Current literature suggests that prescribing of secondary preventive therapy has not been maximized which would reduce the occurrence and cost of secondary fracture. Additionally, patient acceptance of treatment alternatives has not been maximized due to the administration complexity and potential side effects of bisphosphonates. Alternative agents with osteoporotic benefits may be used in some women to increase patient adherence. Additionally, patient acceptance and adherence may increase after an osteoporotic incident (fracture or vertebral collapse). The purpose of this study was to assess compliance rates through refill adherence with bisphosphonates vs. alternative osteoporotic treatments (estrogen replacement therapy, salmon calcitonin, or raloxifene) in primary and secondary prevention among women.

METHODS: Members of a Southeastern Michigan managed care organization were retrospectively identified with pharmacy claims by those receiving bisphosphonates, estrogen replacement therapy, salmon calcitonin or raloxifene. Women >45 years of age as of January 1, 2001 were cross-referenced with medical claims for a diagnosis of non-traumatic fracture by CPT and ICD-9 codes between January 1, 1996 to April 30, 2001. Women with a history of fracture with treatment were classified as having secondary treatment prevention; women without a history were classified as primary treatment prevention.

RESULTS: Mean adherence rates were 76.32% (±39.12) in the primary prevention population (n = 653) and 84.91% (±31.08) in the secondary prevention population (n = 114). The bisphosphonate treatment group’s (n = 78) mean adherence rate was 77.69% (±33.92); the alternative treatment group’s (n = 689) rate was 83.86% (±38.62).

CONCLUSIONS: Treatment associated with secondary prevention and involving alternative treatments had the highest adherence rates. Patient adherence and acceptance should be considered in determining osteoporosis treatment guidelines to ensure those most likely to benefit receive proper treatment.

Asthma & Respiratory Diseases/Disorders—Clinical Outcomes Presentations

Analysis of Nasal Steroid Dosing Patterns in a Large Sample from a Prescription Database
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High potency nasal steroids are generally considered to be those that can be administered once daily. Most clinicians prefer an agent that can be given once daily, increasing the likelihood of treatment adherence. We weighted this provider preference highly when we sought to select one or two nasal steroids for preferred formulary status in our large health system. We analyzed directions for use of prescriptions for nasal steroid products to determine the products that appeared to be prescribed once daily to greater than 90% of patients.

OBJECTIVE: This paper describes the results of a database analysis of nasal corticosteroid dosing patterns in a large health system.

METHODS: We extracted prescription records from the Uniformed Services Prescription Database (USPD) for all nasal corticosteroid inhaler products dispensed between October 1, 2000 and May 31, 2001. There were 659,000 prescriptions for 260,971 unique patients in the dataset. We developed and validated a text parsing algorithm to analyze directions for use (sigs) associated with each prescription. Number of prescribed administration times per day and number of puffs per administration were tabulated for each patient by product.

RESULTS: Of the eleven available formulations, three were used once a day in over 90% of patients: Mometasone aqueous (94.1%), fluticasone (94.6%), and beclomethasone DS aqueous (91.9%). Three products (triamcinolone aqueous, triamcinolone aerosol, and beclomethasone DS aerosol) were used once a day in 80%-90% of patients. Once daily use of the remaining products ranged from 10% to 62.7%.

CONCLUSION: Three products (mometasone, fluticasone and beclomethasone DS aqueous) appeared to be prescribed once daily to greater than 90% of patients, meeting our criteria for preferred formulary status.