

as separate but intertwined processes. Further research should be conducted to better understand the mechanisms of this interaction.

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#### STIFF PERSON SYNDROME WITH REFLEX MYOCLONUS AND OCCUPATIONAL INCAPACITY. CASE REPORT

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**Introduction** The stiff person syndrome it's a rare and not common neurological disorder, of unknown aetiology. There have been more than over 250 cases in the last 30 years. It consists in a long-term evolution of progressive muscle rigidity, with painful muscle spasms, mainly axial and pelvic limbs that lead progressively to disability, associated comorbidity and death due to complications. Symptoms generally start between the 4th and the 5th decade of life.

**Methods** 39 years old worker, purified water seller, 2 years in service, with 20 Kg weight lifting. He begins with lumbar pain that doesn't respond to regular treatment; continues with decreased movement due to muscle rigidity, beginning with the upper extremities, moving forward to the pelvic limbs, with myoclonus and chorea, relating the symptoms to physical activity or stress that persists at rest. Physical examination: a slow and assisted walked was observed. Hypertonic lower limbs; presented myoclonus. Abolished reflections, strength and sensibility preserved. Myoclonus presented during examination with stiffness lower limbs, following walk tests. He continued without responding to treatment. Diazepam medication is added so he could fall asleep. He remains bedridden, performing only needed movements, with pain aggravation while presenting spasms.

**Results** Electromyography compatible with cervical and lumbar radiculopathy. Magnetic resonance without alterations. No Anti GAD test taken, considering only normal clinical description, laboratory data and consultancy results for diagnosis of the patient was established as stiff person syndrome with myoclonus version, determining incapacity due to a low compatibility with his job.

**Discussion** Progressively severe muscle stiffness typically develops in the spine and lower extremities; often beginning during a period of emotional stress. To make a right stiff man diagnose normality data in imaging studies are needed, laboratory data not concluding from another pathology, and relating clinical description. Anti GAD is presented only in 60% of the patients.

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#### CONTRIBUTION OF WORKPLACE PSYCHOSOCIAL FACTORS ON NECK AND SHOULDER SYMPTOMS AMONG MANUFACTURING WORKERS

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**Introduction** Neck and shoulder pain is a common complaint in workplaces, due to a combination of exposure to ergonomic and psychosocial factors. Information is relatively lacking on the contribution of workplace psychosocial factors to neck and shoulder symptoms. This investigation aimed to determine the contribution of workplace justice and job insecurity to neck and shoulder pain among manufacturing workers in Taiwan.

**Methods** A cross-sectional survey on a representative sample of employed workers were conducted in 2010. Those employed in manufacturing industries were included for this analysis. The adopted Chinese version of the Nordic Musculoskeletal Questionnaire was used to assess musculoskeletal symptoms. Self-reported neck and shoulder pain affecting work performance was considered the positive outcome. Self-reported ergonomic factors, workplace justice, and job insecurity were assessed by using previously validated instruments. General linear model was used to obtain relative risk (RR), and population attributable risk (PAR) was estimated.

**Result** Among the 24 427 participants completing the questionnaire, 8632 worked in manufacturing industries. Among them, 1291 (15%) complained of neck/shoulder pain affecting work performance. After adjusting for age, in men (5839, 68%), repeated hand monotonous motion (RR=1.32, 95% CI: 1.24 to 1.40), inappropriate work desk/chair height (RR=1.49, CI: 1.36 to 1.62), prolonged use of computers (RR=1.10, CI: 1.02 to 1.19), and low workplace justice (RR=1.53, CI: 1.40 to 1.68) were significant factors for neck/shoulder pain. The PARs for these factors were 6.5%, 19.7%, 1.9%, and 11.7%, respectively. In women, inappropriate work desk/chair height (RR=1.60, CI: 1.43 to 1.76), low workplace justice (RR=1.49, CI: 1.33 to 1.67), and job insecurity (RR=1.10, CI: 1.01 to 1.22) were significant factors. The PARs were 13.2%, 7.6%, and 2.0%, respectively.

**Discussion** Among manufacturing workers, neck/shoulder pain is related to psychosocial factors. The PAR of around 10% for these factors are lower than ergonomic factors, but should not be ignored when workplace strategies are to be developed to prevent musculoskeletal symptoms.

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#### OCCUPATIONAL RISK FACTORS FOR HIP AND KNEE OSTEOARTHRITIS – EVIDENCE OF GENE-EXPOSURE INTERACTION: A CO-TWIN CONTROL STUDY IN DANISH TWINS

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**Background** No previous studies have examined if genetic factors interacts in the relationship between occupational risk factors and hip and knee osteoarthritis (OA).

**Objective** To examine occupational risk factors for Hip and Knee OA leading to Total Joint Arthroplasty, and if gene-exposure interaction, affect the risk factor-outcome relationship.

**Material and methods** In October 2012 all twin pairs alive in the Danish Twin Register (DTR) with at least one in the pair