

Work in brief

Keith Palmer, Editor



SALIVARY GLAND TUMOURS AND MOBILE PHONES

Previous research has suggested an increased risk of brain tumours in users of cellular and cordless telephones. Hardell *et al* (p. 675) have now conducted a case-control study to investigate the relation between these exposures and risk of another set of head and neck cancers, tumours affecting the salivary gland. A total of 267 cases were recruited from the six regional cancer registries in Sweden and compared with 1053 age and sex matched referents for their use of analogue, digital, and cordless phones. Various analyses were employed involving different assumptions about induction period and latency. No evidence was detected of an increased risk following phone use. Although the findings are reassuring, the authors caution that further research is needed. Long term exposure to mobile phones (more than 10 years of use) occurred in relatively few subjects from the data set.

OCCUPATION AND THE CLINICAL COURSE OF COPD

Occupational exposures may make a substantial contribution to the aetiology of chronic obstructive pulmonary disease (COPD), but rather less is known about their role in the clinical course of the disease once established. Blanc *et al* (p. 661) have now investigated this issue in a study of middle aged and elderly sufferers who reported physician diagnosed COPD at baseline and were followed prospectively for a year. Structured telephone interviews were used to obtain information on respiratory morbidity and health care utilisation, and these were related to baseline data on exposures in the current, most recent, and longest held job, assessed by means of a job exposure matrix and specific questionnaire items.

Occupational exposure to vapours, gases, dusts, and fumes (VGDF) had previously been associated with a greater prevalence of COPD in a baseline cross sectional analysis. At follow up these exposures predicted increased risks of several adverse respiratory outcomes, including restriction for everyday activities, attendance at an emergency department, and admission to hospital. Those who had both work disability and exposure to VGDF at baseline had the highest risks of all, with odds ratios ranging from 3.8 to 7.6.



UPPER LIMB DISORDERS IN VEHICLE ASSEMBLY

So far the association between soft tissue disorders of the upper extremity and ergonomic stressors has been explored predominantly in studies of cross sectional design. Punnett *et al* (p. 668) highlight several potential limitations of this approach, including length time bias (with over-representation of chronic cases), healthy worker bias (with under-representation of affected job leavers), and common instrument bias (potential information bias arising when the subject reports both the outcome and the exposure). To overcome some of these concerns they have conducted a prospective study investigating the incidence and persistence of upper limb disorders in a fixed cohort of automotive manufacturing workers. Subjects were questioned and examined initially and at follow up, with outcomes related to a baseline physical exposure index. Disorders that were present initially often persisted during follow up. Similar relations with risk factors were found longitudinally as in the cross sectional phase of investigation. The frequency of new onset disease increased by about 50% per quartile of exposure index. The exposure-response relation proved to be similar in cases defined by symptoms alone (another common design limitation) as in those confirmed by physical examination.



MORTALITY, CANCER INCIDENCE, AND THE MANUFACTURE OF ALACHLOR

Alachlor is an active ingredient in herbicide formulations, used widely on corn, soybeans, and other crops. It has been found to cause nasal, stomach, and thyroid tumours in animals, but at levels much higher than likely to be encountered by humans. Acquavella *et al* (p. 680) have investigated mortality and cancer incidence rates in alachlor manufacturing workers from Iowa, followed up for a 30 year period. They report a lower than expected overall and cancer specific mortality rate in the study group than for Iowa residents as a whole. No cases were found of the cancers of a priori interest, and “no discernable relation” between cancer incidence for any site and years of alachlor exposure or time since first exposure. The study was quite small (42 observed deaths overall and 13 deaths from all cancers). The authors draw attention, however, to the potential for chronic exposure in those studied and contrast this with the short periods of application by end users in agriculture.



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