out of 64). Two years after TKA the majority of TKA patients still required a handrail (57 out of 105).

Persons who underwent TKA had significantly higher adduction moments on the non-operated side compared to operated and control limbs during stair ascent and descent and the pain and strength of the non-operated limb was the best predictor of long term functional outcomes. The strength of the non-operated side measured 1 month after surgery was also significantly predictive of functional changes 2 years after TKA. Of the initial 216 persons in the TKA group, 17 underwent contralateral TKA within 2 years.

Conclusions: erosions with knee OA waited until they experienced remarkable quadriiceps weakness, difficulty with stairs, reduced gait speed and increased BMI before undergoing TKA. The rehabilitation protocol in this study utilized an aggressive quadriiceps strengthening regimen. This regimen produced significant improvements that were greater than the normal post-operative standard of care. Despite this, some functional variables were still significantly lower than healthy controls, even 2 years after TKA. Persistent kinematic and kinetic gait abnormalities that are present prior to surgery persisted after surgery. This suggests that current rehabilitation protocols, even with aggressive strengthening, do not completely restore function or address biomechanical changes that are adopted prior to TKA. From a functional perspective, persons with end-stage knee OA may benefit from TKA intervention earlier in the course of the disease process. Surgical intervention prior to severe functional disability and quadriiceps weakness may result in greater long term outcomes. This may also reduce the magnitude of learned abnormal biomechanical movement patterns that place greater load on the non-operated limb. Rehabilitation protocols that include an aggressive strengthening component should become the standard of care after TKA. Rehabilitation protocols, even with aggressive strengthening, do not completely restore function and raise biomechanical changes that are adopted prior to TKA.

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IMPACT OF “GLOBESITY” IN KNEE OSTEOARTHRITIS
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Purpose: Background. Globesity, a term coined by the WHO to describe the obesity pandemic in the world, has been described as a risk factor for genesis, progression and disability in patients with OA. Objectives. To estimate the punctual prevalence of overweight or obesity in knee Osteoarthritis (OA) patients and to evaluate the impact of obesity on knee function and pain.

Methods: Design cross-sectional study. Consecutive patients who met ACR criteria for OA knee from an outpatient clinic were included. Demographic data and regular dietary habits were evaluated. Anthropometric evaluation according to criteria of ISAK (International Society for the Advancement of Kinanthropometry) was performed. Functional status was evaluated by means of HAQ, WOMAC and EuroQol. Kellgren and Lawrence (K-L) grading scale was applied to knee radiographic studies in order to evaluate severity of the disease. Descriptive statistics analysis was performed, bivariant analysis was done properly using Wilcoxon test, median test, Student t test and Fisher exact test.

Results: 94 patients were included, 88% women, mean age 61.8 vs. male 63.7 years old, mean disease duration from diagnosis was higher in men, 3.6 vs. 2.2 years in women (p=0.006). Frequent comorbidities in women were hypertension 40.5%, osteoporosis 29.2% and dyslipidemia 19.1%. Body Mass Index (BMI) was 28.5 in women vs. 27.4 in men. Overweight prevalence was 34.8% in women vs 83% in men; obesity prevalence was 43.8% in women vs. 17% in men. Comparing current weight with healthy weight, women had 13.1 kg over in comparison with men with 9.3 kg. Evaluating waist circumference and using the WHO reference, more than 90% of OA patients had higher risk for developing chronic diseases. Patients with higher radiological score had worse pain in affected knee (p=0.05). Those patients with higher BMI had greater pain and stiffness, and lower functional-ality (p=0.001). Patients with overweight and obesity reported worse quality of life (Qol) compared with patients con normal weight (Graphic 1).

Conclusions: Patients with knee OA have a very high prevalence of overweight and/or obesity. These weight disorders have an important influence in pain, function and quality of life.

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COMPARISON OF TWO RESURFACING PROSTHESES FOR TREATMENT OF OSTEOARTHRITIS OF THE SHOULDER. PRELIMINARY RESULTS
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Purpose: Humeral resurfacing arthroplasty is used to preserve bone stock and restore normal anatomy in the osteoarthritic shoulder joint. The aim of this study was to examine the radiological and clinical outcome after Copeland and Global Cap humeral resurfacing replacement.

Methods: 21 patients (10 females) at a mean age of 64 (39-82) years and with shoulder osteoarthritises were included and randomized to a Copeland (11) or Global Cap (10) prosthesis. Both prostheses were uncemented. At 1, 6, 12 and 24 weeks migration of the prosthesis was measured with use of RSA, conventional radiographs were obtained for a geometrical analysis, and the patients were followed clinically with Constant Shoulder Score (CSS) and Western Ontario Osteoarthritis of the Shoulder Index (WOOS).

At 1, 12 and 24 weeks the periprosthetic bone mineral density (BMD) was measured with DEXA.

Results: At 6 months, 13 patients could be evaluated for prostheses migration. The median total translation was 0.09 mm for the Copeland and 0.32 (-0.40 - 0.53) cm for the Global Cap (p=0.20). 16 patients had BMD measured 6 months after surgery. Around the Copeland prostheses, BMD decreased from 0.53 to 0.39 g/cm2 (p=0.02) and around the Global Cap, BMD changed from 0.46 to 0.36 g/cm2 (p=0.21). 15 patients completed CSS and WOOS at 6 months. In the group with a Copeland prosthesis, CSS increased from 55 to 68 (p=0.25) and WOOS improved from 1019 to 535 (p=0.003). For the patients with a Global Cap, CSS improved from 32 to 57 (p=0.12) and WOOS improved from 1311 to 477 (p=0.01).

LGH0 was measured for 15 patients at 6 months. The median difference in LGHO pre- to postoperative for the Copeland was 0.32 (-0.40 - 0.53) cm and the median difference for the Global Cap was -0.17 (-0.37 - 0.22) cm.

Conclusions: Based on these preliminary results, the performance of the 2 prostheses is comparable. Yet, we consider that there is a problem with overstuffing in the Copeland prosthesis.

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TOWARDS TESTING THE HYPOTHESIS THAT THE INITIAL INJURY PATTERN IS AN IMPORTANT DETERMINANT OF POST-TRAUMATIC ARTHRITIS
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Purpose: Present evidence indicates that surgical repairs of ACL tears do not alter subsequent risk for OA, a complication that develops in over half of affected joints within 10 to 15 years. We hypothesize that an important determinant of this outcome is the extent of initial injury. To develop an approach for testing this hypothesis, we have assessed the information captured at the time of the repair in patients treated by a single orthopedic surgeon using a standardized reconstruction technique.