Methods As a part of the international CUPID study, we followed up 955 workers (651 men; mean age 37.0 years), who at baseline had been free from LBP for ≥1 year. At baseline, information was collected about demographic variables, musculoskeletal pain at different anatomical sites, occupational physical activities, and psychosocial risk factors. Subsequent occurrence of LBP and associated disability was ascertained by a follow-up questionnaire after 1 year. LBD was defined as LBP interfering with work or leading to sick-leave. Associations between risk factors and incident LBD were assessed by logistic regression.

Results 6.1% of the workers developed LBD during the follow-up period. History of LBP, occupational physical activities (eg, climbing up or down more than 30 flights of stairs per day, bending and twisting for ≥ 4 h per day), frequent and severe neck or shoulder discomfort, inadequate breaks at work, and ≥ 60 h of work per week were statistically significant risk factors of new-onset LBD.

Conclusions The observed associations with long working hours and frequent and severe neck or shoulder discomfort (which is a common somatising symptom in the Japanese) indicate a role of psychosocial as well as physical risk factors in the development of LBD.

RISK FACTORS FOR NEW-ONSET LOW BACK DISABILITY AMONG JAPANESE WORKERS: RESULTS FROM THE CULTURAL AND PSYCHOSOCIAL INFLUENCES ON DISABILITY (CUPID) STUDY

Ko Matsudaira,¹ Takayuki Sawada,² Tatsuya Isomura,² Noriko Yoshimura,³ Keith Palmer,⁴ David Coggon⁴ ¹Kanto Rosai Hospital, Kawasaki, Japan; ²Clinical Study Support Inc, Nagoya, Japan; ³University of Tokyo, Tokyo, Japan; ⁴University of Southampton, Southampton, UK

10.1136/oemed-2011-100382.24

Objectives We investigated physical and psychosocial risk factors for incident low back pain (LBP) with disability (LBD) among Japanese workers who were initially pain-free.