

XVI Congresso Português de Reumatologia

Osteoarthritis is associated with older age, female gender and retirement – a cross-sectional study in 641 EpiReumaPt participants

Submetido em :24-02-2012 11:36:20

Machado, P(1); Ramiro, S(2); Gouveia, N(3); Canhão, H(4); Branco, J(5);

1 Hospitais da Universidade de Coimbra, Coimbra &EpiReumaPt Investigation Team, Sociedade Portuguesa de Reumatologia; 2 Hospital Garcia de Orta, Almada &EpiReumaPt Investigation Team, Sociedade Portuguesa de Reumatologia; 3 EpiReumaPt Investigation Team, Sociedade Portuguesa de Reumatologia; 4 Centro Hospitalar Lisboa Norte, Lisboa &EpiReumaPt Investigation Team, Sociedade Portuguesa de Reumatologia; 5 Faculdade de Ciências Médicas, Lisboa &Centro Hospitalar Lisboa Ocidental, Lisboa &EpiReumaPt Investigation Team, Sociedade Portuguesa de Reumatologia;

Background: Osteoarthritis (OA) is the most common musculoskeletal disease and has important social and economic consequences. Our knowledge about the epidemiology of osteoarthritis of the hip (OAH), knee (OAK) and hand (OAHD) still remains poor in Portugal. Few studies on socio-demographic factors associated with OA have been conducted.

Objectives: To identify socio-demographic factors associated with OAH, OAK and OAHD.

Methods: Data collected as part of the EpiReumaPt epidemiological study was used (December 2011 cut-off). The first phase of the study consists of a screening survey for several rheumatic diseases, including OA, randomly performed by trained interviewers at subjects' homes (selection by a random-route methodology). Positive screenings and a random 20% negative screenings' sample are selected for the second phase of the study. This second phase consists of a clinical observation performed by a Rheumatologist, in order to establish the final diagnosis of observed participants. Subjects with a negative screening for OA in the first phase of the study (n=386) and subjects observed by a rheumatologist (n=255, including those who had a positive screening for OA) were included in this analysis. Subjects with a positive OA screening that were not observed by a rheumatologist (drop-outs) were excluded from the analyses (n=193). Physician diagnoses of OAH, OAK and OAHD were used as dependent variables in univariable logistic regression models to identify socio-demographic factors associated with these diagnoses. Significant variables in the univariable analysis were re-tested in multivariable models (backward method).

Results: A total of 641 participants were analysed. Of those, 11 (1.7%) had OAH, 56 (8.7%) had OAK and 40 (6.2%) had OAHD. In univariable analysis, all types of OA were associated with older age, lower educational level and retirement; OAK was also associated with the absence of alcohol intake, OAHD with decreased physical activity, and both OAK and OAH with female gender and inactive working status. In multivariable analysis, OAH, OAK and OAHD were all independently associated with older age; OAK and OAHD were also independently associated with female gender and only OAK was independently associated with retirement (table).

Table: Logistic regression analyses for socio-demographic factors associated with OAH, OAK and AOHD

Independent variables	Best -fit OAH model	Best-fit OAK model	Best-fit OAHD model
	OR (95% CI)	OR (95% CI)	OR (95% CI)
Age (years)	1.06 (1.02, 1.11)	1.05 (1.01, 1.08)	1.07 (1.05, 1.10)
Gender (female vs male)	*	2.48 (1.26, 4.85)	34.4 (4.6, 256.3)
Coffee intake (yes vs no)	*	*	*
Alcohol intake (yes vs no)	*	†	*
Smoking (pack-years)	*	*	*
Physical activity (yes vs no)	*	*	†
Body mass index (kg/m ²)	*	*	*
Ethnicity (white vs other)	*	*	*
Education level (years)	†	†	†
Active worker (yes vs no)	*	†	†
Retired (yes vs no)	†	3.09 (1.11, 8.65)	†
Income:			
a) 1001-2500€ (vs. 1000€)	*	*	*
b) >2500€ (vs. 1000€)	*	*	*

*Not selected in univariable analysis. †Not selected in multivariable analysis.

Conclusion: In this Portuguese population, older age, female gender and retirement were independent factors associated with OAK.

OAHD was strongly associated with female gender and to a lower extent with older age. Older age was the only factor associated with OAH.