933

CAUSES OF DEATH IN CELIAC DISEASE PATIENTS IN A POPULATION-BASED SWEDISH COHORT.

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Little is known about mortality risk from causes other than malignancies among patients with celiac disease, but nationwide linked registry data from Sweden offer a unique opportunity to investigate this issue. Mortality rates among 10,032 Swedish patients hospitalized with celiac disease during 1964-93 and followed for 12 months or more were compared with rates in the general Swedish population and standardized mortality ratios [SMR] were calculated. There were 828 deaths, resulting in a 2.0-fold elevated SMR from all causes (95% confidence interval [95%CI]=1.8-2.1) with no difference by gender, length of follow-up, or calendar year of initial hospitalization. However, mortality risk from all causes was 3.9-fold increased (95%CI=3.3-4.5) among patients who were initially hospitalized with both celiac disease and other medical conditions at ages 20-60 years. Mortality risks were elevated for a wide array of causes of death involving immunological dysfunction, including autoimmune diseases (rheumatoid arthritis SMR=7.3, diffuse diseases of connective tissue SMR=17.0, inflammatory bowel diseases (ulcerative colitis Crohn's disease) SMR=70.9), diabetes mellitus SMR=3.0, disorders of immune deficiency SMR=20.9, tuberculosis SMR=5.9, pneumonia SMR=2.9, nephritis SMR=5.3, non-Hodgkin's lymphoma SMR=11.4, and allergic disorders (asthma SMR 2.8).

934

COHORT MORTALITY STUDY OF UNION CARBIDE CORPORATION'S TEXAS CITY EMPLOYEES: 1941–1994.

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Mortality patterns through 1994 were examined among all 8037 men employed at Union Carbide Corporation's Texas City plant between 1941 and 1983. An excess of brain cancer deaths was previously noted within this inception cohort. Cause of death was analyzed in 92 categories using standardized mortality ratio (SMR) analyses controlling for age, race and calendar year. Over 250,000 person-years accrued with 2504 (31% of cohort) deaths. For salaried employees, the all-cause SMR was 61 (95%Confidence Interval (CI): 53-68), and the all-cancers SMR was 78 (95%CI: 61-97). For hourly employees, all-cause and all-cancer SMRs were 92 (95%CI: 88-95) and 103 (95%CI: 95-112), respectively. The SMR for benign neoplasms (n=15) was significantly elevated (SMR=200, 95%CI: 112-330). Non-statistically significant excesses were seen for leukemia, and cancers of the biliary passages and liver (with a significant two-fold excess among those employed earliest), brain and prostate. The SMRs for leukemia were elevated for those with shorter duration of employment and fewer years since hire. The prostate cancer excess was confined to the most recent 10 years of follow-up. With an average 32 years of follow-up and nearly complete tracking, this study had reasonable power to detect important effects. The only statistically significant excess observed was for benign tumors, the majority of these of unknown site. The previous brain cancer excess was attenuated, with no excess seen for the most recent follow-up period (1980-1994). Excess mortality due to liver cancers continues; however, no cases have been identified among men hired after 1953.

935

EPIDEMIOLOGY OF MULTIPLE SCLEROSIS IN AMERICAN VETERANS OF VIETNAM AND LATER SERVICE: PRELIMINARY RESULTS .

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We identified 5,345 new cases of multiple sclerosis (MS) among American veterans who entered military service between 1960 and 1994 and who were "service-connected for MS by the Department of Veterans Affairs (VA). Sixty-five random case records were reviewed for diagnosis, and over 96% met the Schumacher and Poser criteria for definite MS. Controls were matched to cases 2:1, n=10,683) on age, month and year of entry into active duty, and branch of military service. Odds ratios (OR) were calculated to determine the risk for developing MS by race and sex group and geographic tier within the United States. Females had the highest risk for developing MS, with other race (nonwhite, nonblack) females, white females, and black females having ORs of 3.55, 3.00, and 2.89, respectively. The risk for MS in other race males, black males, and white males was 0.31, 0.68, and 1.01, respectively. For white males, geographic tier of residence at entry into active duty was shown to influence one's risk for MS. ORs were 1.36 for northern tier veterans, 1.03 for middle tier, and 0.69 for southern tier. Compared with our earlier World War II and Korean Conflict veteran cohorts, this new cohort showed all females have even higher risk for developing MS, risk in black males is higher, and the north-south geographic gradient is less pronounced.

936

LOW BONE MASS IN POSTMENOPAUSAL WOMEN: INITIAL RESULTS OF THE NATIONAL OSTEOPOROSIS RISK ASSESSMENT (NORA) STUDY.

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Current knowledge of low bone mass and fracture risk in postmenopausal women (PMW) is largely derived from small cohorts of Caucasian women. NORA is an on-going longitudinal observational study of the natural history, risk factors, and treatment of low bone mass. Approximately 200;000 PMW with diverse ethnic backgrounds from 4,000 primary care physicians nationwide participated in the study. Each participant had BMD measured at forearm, hand, or heel at baseline. Medical history and risk factors were obtained by self-report. Fractures were ascertained within 12 months of enrollment. BMD was defined based on World Health Organization criteria as normal (T-score > -1), osteopenia (-2.5 < T-scores ≤-1), and osteoporosis (T-scores ≤ -2.5). 200,160 women were included in the analysis; the mean age was 64.5 years (SD 9.3 years). Low BMD was found in 47% of the women, of those 7% had osteoporosis. Osteoporosis-related fractures were reported in 2,971 women (514 hip, 389 spine, 908 rib, and 1045 wrist). Low BMD was associated with an increased risk of fractures; the adjusted relative risk was 1.73 (95% CI 1.58, 189) for osteopenic women and 2.74 (95% CI 2.43, 3.09) for osteoporotic women, compared to women with normal bone mass. Almost half of the PMW had previously undetected low BMD and peripheral BMD results were highly predictive of fracture risk. Given the economic and social burden of osteoporotic fractures, strategies to identify and manage osteoporosis in the primary care setting need to be implemented.