THE QUALITY OF LIFE OF SUFFERERS OF OSTEOARTHRITIS: THE IMPACT OF TREATMENT

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OBJECTIVES: The French public health law of 9 August 2004 took this need into consideration and provided for the implementation of a quality of life improvement programme for those affected by chronic illnesses. Furthermore, the 87th of the 110 Public Health objectives is aimed at “Improving the quality of life of those suffering from osteoarthritis” Describe what impact treating sufferers of osteoarthritis has on their quality of life.

METHODS: Quality of life was also evaluated for subjects suffering from gonarthritis using the SF-12 score, which is an approved generic tool for determining the physical and mental state of health of populations. RESULTS: A total of 256 subjects suffering from gonarthritis were randomised into 2 groups: 127 randomised subjects were placed in the group treated with ACS Avian, and 129 randomised subjects in the group receiving the placebo. Upon inclusion, the PCS-12 scores were 36.43 and 36.64 for the group treated with ACS Avian and the group receiving the placebo respectively. The 2 groups were similar upon inclusion. After 6 months of treatment, the PCS-12 scores were 42.25 and 39.47 for the group treated with ACS Avian and the group receiving the placebo respectively. There was a statistically significant improvement in the physical dimension score of the group of patients treated with ACS Avian compared with that of the placebo group (p < 0.05). CONCLUSIONS: These various studies confirm the sharp deterioration in the physical dimension of quality of life of patients with gonarthritis. There was a statistically significant improvement in the physical dimension score of the group of patients treated with ACS Avian compared with that of the placebo group. This data confirms the pertinence of both the public health objective fixed by the health authorities, and the use of ACA Avian in the treatment of osteoarthritis.

PUBLIC HEALTH OBJECTIVE: THE QUALITY OF LIFE OF SUFFERERS OF OSTEOARTHRITIS FINALLY TAKEN INTO CONSIDERATION

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OBJECTIVES: Over the last few years, in addition to traditional mortality and morbidity indexes, new measuring instruments for assessing state of health have been developed. One of the applications of these new instruments is the self-assessment, by patients, of their state of health. Quality of life is therefore readily taken into consideration today when assessing state of health, whether in terms of understanding the consequences of a pathology, comparing the impact of alternative strategies, or evaluating the effect of health policies. The 87th of the 110 public health objectives is aimed at “Limiting the disability and improving the quality of life of those suffering from osteoarthritis” Compare the level of quality of life in sufferers of osteoarthritis with that of the population in general and other pathologies.

METHODS: In order to evaluate the quality of life of osteoarthritis patients, SF-12 scores were calculated for 301 patients suffering from femorotibial gonarthritis and 1,945 representative subjects of the French population aged 15 and over. The SF-12 score is a generic tool used to assess the physical and mental state of health of populations. The higher the score, the better the quality of life.

RESULTS: The average PCS-12 score was considerably lower in osteoarthritis patients (36.08 ± 7.88) compared with that of the population in general (49.87 ± 9.32). MCS-12 scores were similar for both populations (48.88 ± 10.24 and 46.77 ± 9.69 respectively). There was a strong correlation between PCS-12 scores and those of the Lequesne algorithmic index (p < 0.0001), knee pain at rest (p = 0.0013) and in activity (p < 0.0001). There was a strong correlation between MCS-12 scores and those of the Lequesne index (p < 0.003), and at the limitation of the walking perimeter in particular. For comparison purposes, PCS-12 and MCS-12 scores for an American population were 46.47 and 52.99 respectively for hypertension, 40.02 and 51.15 for a cardiac accident, and 44.84 and 52.49 for type II diabetes. Little SF-12 data exists in France. A study carried out in 2002 on the benign hypertrophy of the prostate (BHP) gave PCS-12 and MCS-12 scores of 46 and 47.2 respectively.

CONCLUSIONS: These studies confirm the sharp deterioration in the quality of life of patients with gonarthritis, both compared with the population in general and compared with patients affected by other chronic pathologies. Deterioration of the physical dimension was observed, associated with pain and functional disability. The mental dimension of quality of life seemed less affected, and was associated with the limitation of the walking perimeter. This data confirms the pertinence of the 87th public health objective.

RELIEF OF PAIN AND SYMPTOMS IN KNEE CARTILAGE DEFECT IS ASSOCIATED WITH HIGHER SF-36 UTILITY SCORES: DATA FROM A PROSPECTIVE RANDOMIZED TRIAL OF CHONDROCELECT®

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OBJECTIVES: Characterized Chondrocytes Implantation (CCI), a knee cartilage repair technique using an autologous cell therapy product (ChondroCelect®), results in better structural repair than microfracture as demonstrated in a prospective randomized clinical trial (Saris, Vanlaeuwe et al. 2008). The SF-36 questionnaire collected along the trial allowed the calculation of utility scores. This analysis aims to quantify the gap in utility levels by surgery outcome. METHODS: Patients were split by response status to the self-reported Knee injury and Osteoarthritis Outcome Score (KOOS) and pain Visual Analog Scale (VAS) regardless of the treatment received. Utility scores were derived from the SF-36 via a validated algorithm and compared between responders (overall KOOS increase ≥10%, VAS decrease ≥20% vs. baseline) and non-responders at Months 24, 30 and
36 post-surgery using the Mann-Whitney test. Pearson correlation coefficients were calculated between utility scores and the KOOS overall, KOOS quality of life and VAS scores at each time-point. RESULTS: Significantly higher utility scores were observed in KOOS responders compared to non-responders at Months 30 (0.817 vs. 0.691, n = 25/14, p = 0.004) and 36 (0.775 vs. 0.618, n = 19/6, p = 0.006) and in VAS responders compared to non-responders at Months 24 (0.827 vs. 0.701, n = 17/9, p = 0.038) and 36 (0.764 vs. 0.600, n = 21/4, p = 0.015). A similar trend of borderline significance was measured at Months 24 (using KOOS, 0.818 vs. 0.728, n = 16/10, p = 0.136) and 36 (using VAS, 0.800 vs. 0.704, n = 21/4, p = 0.053). Utility scores correlated best with the KOOS overall (Pearson coefficients ranged from 0.579 to 0.721, p-values < 0.01) and VAS scores (−0.514 to −0.671, p-values < 0.01). CONCLUSIONS: Gaps in utility scores between responders (= successful surgery) and non-responders ranged from 0.091 to 0.164. This finding validates the assumption made in a previous Health Technology Assessment on Autologous Chondrocytes Implantation. Consistent gaps and significant correlations with validated tools provide valuable information for future economic modeling of CCI.

**PMSS5**

EURO QOL (EQ-5D) BASED QOL (QUALITY OF LIFE) IN 5,023 JAPANESE PATIENTS WITH RHEUMATOID ARTHRITIS (RA) PATIENTS IN AN OBSERVATIONAL COHORT IORRA

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OBJECTIVES: QOL (quality of life) is critical in the management of patients with rheumatoid arthritis (RA). To evaluate the QOL of RA patients with different background, we evaluated the QOL by using Japanese version of EuroQol (EQ-5D) in a large observational cohort study of Japanese RA patients, IORRA. METHODS: We have established a large observational cohort of RA patients IORRA (Institute Of Rheumatology Rheumatoid Arthritis) in the Institute of Rheumatology Tokyo Women’s Medical University since 2000. Essentially all RA patients who consulted there were registered, and clinical parameters including the disease activity, use of drugs and the occurrence of adverse events in daily clinical settings were assessed biannually based on patient’s report, physician’s examination and laboratory data. In this cohort, we evaluated the QOL of RA patients by EQ-5D, disease activity by DAS28, and disability by JHAQ, and then we analyzed the related factors for EQ-5D by Spearman’s correlation. RESULTS: In September 2007, a total 5023 RA patients (female 84.2%, average 58.02 years-old, average disease duration 11.26 years, rheumatoid factor positive 74.8%, patients taking steroid, methotrexate and biologics were 51.0%, 63.6%, and 4.3%, respectively) fulfilled the questionnaire of EQ-5D. Mean ± SD of EQ-5D, DAS28 and JHAQ was 0.757 ± 0.178, 3.28 ± 1.147 and 0.737 ± 0.769, respectively, EQ-5D was worse in female (0.75 ± 0.177) than in male (0.798 ± 0.177) patients, and worse in rheumatoid factor positive (0.75 ± 0.178) than negative (0.782 ± 0.175) patients. EQ-5D became worse by older age and longer disease duration. No clear relationship was identified between EQ-5D and medications including corticosteroid, methotrexate or biologics in this cross-sectional analysis. CONCLUSIONS: EQ-5D based QOL was analyzed in a large number of Japanese RA patients using IORRA cohort.

**PMSS6**

FIBROMYALGIA MOLDOFSKY QUESTIONNAIRE (FMQ): VALIDATION OF A TOOL TO AID DIAGNOSIS

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OBJECTIVES: The absence of objective signs and lack of tests make patient complaints fundamental to a presumptive diagnosis of fibromyalgia. To make diagnosis easier, H. Moldofsky has developed a questionnaire of 6 items related to diffuse pain, fatigue, psychological distress, unrestorable sleep and impaired well-being. To validate the FMQ (Fibromyalgia Moldofsky Questionnaire) as a tool to aid diagnosis, METHODS: A representative sample of 1300 subjects from the general UK population was constituted using the quota method. The FMQ questionnaire, was administered along with two validated questionnaires (LFESSQ London Fibromyalgia Epidemiology Study Screening Questionnaire and CES-D Center for Epidemiologic Studies Depression Scale) and a questionnaire assessing a decline in the restorative effects of sleep (SQA Sleep Quality Assessment). The maximum score of 18 reflected a strong presumption of fibromyalgia syndrome. Internal consistency, structural and clinical validity were tested. The sensitivity and specificity were also assessed, RESULTS: Internal consistency was satisfactory (O$_{comb}$ > 0.7). The items composing each dimension were pertinent to the dimension that they represented (R > 0.4) and were not correlated with any other dimension. Subjects responding positively on the LFESSQ had an FMQ score that was significantly higher than subjects who responded negatively (8.6 [7.9–9.3] vs 4.1 [3.9–4.3], p < 0.001). Similar differences were observed between those subjects who had or did not have probable depressive symptoms (8.0 [7.4–8.6] vs 4.0 [3.8–4.2], p < 0.001) and between subjects experiencing a decline in the restorative effect of sleep or not (7.3 [7.0–7.6] vs 3.5 [3.3–3.7], p < 0.001). The FMQ had a sensitivity of 46 to 54%, depending on the specific dimension and questionnaire studied. Specificity was optimal (90 to 95%), CONCLUSIONS: The results observed during this psychometric validation showed that the FMQ questionnaire responded to the objectives that we had established and therefore allows referring physicians to send subjects with presumed fibromyalgia to specialist investigation centres.

**PMSS7**

VALIDITY AND RESPONSIVENESS OF THE WORK PRODUCTIVITY SURVEY: A NOVEL DISEASE-SPECIFIC INSTRUMENT ASSESSING WORK PRODUCTIVITY WITHIN AND OUTSIDE THE HOME IN SUBJECTS WITH RHEUMATOID ARTHRITIS

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OBJECTIVES: To determine the validity and responsiveness of the novel disease-specific Work Productivity Survey (WPS-RA) in patients with active rheumatoid arthritis (RA). The WPS-RA captures the RA impact on work and home-related productivity. METHODS: A total of 220 RA subjects were randomized to 400 mg of subcutaneous certolizumab pegol or placebo every 4 weeks, for 24 weeks (wks). The WPS-RA was completed monthly starting Baseline (BL) until withdrawal/completion. Validity was evaluated at BL, using the known-groups approach. Mean WPS-RA responses at BL were compared between subjects with different levels of physical function or health-related quality-of-life (HRQoL). Groups were defined by the median cut of subjects’ scores to Health Assessment Questionnaire Disability Index (HAQ-DI) and SF-36 (the physical and mental component sum-