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TREATMENT MODIFICATIONS AND COSTS OF BIOLGIC THERAPY IN PATIENTS WITH ANKLYOSING SPONDYLITIS

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OBJECTIVES: Limited information exists on real-world use of biologic agents in ankylosing spondylitis (AS). This study evaluated the treatment patterns and costs of biologic therapy and disease-modifying antirheumatic drugs (DMARDs) in AS patients.

METHODS: MarketScan claims databases were used to identify biologic therapies used by AS patients ≥18 years of age with ≥3 biologic treatments in the past 6 months (n=393 patients). The study evaluated treatment changes from the initial AS biologic treatment over a 3-year follow-up period.

RESULTS: A cohort of 339 AS patients was identified. First-line biologics were etanercept (n=140), adalimumab (n=127), infliximab (n=41), golimumab (n=13), certolizumab pegol (n=7), and abatacept (n=5). Among patients with ≥2 biologic modifications to their treatment, first-line modification rates were 64.6% discontinued their first-line biologic therapy and did not restart any biologic therapy, 23.6% of patients stayed on their first-line, 8.8% switched to second-line and 2.9% to third-line therapies. Patients who switched to a second- or third-line biologic treatment remained on their first-line agent for less time (736, 325, days, respectively) than those who did not switch (502 days). Most common treatment modifications in first-line were DMARD add-on (6%) and removal (6%). Time to first treatment-modification was shorter for those who switched to second- (88 days) and third-line therapy (6 days) vs. those who remained on first-line (160 days).

Monthly-per-member medical costs were greatest for non-switchers ($1,908) vs. patients second-line biologic treatment and those remaining on DMARDs ($1,849). Those who switched biologics had more modifications to their treatment.

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CONCLUSIONs: Higher age and having arthroplasty were associated increased risk of subsequent hip fracture in elderly women. The higher risk of subsequent hip fracture in patients with hip arthroplasty could be explained their longer survival after primary treatment. Further analyses of risk factors are needed to elaborate effective prevention strategies for secondary hip fractures.

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INCREASED RISK OF OSTEOPENIA AMONG HIV-POSITIVE ADULTS AGE18–49 China, Pei Q1, Alder RA2, Lafeur3

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OBJECTIVES: Bone loss is a common problem occurring among human immunodeficiency virus (HIV)-positive adults. Explanations for the bone loss are unknown.

We estimated the prevalence of osteopenia among HIV-positive adults ages 18–49 versus matched HIV-negative adults, and ranked predictors for osteopenia in terms of their statistical significance.

A retrospective cohort study was selected using a commercial, population-based, natlional database. HIV-positive individuals were identified according to HIV antibody test.

Bone mineral density (BMD) T-score of femur neck was calculated based on the mean of their contribution to a prediction model.

RESULTS: 52 HIV-positive individuals were identified. In the matched cohort 46 HIV-positive and 138 HIV-negative adults were included. The mean age of the matched cohort was 35 ± 8 years. HIV-positive and HIV-negative groups did not differ significantly in terms of age, sex, race or BMI. HIV-positive individuals had significantly lower bone mineral density (BMD) than controls. The prevalence of osteopenia was 7.3% versus 1.7% among the cases and controls, respectively.

CONCLUSIONS: HIV itself is a significant predictor for osteopenia, but due to lack of information on treatment history, it remains unclear if HIV medicine or treatment duration can increase the risk of osteopenia.

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MULTINOMIAL LOGISTIC REGRESSION ANALYSIS OF RISK FACTORS INFLUENCING THE TIME UNTIL SECONDARY HIP FRACTURES Juhász K1,2,3, Sebestyén A1,2,3

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OBJECTIVES: The risk of subsequent hip fracture is increased in presence of previous hip fracture. This study evaluated the time until subsequent hip fracture in patients with a history of hip fracture between 01 January 2000 and 31 December 2008 were selected from the database of the Hungarian National Health Insurance Fund. Patients’ data concerning their age, gender, place of living, type of primary fracture, comorbid medical diseases, surgical intervention for primary fracture and hospital providing treatment for primary hip fracture were evaluated. Multinomial logistic regression was used to assess the association between risk factors and time (≥1 year to the initial hip fracture. The aim of our nationwide retrospective observational cohort study was to reveal the significance of demographic and clinical factors on time until subsequent hip fracture.

METHODS: Patients 20–69 years old and treated with primary femoral neck fractures in the year 2000 and suffered from contralateral hip fracture between 01 January 2000 and 31 December 2008 were selected from the database of the Hungarian National Health Insurance Fund. Patients’ data concerning their age, gender, place of living, type of primary fracture, comorbid medical diseases, surgical intervention for primary fracture and hospital providing treatment for primary hip fracture were evaluated. Multinomial logistic regression was used to assess the association between risk factors and time (≥1 year to the initial hip fracture.

Conclusions: 52 HIV-positive individuals were identified. In the matched cohort 46 HIV-positive and 138 HIV-negative adults were included. The mean age of the matched cohort was 35 ± 8 years. HIV-positive and HIV-negative groups did not differ significantly in terms of age, sex, race or BMI. HIV-positive individuals had significantly lower bone mineral density (BMD) than controls. The prevalence of osteopenia was 7.3% versus 1.7% among the cases and controls, respectively.

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