would appear that, for subjects quitting smoking, combining pastilles with a transdermal nicotine substitute is indispensable. The role of the health professional initiating the quitting programme is therefore of prime importance.