chronic diseases. Most often PA is self-reported while measures of the aerobic capacity are more seldom measured in subjects with chronic pain.

Objectives: To observe the physical activity (previous reported and aerobic capacity) in people with chronic pain classified as regional or widespread and to compare the findings with a group that report no pain.

Methods: From the 2016 follow-up of the Swedish population based Epipain cohort (n = 1321), 146 subjects were invited to a clinical assessment where the aerobic capacity was assessed by using a submaximal bicycle test, the Exbom-Bak test, together with assessment of the Borg scale for perceived exertion (RPE). Aerobic capacity was also classified as low, average or high according to data from the general population. Self-reported physical activity was coded as MVPArec if recommended levels of PA was reported (physically active on a moderate level: ≥150 min/week (MPA)) or on an vigorous level: ≥75 min/week (VPA) or not). The Fear Avoidance Beliefs Questionnaire for PA (FABQ-PA, 0–24 best to worst) and for work (0–48 best to worst) were also assessed. The participants were classified as having chronic widespread pain (CWP), chronic regional pain (CRP) or no chronic pain (NCP) based on a pain mannequin presenting 0–18 pain regions and if pain had lasted for 3 months or more. Chi2 and Kruskal-Wallis tests were performed to study differences between the three pain groups.

Results: 141/146 (97%) subjects (mean (SD) age 59.4 (8.2) years) whereof 61% were women, could be classified into pain groups; 43 as CWP (84% women), 43 as CRP (42% women) and 55 as NCP (58% women). The group with CWP was slightly older than those with CRP (mean (SD) age 57.0 (7.6) years vs. 61.9 (6.9) years, p = 0.02). The CWP group also had lower aerobic capacity (mean (SD) 2.2 (0.5) (min vs. 2.6 (0.6) (min, p = 0.03), and a larger proportion was classified as having low aerobic capacity (CWP 21%, CRP 7% and NCP 10%, p = 0.04). The proportion of MVPArec did not differ between the groups; CWP 70%, CRP 81% and NCP 74% (p = 0.5). There was neither a difference between the groups in BMI, RPE or in sitting hours/week (p>0.6). However, differences were found in the FABQ where in the PA scale those with CWP had worse scores compared with NCP (mean (SD) 11.2 (7.3) vs. 6.0 (6.0), p<0.001), the difference between CWP (mean (SD) 8.9 (6.7) and NCP was p = 0.06. In the work subscale (6 of FABQ, CWP had worse scores compared with CRP (mean (SD) 18.9 (15.7) vs. 10.0 (12.5), p = 0.002) and CRP had worse scores compared to those with NCP (mean (SD) 10.0 (12.5) vs. 6.5 (9.1), p<0.001).

Conclusions: In this sample of subjects with chronic pain or no pain, having widespread pain tended to affect the aerobic capacity negatively while self-reports of recommended levels of physical activity did not differ between groups. Fear avoidance in relation to physical activity and especially in relation to work was more noticeable in subjects with chronic pain compared to those with no pain.

Measures of aerobic capacity and information of fear avoidance beliefs might help health professionals to better tailor the non-pharmacological treatment for subjects with chronic pain.

Disclosure of Interest: None declared


SAT0739-HPR OCCUPATIONAL EXPOSURE TO PESTICIDES INCREASES THE RISK OF RHEUMATOID ARTHRITIS: RESULTS FROM THE MALAYSIAN POPULATION-BASED CASE-CONTROL STUDY


Background: Adult men may have the assumption that the risk of developing the RA may be high because they work in high risk occupations such as farming where pesticides are used. The current study aims to investigate the association between pesticides exposure and the HLA-DRB1 shared epitope (SE) in the Malaysian population.

Methods: The study population was recruited from the 2016 follow-up of the Swedish population based Epipain cohort (n 1321), 146 subjects were invited to a clinical assessment where the health status of the participants was evaluated. From the 2016 follow-up of the Swedish population based Epipain cohort (n 1321), 146 subjects were invited to a clinical assessment where the health status of the participants was evaluated. The current study was powered to detect an increased risk of RA for the following risk factors: previous occupational exposure to pesticides (OS), sex (male=1, female=0), ever/never occupationally exposed to pesticides as risk factor for rheumatoid arthritis (RA).

Results: The proportion of ACPA positivity in the RA patients was 64.4% and 1.9% in the normal controls. The presence of HLA-DRB1 SE alleles in RA patients was 40.2% and 15.8% in the normal controls. Our data demonstrated that occupational exposure to pesticides was significantly associated with an increased risk of developing RA in the Malaysian population (OR 2.31, 95% CI 1.12–4.73, p = 0.03). The association between occupational exposure to pesticides and risk of RA was observed with ACPA-positive RA (OR 3.10 95% CI 1.49–6.47, p = 0.003), but not with ACPA-negative RA. A dramatically increased risk for ACPA-positive RA was seen in individuals who both exposed to pesticides occupationally and carried SE alleles (OR 28.06, 95% CI 3.58–220.09, p<0.0001).

Conclusions: This study demonstrates that occupational exposure to pesticides is associated with an increased risk of ACPA-positive RA in Malaysian population.

Disclosure of Interest: None declared


SAT0738-HPR FACTORS ASSOCIATED WITH RISK OF FALLING IN ADULTS WITH KNEE OSTEOARTHRITIS: A CROSS-SECTIONAL STUDY

D.G. Manilazap, P. Jayakaran, G. Sole, C.M. Chappie. Centre for Health, Activity and Rehabilitation Research, School of Physiotherapy, University of Otago, Dunedin, New Zealand

Background: There is evidence of increasing number of falls in adults with knee osteoarthritis (OA). However, the contributing factors for falling in adults with knee OA has not been substantially investigated.

Objectives: This cross-sectional study aimed to explore the relationship between falling in adults with knee OA and clinical characteristics of knee OA such as balance, knee muscle strength, and physical function.

Methods: Sixty-three participants with knee OA (30 female, 33 male), with a mean age (SD) 53.78 (16.17) years were included in the study. Thirty-one (49%) participants reported at least one fall in the previous 12 months. An independent t-test suggested that the SOT Composite Score in fallers was significantly less (mean ±SD: faller =7.4±4.7, non-faller =7.8±4.4, p =0.012) and the TUG test was significantly longer (mean ±SD: faller =7.4±1.29, non-faller =6.7±0.78; p =0.001) when compared with the non-faller group. Also, lower muscle strength of knee flexors and extensors were significantly less in the faller group (p<0.05). Fallers in the physical 12 months was associated with Composite Score (OR 0.85, 95% CI 0.74–0.97, p=0.017), knee extensors strength (20 degrees (OR 0.76, 95% CI 0.66–0.82, p<0.025) and 70 degrees (OR 0.71, 95% CI 0.55–0.91, p=0.008)), and TUG test (OR 2.65, 95% CI 1.32–5.31, p=0.006) using univariate logistic regression analysis. There were no changes in these results with multivari- able analyses adjusting for age, gender, and body mass index.

Conclusions: This study suggests that balance, knee muscle strength, and performance of physical function significantly differed between those with and without the history of falling. An understanding of these risk factors may help in implementing an appropriate evaluation and intervention strategy to reduce falls in this patient population. Given the prevalence of falls in knee OA, this study suggests that falls assessment should be part of the clinical practice routine when evaluating patients with knee OA.

Acknowledgements: This study was funded by Mark Steptoe Grant-in-Aid, University of Otago School of Physiotherapy

Disclosure of Interest: None declared