evaluated patterns of use of TJA following an index primary TJA over an 8-year period.

Methods: Primary and revision TJA procedures performed on Ontario, Canada, residents aged 55+ years between April 2002 (baseline) and March 2010 were identified from hospital discharge abstracts using specific ICD-10-CA/CCI procedure and diagnosis codes. The records of individuals who underwent TJA prior to April 1, 2002 (i.e. pre-baseline) were excluded as were non-elective TJAs and those performed for cancer, fractures or trauma. Due to our specific interest in examining the patterns of use of TJA for OA, we also excluded individuals who received their first TJA before age 55 years. Of those aged 55+ years who received their first (index) TJA following April 2002, we examined the proportions with repeat hospitalizations for TJA, and the associated TJA type (elective versus non-elective, hip versus knee, primary versus revision). The maximum follow-up time was 8 years.

Results: Excluding those with a prebaseline TJA, 164,330 index TJA procedures were identified. Of these, 129,937 were eligible for inclusion (90.4% of TJAs performed in people aged 55+ years). Bilateral knee replacements in the same hospitalization were more frequent (n=4,460, 3.44%) than were bilateral hip replacements (n=228, 0.18%). Further, knee replacements as the first TJA were almost twice as common as hip replacements (65.85% versus 34.15%). A total of 33,474 second TJA hospitalizations occurred (25.76% index TJAs were followed by a second TJA hospitalization during the observation period). Of 85,565 index primary knee replacements (4,460 bilateral), 23,984 (28.03%) experienced a second TJA hospitalization, with a median duration (IQR) from the index procedure of 1.37 years (0.63–2.93 years). Of these, 83.68% were for primary TJA of the contra-lateral knee, 1,802 (75%) were single or bilateral primary hip replacements, and 2,087 (8.7%) were for revision or one OA index knee. Of 44,372 index primary hip replacements (228 bilateral), 9,490 (21.39%) experienced a second TJA hospitalization with a median duration of 1.21 years (0.64–2.58 years) from the index procedure. Of these, 69.52% were for primary TJA of the contra-lateral hip, 2,193 (23.11%) were single or bilateral primary knee replacements, and 700 (7.38%) were for revision or one or both index hips. Of those who experienced a second TJA hospitalization, 2,561 (157 of the cohort) went on to receive a third within a median duration of 2 years (IQR 1.1–4.1 years) from the index procedure; the majority (89.54%) of these were elective TJAs.

Conclusions: In a population cohort undergoing primary hip or knee TJA, repeat TJA hospitalizations are frequent; approximately one-quarter experienced a second TJA hospitalization, which was most often for primary TJA of the contra-lateral hip or knee. Most repeat hospitalizations occurred within 3 years of the index TJA. Together, these data suggest that exclusion of such individuals from TJA cohort studies reduces the generalizability of results to all patients undergoing primary TJA. Researchers are encouraged to incorporate these subsequent TJA hospitalizations in examining the risks and benefits of this common procedure.

338 ELDERLY MEN WITH HIP OSTEOARTHRITIS ARE FRAIL AND FRAILTY REMAINS AFTER TOTAL HIP REPLACEMENT IN THE MROS COHORT

B.L. Wise1, N. Parimi2, Y. Zhang3, P.M. Cawthon2, E. Barrett-Connor4, 5

Purpose: To examine the association of radiographic hip osteoarthritis (RHOA) or total hip replacement (THR) with prevalent frailty status in elderly men. Previous studies have shown that frailty is associated with co-morbidities and increased mortality.

Methods: We conducted a cross-sectional study in the Osteoporotic Fractures in Men (MrOS) Study, a cohort of 5994 men age ≥65 yrs. at baseline. We included all men without prior hip fracture who had a hip radiograph obtained at visit 2 (4.6±0.35 yrs from baseline) and measurements for assessment of frailty status at visit 2. We defined frailty using the Fried definition as three or more of the following components: unintentional weight loss defined as >5% weight loss from baseline to visit 2; weakness defined as low grip strength; self-reported exhaustion; low activity level, and slow walking speed. Men with intermediate frailty status met one or two criteria while robust men had none. We defined RHOA as a modified Croft score ≥2 on hip radiograph. The relation of hip RHOA and RHOA and/or THR to prevalence of frailty status was examined using the proportional odds model adjusted for age, college education, and BMI ascertained at visit 2.

Results: We evaluated 4130 men with a mean age of 71.3±5.4 yrs and BMI of 27.4±4.0 Kg/m². Of these, 415 had RHOA and 137 had validated THR (41 with RHOA in one hip and THR in the contralateral hip; 96 THRs with To OA in contralateral hip). Prevalence of robust, intermediate and frailty status was 41%, 47%, and 11%, respectively. RHOA was associated with greater severity of frailty status (multivariable adjusted OR = 1.24, 95% CI 1.01, 1.51). RHOA and/or THR was associated with a higher odds of worse frailty status (OR = 1.43, 95% CI 1.19, 1.72) after multivariable adjustment. Further adjustment for self-reported health status attenuated, but did not eliminate the association (OR = 1.34, 95% CI 1.11, 1.62).

Conclusions: There is a moderate association of RHOA and THR with frailty in elderly men. This finding suggests that interventions to reduce frailty may be warranted in elderly men with either RHOA or THR.

339 EPIDEMIOLOGICAL ASPECTS OF OSTEOARTHRITIS (OA) IN THE LATIN AMERICAN POPULATION: A FREQUENCY STUDY

H.L. Riera1, M. Vera1, R.A. Torres1, A. Reginiato2, O. Jair Felipe3, B. Román4, O. D’Rillo5, M. Quintero6, 1Univ. de Los Andes, Mérida, Venezuela, Bolivarian Republic of; 2The Warren Alpert Sch. of Med. at Brown Univ., Providence, RI, USA; 3IPANLAR OA Group, Mérida, Venezuela, Bolivarian Republic of

Purpose: The aim of the present study is to investigate epidemiological aspects of Osteoarthritis (OA) in Latin American region.

Methods: A multi-center study was conducted in 13 Latin American countries that included 3040 patients evaluated at rheumatology outpatient clinics with defined ACR criteria of Osteoarthritis (OA). Epidemiologic aspects were collected using standardized questionnaire between July 1st and September 30th 2010 time period.

Results: Approximately 3040 patients met OA criteria for this study. The mean age of patients was 62.5 year-old. There was a 4.8:1 female/male ratio. Mean Body Mass Index (BMI) was 28.7. Overweight (BMI>25) was seen in 79.4% while obesity (BMI>30) in 38.1%. Approximately 88% of the patients had primary OA and the time of consultation with diagnosis made within 5 years. Specific OA joint involvement: only knee OA was seen in 948 patients (31.2%); only hands OA in 290 patients (9.5%); hands and knee OA seen in 699 patients (22.9%); DIP and PIP joint was found in 198 patients (6.5%); axial involvement (cervical and lumbar spine) was seen, together in 202 patients (6.6%); and hip joint involvement in 40 patients (1.3%). Radiographic severity of OA on the basis of the Kellgren-Lawrence grading scale (0–4) showed that 88.5% of patients had Kellgren-Lawrence grade 2 and 3. Treatments options for OA included: NSAIDs (15%); paracetamol (4.1%); hyaluronic acid (4.4%); glucosamine-sulphate (3.5%); glucosamine sulphate+chondroitin (5.2%); glucosamine sulphate +chondroitin+NSAIDs (12.2%); and glucosamine sulphate +chondroitin + others (5.8%). Comorbidities associated with OA: none seen in 577 patients (19%); hypertension seen in 391 patients (12.9%); obesity (BMI>30) in 284 patients (9.3%); obesity in 295 patients (9.7%); and an osteoporosis seen in 118 patients (3.9%)

Conclusions: This is the first Latin American study to evaluate the frequency of OA in rheumatology outpatient setting. This study showed strong correlation of OA with age greater rate among women than men of the same age. In agreement with other epidemiological studies BMI correlated with frequency of OA. Knees and hands were the most frequently specific joints involved in OA. Treatment of OA between 13 countries showed a diverse spectrum ranging from a combination of analgesic to chondroprotection and viscosupplementation. Hypertension and obesity were two most common comorbid conditions more frequently found in our patients. Our epidemiological findings are in agreement with other epidemiological studies and provide a better understanding of the factors contributing to the development of OA in the Latin American population.