Methods: Data were obtained from information recorded in the medical records of sequential patients who underwent autologous bone-patellar tendon-bone graft ACL reconstruction by one of us (Levy) during the years 2003-2005. Injury to specific articular structures, as well as the effects of age, height, weight, body mass index (BMI), occupation, tobacco and alcohol use, gender, and timing of surgery relevant to the date of injury were assessed.

Results: Eighty-six patients who underwent this procedure for ACL resection were analyzed. Among them, 24 patients had medial meniscal tears (most commonly partial thickness, longitudinal and bucket handle tears in the posterior horns), 15 had lateral meniscal tears (most commonly radial and longitudinal tears in the posterior horns), and 7 had tears in both menisci. Nineteen patients suffered chondral injuries: 3 in the lateral femoral condyle, 8 in the patella, 9 in the medial femoral condyle, and 3 in the trochlea. Obese patients, (defined as a BMI of 30 or over), had an increased risk for patellar chondral lesions (2.3% versus 31.3%). Surgical delay greater than a year was associated with an increased risk for medial meniscal tears (29.7% versus 75%), but not lateral meniscal tears, as well as medial femoral condyle injuries (6.8% versus 33.3%). Patients over the age of 25 were more likely to have medial femoral condyle lesions (2.5% versus 17.4%). Gender, height, weight, occupation, and use of alcohol or tobacco showed no effect on chondral or meniscal injuries in patients with ACL tears.

Conclusion: The observations recorded on this group of patients are very similar to those recorded by other orthopedic surgeons who have attempted to map meniscal and chondral lesions observed at the time of ACL repair procedures (Slaunterbeck et al., 2009, Kaeding et al., 2005). The correspondence among these recordings supports their accuracy. Therefore, among patient groups with identical surgical interventions, it seems reasonable to undertake a large-scale study correlating recordings of initial injury patterns with biomarkers of cartilage extracellular matrix turnover, imaging studies of the menisci and cartilage, and clinical features of OA at 5 to 15 years of follow-up as a means of testing the hypothesis.

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GENDER AND BODY MASS INDEX PREDICT WOMAC AND QUALITY OF LIFE SCORES IN KNEE OSTEOARTHRITIS
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Purpose: To examine the association of gender, BMI and age with knee osteoarthritis (OA) symptomatic severity.

Methods: This was a cross-sectional analysis of 1487 patients with symptomatic knee OA. Patients completed the WOMAC questionnaire and SF-36 health survey. The effect of BMI was analyzed by gender and age. The HOOS subscales for pain and ADL function were 34 ± 14 and 37.5 ± 15, respectively. The mean HHS was 50 ± 15. 15 patients were under 20 m walk-test and a stair-climbing test performance-tests, 20 m walk-test mean ± 30 ± 16 sec, and stair-climbing test mean ± 31 ± 18 sec. An open question on expectations due to physical function. They selected the self-administered questionnaires Hip disability and Osteoarthritis Outcome Score (HOOS) and the COOP/WONCA. The interviewer-administered questionnaire Harris Hip Score (HHS) was completed and the 20 m walk-test and a stair-climbing test were performed.

Results: The mean age was 68 ± 12 years and the mean BMI was 27 ± 4. 68% of the patients were women, 52.5% were retired and 37.5% were employed. 50% had attended physical therapy, 65% were on medication and 37.5% had been given advice about physical activity by their GP. The HOOS subscales for pain and ADL function were 34 ± 15 and 40 ± 14, respectively. The mean HHS was 50 ± 15. 9 patients (22.5%) were under 60 years and had a mean BMI of 29 and 7 of them had a HHS over 60. The COOP/WONCA subscales physical fitness and daily activities had a mean score of 4.4 ± 0.9 and 5.6 ± 0.8, respectively. Large variations were observed in the performance-tests, 20 m walk-test mean ± 30 ± 16 sec, and stair-climbing test mean ± 31 ± 18 sec. An open question on expectations due to physical function showed that most patients undergoing THA expect to be able to perform demanding physical activities like skiing, biking, dancing and mountain-walking after surgery. The association between self-reported physical function and the performance tests were low, indicating that

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PREVALENCE OF ANXIETY AND DEPRESSION IN PATIENTS WITH OSTEOARTHRITIS IN A PRIMARY CARE-BASED RHEUMATOLOGY CONSULTATION
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Purpose: To analyze the prevalence of the diagnosis of the anxiety-depression syndrome in patients with symptomatic osteoarthritis seen in a rheumatology consultation within a primary care setting.

Methods: Prospective study systematically including patients aged >50 y referred to a rheumatology consultation in a primary care setting because of symptomatic OA or symptoms leading to a diagnosis of OA at that consultation. Demographic data of all patients were recorded as well as the diagnosis of anxiety-depression when present in the primary care diagnosis database system of the patient as registered by his/her GP. Patients within the same age range referred to the same consultation because of soft tissue disorder sand who did not have any other rheumatologic disease were used as group control.

Results: Four hundred and twenty-five patients were included, 235 with OA and 190 with soft tissue disorders; mean age 64.7 ± 9.2 y, F/M 317/108 (75/25%). No differences were observed between groups regarding sex distribution or age. The prevalence of anxiety-depression was significantly greater in the OA group than in the control group (24.3% vs. 17.5%, p < 0.05, OR 1.78 (1.08-3.08, IC95%) and with hand OA (26.9 versus 19.3, p < 0.05, OR 1.84 (1.10-3.08, IC95%).

Conclusions: These data suggest that anxiety-depression disorders are relatively frequent in OA patients referred to a rheumatology consultation in a primary setting.

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PREOPERATIVE STATUS IN PATIENTS UNDERGOING PRIMARY TOTAL HIP ARTHROPLASTY
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Purpose: Osteoarthritis (OA) is the most common reason for total hip arthroplasty (THA). The main indications for THA are severe pain and functional limitations, and should be considered if conservative treatment has failed. Although international recommendations for both conservative therapy and surgical treatment exist, the adaptation of these guidelines varies. The purpose of the present study was to evaluate if the conservative modalities were given the OA patients in the pre-surgery phases and if the inclusion criteria for primary THA surgery were in accordance with existing international guidelines.

Methods: On the day before surgery, 40 patients completed a questionnaire exploring demographic variables like age, sex, BMI, employment, current medication, previous received treatment modalities and expectations from surgery due to physical function. They completed the self-administered questionnaires Hip disability and Osteoarthritis Outcome Score (HOOS) and the COOP/WONCA. The interviewer-administered questionnaire Harris Hip Score (HHS) was completed and the 20 m walk-test and a stair-climbing test were performed.

Results: The mean age was 68 ± 12 years and the mean BMI was 27 ± 4. 68% of the patients were women, 52.5% were retired and 37.5% were employed. 50% had attended physical therapy, 65% were on medication and 37.5% had been given advice about physical activity by their GP. The HOOS subscales for pain and ADL function were 34 ± 15 and 40 ± 14, respectively. The mean HHS was 50 ± 15. 9 patients (22.5%) were under 60 years and had a mean BMI of 29 and 7 of them had a HHS over 60. The COOP/WONCA subscales physical fitness and daily activities had a mean score of 4.4 ± 0.9 and 5.6 ± 0.8, respectively. Large variations were observed in the performance-tests, 20 m walk-test mean ± 30 ± 16 sec, and stair-climbing test mean ± 31 ± 18 sec. An open question on expectations due to physical function showed that most patients undergoing THA expect to be able to perform demanding physical activities like skiing, biking, dancing and mountain-walking after surgery. The association between self-reported physical function and the performance tests were low, indicating that
the patients value their physical function less than actually shown in the performance-tests.

**Conclusion:** The preoperative variation in levels of pain and functional limitations in THA patients was high. The conservative treatment modalities given the patients in the pre-surgery phases were not in accordance with international recommendations. Only 50% of the patients had received exercise therapy or advice about physical activity prior to surgery.

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**OPTIMAL TREATMENT OF OSTEOARTHRITIS OF PATIENTS WITH COMORBID DISEASES**

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**Purpose:** To study the prevalence of knee osteoarthritis (OA) in patients with somatic pathology and to assess the impact of combined drug therapy of chondroitin sulfate and glucosamine (ARTRA) on the course of OA and somatic pathology.

**Methods:** A screening of 1200 patients with various somatic diseases was performed to reveal the knee OA. The group of 60 patients with somatic pathology and knee OA was formed to participate in a comparative randomized study investigating the effectiveness and safety of the therapy with ARTRA. The level of pain (VAS, WOMAC), a functional insufficiency (WOMAC), data, esophagogastroduodenoscopy, blood pressure, frequency of episodes of painful and painless myocardial ischemia, as well as the frequency of rehospitalizations during the year were evaluated in dynamics.

**Results:** It was shown that over two thirds of the patients aged 60 years with chronic somatic diseases suffer from pain in the knee or hip joints, and 60% of them have radiological signs of OA. It was found that in many cases the aggravation of the articular syndrome is preceded by exacerbation of underlying disease (hypertension, ischemic heart disease, heart failure, etc.). Evaluation of the therapy received by these patients, showed that 71.3% of them had to take NSAIDs, and medications containing chondroitin sulfate and glucosamine, were taken only by 45% of patients. Inclusion of arthritis drug therapy in patients with OA and somatic pathology allowed reaching the pain-relieving effect and improving the functional state of the joints faster compared with the patients receiving only NSAID. Besides, the use of ARTRA reduced the risk of complications in the gastrointestinal tract (data esophagogastroduodenoscopy), reduced the risk of destabilization of somatic diseases (CHD, hypertension, etc.), as well as reduced treatment costs (including the reduce of number of hospitalizations).

**Conclusions:** The findings suggest the need for screening of OA in patients with somatic pathology, especially in people aged over 60 years. The use of slow anti-inflammatory drugs with a structurally modifying action (ARTRA) in treatment of OA improves the results of articular pathology treatment as well as somatic state of patients.

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**BETTER MANAGEMENT OF OSTEOARTHRITIS (BOA)**

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**Purpose:** Treatment guidelines for hip and knee osteoarthritis (OA) recommend information, exercise and weight control as first line treatments. However, recommendations are given in general terms that are not easy to implement and the interpretation of the recommendations are not always straightforward for the care giver. Consequently, they are too seldom reflected in clinical practice. In fact, patients with hip or knee OA are often referred to surgery before having evidence-based non-surgical core treatments adequately tried.

**Methods:** During 2008 a national programme was introduced in Sweden to standardize and improve care and management of patients with hip or knee OA; Better management of patients with OsteoArthritis (BOA www.boaregistret.se). The intervention is a self-management course for patients with hip or knee OA, including information on pathology, etiology, available treatments, and coping strategies (Fig 1). An exercise program is optional, given individually or in a group. Furthermore, one of the three theoretical classes is held by an osteoarthritis communicator, i.e. a patient with OA who has been educated to teach about the lived experience with OA. Physical therapists, who have been trained during a two-day instructional course, deliver and evaluate the BOA intervention in a standardized way. Patient-reported outcome measures (PROM), including EQ-5D, co morbidity, pain, physical activity, self-efficacy, work capacity, and satisfaction, are assessed at baseline, 3 and 12 months (Fig. 1). Compliance to intervention is reported by the physical therapist.

**Results:** These outcomes are registered in a national database, the BOA-register that now includes 25 care giving units. More units continuously join the registry. Preliminary results from 1000 patients at three months show that 87% consider the course to fulfil their expectations, and 64% use what they have learned in their daily life.

**Conclusions:** This new approach, a structural way to take care of patients with hip and knee joint OA, will provide population-based data and demographics to optimize clinical care. Furthermore, merging the BOA-register with other Swedish national registers enables evaluation of use of medical care, arthroscopic surgery, knee MR examination, use of medication, as well as sick leave for patients with OA participating in the BOA intervention compared to non-participants.

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**IDENTIFICATION OF EARLY DEGENERATIVE CHANGES OF THE KNEE AFTER AN ANTERIOR CRUCIATE LIGAMENT LESION. THE KNALL STUDY**

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**Purpose:** Rupture of the anterior cruciate ligament (ACL) is a common sports related injury, that has an annual incidence varying of 2-8 per 10,000 persons. Several studies showed that 50 - 85% of patients with an ACL rupture had slight-to-moderate radiographic changes at 12 to 20 years after trauma. The pathophysiology of an ACL rupture leading to evident radiologic knee osteoarthritis (OA) still remains largely unknown. Therefore, the overall aim of this study is to investigate early degenerative changes in patients with an acute ACL rupture. These changes will be evaluated by several sensitive measurements for OA (MRI, radiographs, DEXA scan and biomarkers).

**Methods:** Design and study population: The KNALL (Knee osteoArthritis anterior cruciate Ligament Lesion) study is a prospective follow-up study in which 160 patients will be included. The patients will be included after the initial trauma up to 6 months and evaluated each year, in first instance up to 2 years. Patients aged between 18 and 45 years with an ACL rupture (diagnosed by physical examination and MRI) will be included. Patients