clinical ACR criteria of knee OA on persisting knee complaints, increase of disability (WOMAC function score), and increase of absence of work through illness after one year follow-up was assessed.

Results: 549 patients were included in the study of which 480 (87.4%) were available for follow-up. The studied population contained 236 (49.2%) women, mean age 53.6 (sd 11.3), mean BMI 27.1 (sd 4.2), 288 (60.0%) patients had payed employment (>8 hours/week), and 292 (60.8%) patients fulfilled the ACR clinical criteria of knee OA. After one year follow-up, 236 (49.2%) patients reported persisting knee complaints, 84 (17.5%) reported an increase of disability, and 5 (1%) patients reported an increase of absence of work through illness.

There was no association between fulfilling the ACR clinical criteria of knee OA and persisting knee complaints (OR 1.15; 95% CI 0.80, 1.67), and increase of disability (OR 1.05; 95% CI 0.43, 2.58), and increase of absence of work through illness (OR 0.97; 95% CI 0.16, 5.83) after one year follow-up.

Conclusions: The ACR clinical classification criteria of knee OA have no prognostic value in adult patients with non-traumatic knee complaints in general practice during the period of one year follow-up.

246 USING GROUP-BASED TRAJECTORY MODELING TO IDENTIFY PATTERNS OF JOINT SPACE NARROWING IN KNEE OA OVER TWO YEARS

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Purpose: Change in group mean joint space width (JSW) is currently the gold standard for assessing disease progression in knee osteoarthritis (OA) clinical trials. Although probability plots and histograms have been used to examine change at the individual level, longitudinal modeling methods that use all data collected are available to look at pattern clusters of change over time.

Methods: We performed secondary data analyses of 622 men and women with medial compartment knee OA enrolled in the placebo arm of a 2 yr multi-national study of the effects of a bisphosphonate on OA symptoms and radiographic progression. At baseline, participants had x-rays with 2–4 mm JSW in the medial compartment of the knee. Minimal JSW of the medial compartment was measured from fluoroscopically-positioned radiographs obtained at baseline, 12 and 24 months. Group-based trajectory modeling was used to identify distinctive groups of individuals with similar trajectories of JSW change over two years taking into account sex, age and body mass index (BMI).

Results: The optimal number of groups identified from the trajectory analysis was seven. Group assignment was associated with gender, age and BMI but not geographic site (North America vs. European Union). JSW stability over 2 years was observed in 4 groups representing the most common trajectory (70%), irrespective of initial JSW. Three groups showed statistically significant (p < 0.01) narrowing of JSW: two groups with the narrowest joint space at baseline (2.1 and 2.3 mm JSW), comprised 8% and 20% of the sample respectively and showed an average narrowing of 0.7 mm. and 0.2 mm. A small group (2%) had a mean decrease of 2.1 mm. As compared to participants in the group with the largest JSW at baseline (mean 3.7 mm; 22% of sample), participants in the group with the most JSW narrowing were more likely to be female, while those with more moderate narrowing were significantly older with a higher BMI.

Conclusions: In the medial compartment of the knee, minimal JSW remains stable over 2 years in most men and women, with further narrowing that was greater than measurement error observed in only 10%. Longitudinal modeling of JSW data can be used to study patterns of change over time.

247 CORRELATION BETWEEN PATIENT SELF ASSESSMENT OF TREATMENT EFFECTIVENESS (PATE) AND OTHER OUTCOME VARIABLES. RESULTS OF A STANDARDIZED FOLLOW-UP IN PATIENTS TREATED WITH INTRA-ARTICULAR INJECTION OF HYALURONIC ACID FOR HIP OSTEOARTHRITIS

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Purpose: To determine the validity of patient self assessment of treatment efficacy (PATE) compared to other usually used outcome variables.

Methods: Standardized follow-up (FU). Patients: Forty patients suffering from HOPA treated by a single intra-articular injection of non-animal-stabilized hyaluronic acid (NASA) in the painful hip under fluoroscopy.

Evaluation: PATE, patient global assessment (PGA) and walking pain (WP) on a 100 mm visual analogue scale, WOMAC index, Lequesne index at each visit. Statistics: Last observation carried forward. Treatment was considered as effective when patients reported PATE >50 mm (PATE50+). PATE at last visit of FU was compared to the usually used outcome variables, obtained from PGA, WOMAC and WP: OMERACT-OARS responder criteria, Minimal Clinically Important Improvement (MCII), Patient Acceptable Symptom State (PASS) using Mann-Whitney test.

Results: Thirty four patients were assessable (mean FU 159 days): 22 were PATE50+ (mean PATE [SD] = 77.1 [12.7] mm) and 12 not (10.7 [18.0] mm). PATE50 was correlated with PASS (p=0.017), MCII (p=0.017) and OMERACT-OARSI responders (p=0.017). PASS and OMERACT-OARSI were also correlated (p=0.001) as well as OMERACT-OARSI and MCII (p=0.005). In contrast there was no correlation between PASS and MCII (p=0.21). PATE was strongly correlated with Lequesne index reduction (p < 0.001) and walking pain decrease (p=0.002). PATE at month 1 was also highly predictive of the efficacy at month 6 (p=0.003).

Conclusions: This study showed that PATE could be useful, as a clinical outcome variable, to easily assess the efficacy of viscosupplementation in hip OA in routine practice. Evaluation of the value of these surrogate outcome variables needs to be conducted in larger samples of subjects and in OA oral medication treatment.

249 RELATION BETWEEN ALIGNMENT AND PAIN IN PATIENTS SURGICALLY TREATED FOR MEDIAL KNEE OSTEOARTHRITIS BY HIGH TIBIAL OSTEOTOMY. A ONE YEAR FOLLOW-UP STUDY

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Purpose: The relation of lower extremity alignment and knee pain is unclear. High tibial osteotomy, a treatment option for unicompartmental knee osteoarthritis (OA), alters load from the affected to the unaffected compartment of the knee by correcting malalignment. This surgical technique thus offers the possibility to study the cross-sectional and longitudinal relation of alignment to pain. The aim was to study (1) the preoperative relation of alignment to preoperative pain and (2) the relation of change in alignment with surgery to change in pain preoperatively compared to at one year postoperatively in patients operated on for knee OA by high tibial osteotomy using the hemicallotasis technique.

Methods: 182 patients (90% men) mean age 52 years (range, 35–69) with varus alignment having tibial osteotomy by the hemicallotasis technique (HCO) for unicompartmental medial knee OA were consecutively included. Alignment was assessed by the Hip-Knee-Ankle (HKA) angle from radiographic including the hip and ankle joints. The HKA angle was defined as a line from the center of the femoral head to the midpoint of the talus and a line from the femoral head to the ankle axis. Changes in Joint Space Width over 24 months.

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