Surgery in health outcomes and reduce the need for repeat interventions.

were followed for 5 years. Procedure failure was defined as receiving a total knee within 3 years, and 22% within 5 years. Failure rates defined by TKR after microfracture surgery were 5% within 1 year, 12% patients received knee procedures within 1 year, 3 years, and 5 years, respectively. Increased with increasing years of follow-up: 9% within 1 year, 18% within 3 years, and 32% within 5 years. Among commercial payer patients, 8% were failures after 1 year, 15% after 3 years, and 20% after 5 years. The highest rates of failure were observed among Medicare beneficiaries, in which 18%, 30%, and 41% of patients received knee procedures within 1 year, 3 years, and 5 years, respectively. Failure rates after microfracture for primary knee fracture surgery was 5% within 1 year, 12% within 3 years, and 22% within 5 years. CONCLUSIONS: Although the overall failure rates of knee microfracture surgery have high failure rates as defined by repeat procedures within five years. There is a need for procedures that provide durable improvements in health outcomes and reduce the need for repeat interventions.

EVALUATION OF PROGNOSTIC FACTORS FOR CONTRALateral HIP FrACTURE AMONG ELderly women in husband: A 8-YEAR nAtIOnAl sTUDY

OBJECTIVES: Hip fracture is most serious consequence of osteoporosis with significant financial and personal costs. Our aim was to determine the significance of demographic and clinical factors for contralateral hip fracture among elderly women. METHODS: In our retrospective observational cohort study women aged 60 years and over treated with primary femoral neck fractures in the year 2000 were selected from the database of the Hungarian National Health Insurance Fund. Contralateral hip fractures were recorded between 01 January 2000 and 31 December 2008. Patients’ data including age, place of living, hospital providing treatment for primary hip fracture, type of primary fracture, comorbidities, type of primary surgical intervention, and time of occurrence were used for the study. The contralateral hip fractures were evaluated using multivariate Cox proportional hazard regression and Kaplan-Meier survival analysis. RESULTS: 2866 subjects met the criteria. 263 patients (9.17%) suffered contralateral hip fracture in the mean time until secondary fracture was 1142.82 days. Expressed as cases per person-years the incidence of subsequent hip fracture was 0.23. Significant correlations were found between higher ages (HR: 1.03; p < 0.001, CI: 1.01 - 1.05), having hip arthroplasty as type of primary surgery into group for primary fracture (HR: 1.03; p = 0.002, CI: 1.01 - 1.05) and occurrence of subsequent hip fractures. Comparing patients’ survival on different surgical intervention, log rank test showed significantly longer survival (p = 0.027) in patients with arthroplasty (mean survival time: 1739.84 days) compared with those having osteosynthesis (mean survival time: 1540.59 days). CONCLUSIONS: Higher age and having arthroplasty were associated with increased risk of secondary hip fracture in elderly women. The higher risk of secondary hip fracture in patients with hip arthroplasty could be explained by their longer survival after primary treatment. Further analyses of risk factors are needed to elaborate effective prevention strategies for secondary hip fractures.

INCREASED rISK OF OSTEOPOROSIS AMONG HIV-POSITIVE ADULTS AGES18-49

OBJECTIVES: Bone loss is a common problem occurring among human immunodeciency virus (HIV) positive patients. Explanations for the bone loss are unknown. We estimated the prevalence of osteoporosis among HIV-positive adults ages 18-49 versus matched HIV-negative adults, and ranked predictors for osteoporosis in terms of their contributing effect. METHODS: A cross-sectional study on the 2005-2010 National Health and Nutrition Examination Survey (NHANES). HIV-positive individuals were identified according to HIV antibody test. Bone mineral density (BMD) T-score of femoral neck was calculated based on the mean and standard deviation for NHANES. RESULTS: HIV-positive individuals were identified among 52 HIV-positive and 10 HIV-negative adults were included. The mean age of the matched cohort was 79.5% and 77.1% respectively with BMD in patients were either less than or equal to -2.5 standard deviations and control group. The prevalence of osteoporosis was 7.3% versus 1.7% among the cases compared to controls. Osteoporosis occurred only among males in the cases and females in the controls. CONCLUSIONS: HIV infection itself is a significant predictor for osteoporosis; but due to lack of information on treatment history, it remains unclear if HIV medicine or treatment duration can increase the risk of osteoporosis.

MULTINOMIAL LOGISTIC REGRESSION ANALYSIS OF RISK FACTORS INFLUENCING THE TIME UNTIL SECONDARY HIP FrACTURE

OBJECTIVES: The risk of subsequent hip fracture is increased in presence of previous hip fracture. The time until subsequent hip fracture among patients with osteoporosis was analyzed. Methods: We restricted analyses to participants with 2-year follow-up after 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 aged 60 and over 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 were used to assess the associations between the risk of secondary hip fracture and potential factors. RESULTS: 312 patients met the criteria. Having osteosynthesis as surgical intervention for primary fracture (osteosynthesis vs. arthroplasty, HR: 2.33, 95% CI: 1.06 - 5.12) was an independent predictor of secondary hip fracture in the fifth year than in the first year. Patients between 60 and 69 years (60-69 years vs. >90 years, HR: 2.05, p = 0.010, CI 2.09 - 205.44) were significantly more likely for age, gender, BMI. CONCLUSIONS: First, we provide evidence of the influence of higher age and osteosynthesis as surgical intervention for primary fracture on the time until subsequent hip fractures in elderly Hungarian population. Further efforts may help establish an effective strategy for the prevention of secondary hip fractures.

RELATIONSHIP OF SEDENTARY BEHAVIOR WITH QALYs IN COMMUNITY DWELLING ADULTS WITH or AT RISK FOR KNEE OsteoArthritis

OBJECTIVES: Approximately 10% of the US population is diagnosed with knee osteoarthritis by age 60. Disability due to arthritis increases health care costs and the risk of hospitalization, institutionalization, and mortality. Decreasing sedentary behavior can improve function and may be a modality for improving quality adjusted life years (QALYs). The purpose of this study was to investigate whether interventions to decrease sitting time after total knee replacement (TKR) can increase physical activity, reduce sitting time and increase QALYs. METHODS: This study used longitudinal data from the accelerometer study of the Osteoarthritis Initiative (OAI) (collected at baseline (OAI 48-month visit) and 2-year follow-up (OAI 72-month visit). A2074 participants were included in this analysis. Participants were randomized to 2 groups for sitting time (least sedentary Q1 > 11.6, 10.7 < Q2 < 11.6, 9.7 < Q3 < 10.7, least sedentary Q4 > 9.7 hours). The association between sedentary behavior and QALYs was examined using median regression, adjusting for age, gender, BMI. RESULTS: Average(SD) QALYs over the 2-year follow-up were 1.56(0.23), 1.61(0.20), 1.60(0.23), 1.60(0.23) for Q1-4 respectively.