amino acids of medication class prescribed. RESULTS: There were 2,916 individuals in the study (1,788 in DA cohort, 664 in MOA-B, and 2,482 in LD). Results of these analyses revealed that older patients were significantly less likely to receive DA (OR = 0.977, 95% CI 0.966-0.988) or a MOA-B (OR = 0.968, 95% CI 0.954-0.983), compared to LD. Compared to LD cohort, patients who received a MOA-B were significantly less likely to be diagnosed with pre-period depression (OR = 0.540; 95% CI 0.382-0.760) during the study period. We reviewed data on uncontrolled progression or relapse to further investigate the natural course of neuropsychiatric disturbances, and how the manufacturer influenced the decision reversal. RESULTS: Since 2006, 17 payer decisions for natalizumab were identified (six recommendations, eight restricted recommendations, and three rejections). Three of these recommendations were later reversed by the manufacturers, indicating further investigation is needed. The authors concluded that more evidence is needed to further reverse the payer decision reversal. CONCLUSIONS: By emphasising unmet needs, submitting further evidence in defied subgroups and ensuring indirect comparisons are methodologically sound, it has been possible to overturn initial negative decisions by payer agencies to restrict recommendations in defied subgroups. Identification of the optimum treatable population has proved pivotal in the reversal of fortune.

PHYSIOLOGICAL AND PSYCHOLOGICAL DISTURBANCES - Clinical Outcomes Studies

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THE USE OF MONTELUKAST AND NEUROPSYCHIATRIC DISTURBANCES AMONG PEDIATRIC ASTHMATICS: A NESTED CASE-CONTROL STUDY
Alicja M1, O'Brien C1, Slees M2, Martin B1
1University of Arkansas for Medical Sciences College of Pharmacy, Little Rock, AR, USA; 2UAMS College of Medicine, Little Rock, AR, USA
OBJECTIVES: There is conflicting evidence published in literature regarding the association between montelukast and neuropsychiatric disturbances. We sought to determine the use of montelukast was associated with neuropsychiatric disturbances in children with Asthma. METHODS: A 10% sample of the LifeLink health plan claim data was used to identify subjects less than 18 years of age with a primary diagnosis of asthma between Jan 1, 1998 and Dec 31, 2009. Multiple case definitions for neuropsychiatric disturbances were formulated ranging from narrow to broad measures based on the diagnoses of neuropsychiatric related disorders or use of a psychotropic medication. We used a nested case control design and each case was matched to 3 controls on age, geographic region and controls assigned based on the nearest case to montelukast was measured as any exposure during the year, recency of exposure, cumulative duration of exposure and cumulative dose of exposure during the 30 days and 365 days prior to the outcome. Conditional logistic regression was used to estimate the unadjusted and the adjusted odds ratios after controlling for confounders. RESULTS: Using the broadest definition for neuropsychiatric disturbances, 1,920 cases and 5,760 matching controls were identified. Cases were more likely to be diagnosed with epilepsy, diabetes, cancer and hypothyroidism, and were more likely to use inhaled corticosteroids, long acting beta agonists, systemic corticosteroids and metoclopramide. Subjects exposed to montelukast during the year had an unadjusted OR of 1.085 (CI 0.962 – 1.223) and an adjusted OR of 1.032 (CI 0.909 – 1.172) for experiencing a neuropsychiatric disturbance. None of the other montelukast exposure measures showed a positive association except a cumulative dose of exposure between 351mg and 900mg (OR 1.53; 95% CI 1.29-1.81).
CONCLUSIONS: Preliminary results do not suggest a consistent positive association between montelukast and neuropsychiatric disturbances.

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A RETROSPECTIVE EPIDEMIOLOGIC REVIEW OF COPD IN KOREA
Kim JH1, Jung KS2, Hisa1
1Nycomed Korea Co., Ltd., Seoul, South Korea, 2Hallym University Sacred Heart Hospital, Gyeonggi-do, Dongsan-gu, South Korea
OBJECTIVES: COPD is an important cause of morbidity and mortality. Statistics presented in 2009 the mortality of COPD was 9.4 per 100,000 people with chronic obstructive lung disease as one of the 10 major death causes in Korea. This study was performed to investigate epidemiologic data especially incidence and risk factors associated with COPD exacerbations in Korea. METHODS: A retrospective observational study was carried out on 1,112 COPD patients from 47 medical centers throughout Korea. The data collection was performed at enrollment and a past year from the enrollment. The COPD patients were defined by GOLD criteria, 2010. Also we investigated demographic characteristics, COPD exacerbation, Lung Function Test, Comorbidity, COPD assessment test (CAT), and COPD medication. RESULTS: Among 1,112 patients, more than half of the respondents were more than 70 years old, 91% (n=1,011) were male, mean BMI was 22.2 (SD 3.3) kg/m2, mean COPD duration was 5.8 years, and 55.5% (n=616) were classified as chronic bronchitis. The occasional exacerbation was present in 33.4% (n=374), the moderate exacerbation in past year was 0.67 (SD1.28), and decrease of FEV1/FVC results align with GOLD stage was statistically significant (p<0.0001). The most frequently reported comorbidities were hypertension (36.0%, n=400) and bronchial asthma (16.6%, n=187). The CAT score was 18.5 (SD 8.3). The most frequently used COPD medication was long-acting muscarinic antagonist (47.9%). Multivariate logistic regression results show the effect on exacerbation in the subjects who had only pulmonary emphysema was 0.7 times the subjects who had only chronic bronchitis (95% CI [0.49-0.96], p-value<0.001), and subjects with both history of pulmonary emphysema were 11.1 times higher than in the subjects without history of pneumonia (95% CI [6.89-17.87], p-value<0.0001). CONCLUSIONS: Our results suggested that the