

Human T-lymphotropic virus type b (HTLV-1) and adult T-cell leukemia/lymphoma (ATLL) in Panama. P. H. Levine,* M. Cuevas, J. R. Arosemana, E. S. Jaffe, W. Blattner, and W. C. Reeves (NCI, Bethesda, MD 20892).

The authors conducted a seroepidemiologic survey of 745 representative inhabitants of urban Panama. Five per cent were seropositive as defined by a competitive binding assay. A national registry of hematologic malignancy was subsequently initiated to determine the relative frequency of adult T-cell leukemia/lymphoma (ATLL), a neoplasm comprising 50% of adult lymphomas in human T-lymphotropic virus type 1 (HTLV-1) endemic areas of Japan and the West Indies. A total of 136 incident hematologic malignancy patients (including 40 non-Hodgkin's lymphomas) were enrolled in this study over a two-year period. Only three ATLL patients were identified and all three were seropositive for HTLV-1. The authors conclude that although classical HTLV-1-associated ATLL occurs in the Panamanian population, it is not as prevalent as in other Caribbean countries. The discordancy between the high rate of seropositivity and the paucity of ATLL cases may be due to the detection of a variant virus resembling HTLV-1, problems of specificity in the assay utilized in early studies, genetic resistance to disease, and/or the absence of environmental cofactors for ATLL. These hypotheses are currently under investigation.

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Cesarean deliveries are performed on women with genital herpes to prevent neonatal herpes. A retrospective cohort study was conducted to assess postpartum endometritis risk in women with genital herpes. A total of 909 women who had genital herpes identified from birth certificates and who delivered livebirths during 1980-1983 were compared with women frequency-matched by hospital and birth year. Initial analysis of data from hospital records revealed a 1.9 relative risk of endometritis for women with genital herpes (95% confidence interval (CI) = 1.2-3.1). A second analysis compared 306 women with cesarean deliveries done for genital herpes (not obstetric reasons) with 277 women without genital herpes with repeat cesarean deliveries (not for emergency obstetric reasons). The relative risk for postcesarean endometritis was 1.1 (95% CI = 0.6-1.9). Multivariate adjustment for any labor, rupture of membranes, hospital, and birth year did not influence the risk estimate. The findings suggest that women with known genital herpes have an increased relative risk for endometritis associated with the greater utilization of cesarean delivery as a result of the genital herpes, but not through other mechanisms. Study implications and methodologic challenges are discussed.

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Human T-lymphotropic virus type I (HTLV-I) and adult T-cell leukemia/lymphoma (ATLL) in Panama. P. H. Levine,* M. Cuevas, J. R. Arosemana, E. S. Jaffe, W. Blattner, and W. C. Reeves (NCI, Bethesda, MD 20892).

The authors conducted a seroepidemiologic survey of 745 representative inhabitants of urban Panama. Five per cent were seropositive as defined by a competitive binding assay. A national registry of hematologic malignancy was subsequently initiated to determine the relative frequency of adult T-cell leukemia/lymphoma (ATLL), a neoplasm comprising 50% of adult lymphomas in human T-lymphotropic virus type I (HTLV-I) endemic areas of Japan and the West Indies. A total of 136 incident hematologic malignancy patients (including 40 non-Hodgkin's lymphomas) were enrolled in this study over a two-year period. Only three ATLL patients were identified and all three were seropositive for HTLV-I. The authors conclude that although classical HTLV-I-associated ATLL occurs in the Panamanian population, it is not as prevalent as in other Caribbean countries. The discordancy between the high rate of seropositivity and the paucity of ATLL cases may be due to the detection of a variant virus resembling HTLV-I, problems of specificity in the assay utilized in early studies, genetic resistance to disease, and/or the absence of environmental cofactors for ATLL. These hypotheses are currently under investigation.

Accuracy of death certificates for injury-related causes of death. L. Moyer,* C. Boyle, D. Pollock, and K. N. Co (CDC, Atlanta, GA 30333).

Accuracy of death certificate information for classifying underlying cause of death has focused on "natural" or disease-related causes of death. Current interest in injury-related deaths has placed proper certifi-

cation and coding of these deaths at a high level of importance. This study compares agreement of underlying cause of death as determined from death certificate information with that determined from an independent review of all relevant medical and legal documents of death by a panel of physicians. The study sample includes all deaths ($n = 446$) that occurred over an approximate 19-year follow-up period, in a randomly selected cohort of 18,313 US Army veterans of the Vietnam era. Sensitivity and specificity were all above 90% for motor vehicle crash deaths (*International Classification of Diseases*, Ninth Revision (ICD-9) codes E810-25), suicides (E950-9) and homicides (E960-9). Agreement for accidental poisoning deaths (E850-69), mostly drug and alcohol-related, was poor (sensitivity = 50%); in general, the ICD-9 nomenclature lacks the detail necessary to accurately code drug and alcohol-related deaths. The sensitivity and specificity for the individual three-digit suicide and homicide codes were all above 90%. The agreement was considerably less for motor vehicle crash deaths; sensitivity ranged from 29% to 83%. The lack of descriptive information on death certificates to allow detailed coding was chiefly responsible. Finally, agreement on the fourth digit of ICD-9, for example, the role of the decedent in a motor vehicle crash death, was in general poor.

Incidence of fall injuries among the elderly, Miami Beach, 1985-1986. D. Lambert,* C. DeVito, J. Rodriguez, R. Sattin, A. Ros, and S. Bacchelli (CDC, Atlanta, GA 30333).

Falls are the leading cause of fatal and nonfatal injuries among the elderly, yet little is known about the personal and environmental factors associated with falls. Therefore, the authors analyzed community-based data for Miami Beach, Florida from the Dade County Public Health Unit-Centers for Disease Control Study To Assess Falls Among the Elderly. During the one-year period between July 1985 and June 1986, 1,827 falls were identified from fire rescue, emergency room, hospital inpatient, and medical examiner records. The rate for falls was 96.9/1,000 among persons aged 65 years or older. Fall rates increased exponentially by age, with persons aged 85 years or older having the highest rate (168.2/1,000). For each age group, women had higher rates than men, and the overall fall rate for women (108.9/1,000) was 1.4 times the rate for men (76.2/1,000). Most of the falls took place in the home (54%) or street (19%), and most (78%) took place during the day. Of the 1,512 persons who were injured, 33% suffered fractures, 20% suffered open wounds, and 38% suffered sprains, contusions, or superficial injuries. There were 840 persons hospitalized because of a fall, for a hospitalization rate of 44.5/1,000. Hospitalization rates also increased exponentially by age, and for each age group, rates were higher for women than for men. The hospitalization rate for women (51.3/1,000) was 1.6 times the rate for men (32.9/1,000). The mortality rate for falls was 2.1/1,000, and although women had a higher nonfatal injury rate, the mortality rate for men (2.6/1,000) was 1.4 times the rate for women (1.9/1,000). These findings are being used in Miami Beach to develop and target prevention strategies for falls and fall injuries among the elderly.