Tuberous Sclerosis Complex (TSC) is a multi-system disorder that can affect almost any organ system in the body. The objective of this study is to examine the prevalence and incidence rates of the common co-morbid conditions among patients with TSC related clinical conditions were identified using ICD-9 codes or CPT codes. The conditions with highest incidence rates (per 10,000 patient-years) in the same period were benign neoplasm of skin (1,361), vision disorders (1,017), dyschromia (480), seizure (464), and convulsion (456); subependymal giant cell astrocytoma (169) and Cardiac rhabdomyomas (80) were also observed.

METHODS: The comorbid conditions and organ systems were explored with many comorbid conditions. Vision disorders, benign skin cancer, seizure, convulsion, dyschromia, depression, cardiac dysrhythmia, anxiety, sleep disorders and hematuria are the most prevalent ones in the real world. Managing TSC could be challenging due to its multi-system involvement. Future effort should focus on developing treatment that treat the underlying cause of the disease.

INDIVIDUAL’S HEALTH – Cost Studies

PIH10

Utilization Patterns of Bisphosphonates and Selective Serotonin Reuptake Inhibitors from 2004 to 2008 Among Adult Women

Nyangolo AN, Harpe SE

Virginia Commonwealth University, Richmond, VA, USA

OBJECTIVES: Selective serotonin reuptake inhibitors (SSRIs) have been associated with increased risk of osteoporotic-related fractures. Bisphosphonates (BPs) are one of the recommended medications for osteoporosis and fracture prevention. The primary objective of this study was to examine the proportion of BP users who are also on SSRIs and to explore the relationship between concomitant use and patient age among women aged 45 years and older. METHODS: Data from the 2004-2008 Medical Expenditure Panel Survey (MEPS) was used to examine usage patterns of BPs and SSRIs for women aged ≥45 years. Analyses were based on yearly consolidated data and prescribed medicines files. Weighed descriptive statistics were used to describe patterns of medications use and proportions were reported. Age was categorized into two groups: 45-64, and 65-85 years old. RESULTS: In the timeframe examined, 3.5% women in 2004, 3.8% in 2005, 4.0% in 2006, 3.9% in 2007, and 4.0% in 2008 received bisphosphonates. In the same period, 8.6% of women in 2004, 8.6% in 2005, 8.1% in 2006, 7.1% in 2007, and 7.4% in 2008 received SSRIs. Concomitant use (BPs + SSRIs) was observed in 0.4% women in 2004, 0.5% in 2005, 0.6% in 2006, 0.6% in 2007, and 0.6% in 2008. In 2006, 2007, and 2008, concomitant use of BPs and SSRIs was higher in the 65-85 age group compared to that of 45-64 years. This pattern may be in large part due to increasing population of older women in the United States. CONCLUSIONS: Concomitant use of BPs and SSRIs in adult women ≥45 years is not uncommon and might be higher in older postmenopausal women. The observed concomitant use presents drug safety challenges surrounding the bone health of postmenopausal women. Studies are needed to investigate the potential interactive effects of SSRIs on BP therapy.

PIH11

Prevalence and Incidence Rates of Most Common Comorbid Conditions Among Patients with Tuberous Sclerosis Complex: A National Claim Database Analysis

Sung F1,4, Koenig S2,3

1Eli Lilly Research Laboratory, Indianapolis, IN, USA, 2Eli Lilly and Company, Indianapolis, IN, USA, 3Kaiser Permanente Medical Care Program, CA, USA, 4University of Chicago, Chicago, IL, USA

OBJECTIVES: Tuberous sclerosis complex (TSC) is a multi-system disorder that can affect almost any organ system in the body. The objective of this study is to examine the prevalence and incidence rates of the common co-morbid conditions among patients with TSC. METHODS: We used a large national health care claims database for 39 million commercially insured US populations. Patients with a TSC claim diagnosis between 2000 and 2009, and continuous enrollment 12 months before and 12 months after their first TSC diagnosis were included in this analysis. (These selection criteria lead to the exclusion of those at age less than one). Approximately 40 TSC related clinical conditions were identified using ICD-9 codes or CPT codes. The prevalence and incidence rates of these conditions are reported. RESULTS: Patients (N=1249) with TSC had mean age of 33.9 years at their 1st TSC diagnosis, and 57.5% were females. The most prevalent comorbid conditions within the first post TSC year were vision disorders (34.8%), benign neoplasm of skin (28.1%), seizure (16.1%), convulsion (15.0%), dyschromia (12.2%), depression (11.1%), cardiac dysrhythmia (10.2%), anxiety (8.6%), sleep disorder (7.8%) and hematuria (6.3%). The conditions with highest incidence rates (per 10,000 patient-years) in the same period were benign neoplasm of skin (1,361), vision disorders (1,017), dyschromia (480), seizure (464), and convulsion (456); subependymal giant cell astrocytoma (169) and Cardiac rhabdomyomas (80) were also observed. CONCLUSIONS: Multi-systems and organ systems are affected with many comorbid conditions. Vision disorders, benign skin cancer, seizure, convulsion, dyschromia, depression, cardiac dysrhythmia, anxiety, sleep disorders and hematuria are the most prevalent ones in the real world. Managing TSC could be challenging due to its multi-system involvement. Future effort should focus on developing treatment that treat the underlying cause of the disease.