THU0575  THE EFFECT OF PREOPERATIVE PHYSICAL ACTIVITY ON KNEE AND HIP ARTHROPLASTY OUTCOME IN PATIENTS WITH OSTEOARTHRITIS

E. Vandelli1, C. Duflos2, S. Akouete3, F. Guillemin3, A. C. Rat4, Y. M. Pers5 on behalf of the KHOALA Cohort Study. 1University Hospital of Montpellier, Clinical Immunology and Osteoarticular Diseases Therapeutic Unit, Montpellier, France; 2University Hospital of Montpellier, Clinical Research and Epidemiology Unit, Montpellier, France; 3CHRU Nancy, Inserm, Université de Lorraine, CIC 1433 Clinical Epidemiology, Vandoeuvre-les-Nancy, France; 4Université de Caen Normandie, Université de Lorraine, CHU Caen, Caen, France; 5IRMB, University of Montpellier, Inserm U1183, Montpellier, France

Background: Joint replacement is a therapeutic option increasingly widely-spread among osteoarthritis (OA) patients. Besides improving operating techniques and postoperative management, it is important to pursue the best preoperative conditions in order to achieve the desired result. As physical activity potentially acts on the preoperative predictors, knowing the effect of leisure and occupational PA should be of great interest to obtain a positive outcome.

Objectives: To investigate the influence of preoperative PA on the clinical outcomes of total hip arthroplasty (THA) and total knee arthroplasty (TKA) in OA patients.

Methods: Data from the Knee and Hip Osteoarthritis Long-term Assessment (KHOALA) cohort (1), a multi-regional French cohort of 878 patients with symptomatic hip and/or knee OA, were analysed. We included in our study patients undergoing THA or TKA during a 7-year-follow-up period. The level of total and leisure-time preoperative PA was measured with the Modifiable Activity Questionnaire (MAQ). Outcomes were measured one year after surgery. For the primary endpoint, quality of life (QoL) was measured with the OsteoArthritis Knee and Hip Quality Of Life questionnaire (OAKHQOL). For secondary endpoints, QoL was measured with Short Form 36 (SF-36), pain with the Visual Analogue Scale (VAS), function with the Western Ontario and McMaster Universities Osteoarthritis Index (WOMAC) and with walking distance. The population characteristics were described using frequency or mean and standard deviation (SD), depending on the distribution of the variable. Association between exposures and outcomes was calculated with a multivariable linear analysis with backward selection, adjusting for confounders (age, sex, body mass index, site of joint replacement, polyarticular OA, OA duration, comorbidities, radiological grade of OA, inclusion centre, rehabilitation after surgery, previous joint issues, instruction level). A p-value <0.05 was set as statistically significant.

Results: 150 patients were included. 58.7% underwent TKA and 41.3% THA. The mean age at the time of surgery was 66.6 years (±7.7 SD). The majority of patients were female (75%), overweight (mean BMI 29.63 kg/m², ±5.5 SD) and had polyarticular OA (60%). 53% of patients met the World Health Organization recommendations on PA before surgery. For the primary endpoint, a high preoperative total PA was associated with a better relationship with the partner (β = 0.55, p = 0.02) one year after surgery. As for secondary endpoints, a high two-year preoperative total PA was associated with an improved SF-36 Mental Component Summary score (β = -0.87, p = 0.02), but a longer walking distance (β = 442.81, p < 0.01). Leisure-time PA also showed a positive impact on walking distance (β = 76.25, p = 0.02), but a negative one on social functioning in SF-36 (β = -442.81, p < 0.01). No statistically significant association between preoperative PA and WOMAC was found.

Conclusion: In this cohort study, the preoperative level of PA demonstrated a heterogeneous effect on the various aspects of QoL one year after THA and TKA in OA patients. Preoperative PA was directly associated with gain of function, measured as walking distance, after surgery. Considering the increasing prevalence of OA and the crucial role of PA on health, further studies on this relevant topic are needed.


Disclosure of Interests: None declared.
Background: JAKI (JAK inhibitors) seem simpler of use than injected biologic agents due to their oral administration route. Safety and adherence issues remain and may need to modify patients’ counseling.

Objectives: To understand the influence of the DMARDs’ route of administration on these issues for both patients and physicians in order to update the Hiboot© education tool (ref1).

Methods: Hiboot© is a free smartphone application developed by the French Society of Rheumatology to enhance the patient’s safety, adherence to treatment, self-assessment and to give periodic counseling messages (ref1). This ethnographic study involved 18 patients with rheumatoid arthritis (RA) recruited by 3 rheumatologists considering diversity of clinical and sociological profiles. The panel included 14 women and 4 men, median age 56 years-old, median disease duration 10 years. Four patients were treated by methotrexate (MTX) monotherapy, 5 with MTX-bDMARDs or MTX-JAKi combo, 1 by bDMARDs monotherapy, 8 by JAKi monotherapy; ii) 9 rheumatologists with hospital or mixed hospital-private practice from 6 cities in France.

The interviews were conducted by 2 anthropologists using in-depth semi-directed biographical methods (enough to reach saturation), registered and transcribed. The semi-directive interviews dealt with: i) the patient history with RA and its treatments, ii) the daily medication management, iii) the evolution of patients’ perceptions and knowledge over time.

Results: For patients, adherence and safety behaviors were guided by their representations of 3 risks: disease-related, treatment-related, physician-related. When the disease-related risk was perceived greater than the treatment-related one, patients tended to report better adherence. Beliefs on efficacy and safety depended more on the patient’s experience with RA over time (severity, activity, control) than on the route of administration (oral vs. sub-cutaneous). However, patients treated with JAKi needed to update their lay knowledge and skills regarding their daily constraints and medication management.

For rheumatologists, JAKi were considered a promising therapeutic option, but rarely prescribed so far due to a lack of personal experience. Owing to their recent introduction on the market (~2 years in France), JAKi were prescribed to patients with longer disease duration and after several DMARDs lines. The rheumatologists’ conservative attitude towards JAKi depended on risk perceptions similar to the patients’: disease-related, treatment-related and patient-related i.e their perception of patients’ abilities to manage their care (presumed skills, autonomy,…).

This study confirms the importance of patients’ beliefs of the balance between medication necessity and risks regarding safety and adherence (ref2) which are shared with the rheumatologists. This study unexpectedly emphasized a doctor-related risk in patients as well as a patient-related risk in rheumatologists. One limitation is a bias in the recruitment of patients with long-standing RA.

Conclusion: Rheumatologist-patient collaboration needs a shared vision of disease-related, treatment-related and patient-related i.e their perception of patients’ abilities to manage their care (presumed skills, autonomy,…).

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THU0578 ONLINE CME IMPROVES CLINICAL DECISION-MAKING IN THE MANAGEMENT OF PATIENTS WITH PSORIATIC DISEASE

E. Bell1, A. B. Gottlieb2, P. J. Mease3, G. Littman1, M. Via1

1Medscapes LLC, New York, United States of America; 2Dept of Dermatology, Icahn School of Medicine at Mount Sinai NY, New York, United States of America; 3Swedish Medical Center/Providence St. Joseph Health and University of Washington, Seattle, United States of America; 4Chichester Associates Inc, Phoenix, United States of America

Background: Psoriatic arthritis can be a challenging condition for rheumatologists to manage.

Objectives: We assessed whether an online, virtual patient simulation (VPS) activity could improve the performance of rheumatologists in ordering appropriate tests, tailoring treatment options and selecting an evidence-based treatment for patients with PsA.

Methods: This CME-certified VPS consisted of 2 patient cases presented in a platform that allowed physicians to assess the patients and complete open-field entries, choosing from an extensive database of diagnostic and treatment options reflecting the scope and depth of actual practice. After each decision, learners received detailed clinical guidance (CG) based on current evidence and facility recommendations. Clinical decisions were compared pre- and post-CG using a 2-tailed paired t-test to determine P values (P<.05 is significant).

Results: Case 1 (n=48 rheumatologists):

- Selecting an evidence-based therapy for a patient newly diagnosed with PsA while on MTX therapy (adalimumab, 138%, P<.001)
- Tailoring treatment options based on individual patient characteristics and available evidence (discontinue MTX [46%]and folic acid [140%], both P<.001; order patient education, 24%, P=.006; guidance on lifestyle changes, 20%, P=.01; preventative vaccines prior to ant-TNF therapy, 38%, P=.002 and a followup appointment at an appropriate timescale, 26%, P=.006)

Conclusion: These results demonstrate the success of immersive, online VPS education that engages physicians in a practical learning experience in improving their performance in managing patients with PsA.

References:


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Case 1 (n=48 rheumatologists):

- Selecting an appropriate test to evaluate the patient (C-reactive protein [9%], erythrocyte sedimentation rate [9%] and FBC [17%], all P<.01; Beck depression inventory [51%], BSAxPGA [21%], chemistry panel [15%], Global QoL 13%, Leeds enthesis index [25%], LFTs [32%], PGA [21%], RAPID3 [63%], total BSA [137%] and X-ray of hands and feet [27%], all P<.001

- Tailoring treatment options based on individual patient characteristics and available evidence (discontinue biologic DMARD [67%], order patient education [52%], physical therapy [31%], occupational therapy 27%, preventative vaccines [35%], psychosocial counselling [31%] and a follow-up appointment at an appropriate timescale [32%], all P<.001

- Selecting an evidence-based therapy for a patient with inadequate control of PsA on adalimumab (secukinumab, 152%, P<.001; ixekizumab, 167%, P=.01)

Conclusion: These results demonstrate the success of immersive, online VPS education that engages physicians in a practical learning experience in improving their performance in managing patients with PsA.

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