Oral Presentation

Cancer

0152 CANCER MORTALITY OF DMF EXPOSED WORKERS IN KOREA

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This study is to identify the association of urinary N-methylformamide level (UNMFL) with cancer mortality in N,N-dimethylformamide (DMF)-exposed male workers in Korea. A cohort was composed of 11,953 DMF exposed workers working between January 1, 2000, and December 31, 2004. These cohort members were matched with the mortality data of the Korean National Statistical Office to follow-up for cancer mortality between 2000 and 2011. Standardised Mortality Ratios (SMRs) of DMF exposed workers with reference to Korean men were calculated. Also controlling age, other carcinogen exposure including hepatitis B and C, the Adjusted Hazard Ratios (AHRs) of workers categorised by the 3 groups of UNMFL with reference to workers with zero UNMFL were calculated. There were no significantly increased or decreased SMRs except for stomach cancer (SMR=0.38, 95% CI=0.10–0.98). The AHRs of overall cancer mortality were significantly increased in workers with 7.5 to 15 mg/L (SMR=2.72, 95% CI=1.09–6.81) and 15 and over 15 mg/L (SMR=2.41, 95% CI=1.03–5.66) compared with workers with 0 UNMFL. Hepatocellular carcinoma mortality (AHR=3.73, 95% CI=1.05–13.24) of workers with 15 and over 15 mg/L and lung cancer mortality (SMR=14.36, 95% CI=1.41–146.86) in workers with 7.5 to 15 mg/L were significantly increased compared with workers with 0 UNMFL. In this study workers with high UNMFL showed increased mortalities for overall, liver and lung cancer comparing to those of workers with zero UNMFL, which suggests DMF might be caused cancer, especially hepatocellular carcinoma which was approved carcinogenicity on liver in animal experiments.

Oral Presentation

Cancer

0153 RISK OF BLADDER CANCER IN A COHORT OF CHEMICAL WORKERS

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Objective Bladder cancer is the fourth most frequent cancer among men in Germany. Aromatic amines can cause bladder cancer and therefore cancerogenic aromatic amines have been

banned a long time ago from workplace, but a long latency can still increase the risk of former exposed workers. In this study, we will assess the risk of bladder cancer in a cohort of chemical workers with earlier use of aromatic amines compared to the general population.

Methods In the prospective cohort study UroScreen, 1800 former chemical workers exposed to aromatic amines were offered to participate in an early detection of bladder cancer by means of tumour markers. In 2003–10, 1609 people were examined at least once. The exposure to aromatic amines was determined by means of questionnaires. The observed bladder cancer incidence was compared with the expected incidence in the general population. Bladder cancer risk was estimated as standardised incidence ratio.

Results Nine incidence urinary bladder carcinoma occurred during the study. Eight cases were ex-smokers and one case was non-smoker. All cases were exposed for at least 10 years, including six cases longer than 20 years. Compared to the general population, the risk of bladder cancer was 2.94 (95% CI 1.35–5.59).

Conclusions Since almost all cases have both smoked and were highly exposed, reliable risk detection is difficult. Nevertheless, in view of a threefold increased risk, the early detection of urinary bladder carcinomas were promising.

Poster Presentation

Other

0154 OCCUPATIONAL DISEASES ATTENDED AT PARC DE SALUT MAR (BARCELONA): CARE COSTS IN A SERIES OF CONFIRMED CASES (2010–2014)

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Background The Spanish National Health System (NHS) covers non-work-related diseases. The Social Security system, mainly through collaborating insurance companies, covers both medical and wage-related costs of occupational diseases; however, the actual exchange of resources has not been well studied until now. The objective of this study was to evaluate the economic cost of medical care generated by a series of confirmed cases of occupational disease (OD) treated at Parc Salut Mar (PSMAR) in Barcelona, an NHS health system.

Methods Economic study of 40 cases of suspected OD by the PSMAR Occupational Disease Unit (ODU). Between 2010 and 2014, information on the care received (stays, visits, emergencies, diagnostic tests, medical and surgical treatments, etc.) was independently reviewed by three experts, and discrepancies resolved by one of them. The economic value of the care received in relation to the underlying suspected OD was expressed in terms of actual cost and billing rate, according to age, sex, diagnostic group and type of care received.