week no. 20 ending May 18, 1985

Texas Preventable Disease NEWS

contents:

BUREAU OF EPIDEMIOLOGY 1100 West 49th Street, Austin, Texas 78756 (512-458-7207)

HYPERTENSION CONTROL GUIDELINES

The National High Blood Pressure Education Program Coordinating Committee, administered by the National Heart, Lung, and Blood Institute, sponsored the latest report of the Joint National Committee on Detection, Evaluation, and Treatment of High Blood Pressure. The report, published in May 1984 in the Archives of Internal Medicine and in the Journal of the American Osteopathic Association, reflects current findings on high blood pressure and provides guidelines for physicians in treating their patients and for community groups in developing and administering their programs. High blood pressure is one of three major risk factors (along with elevated blood cholesterol and cigarette smoking) for the development of heart disease or stroke. The 1984 Joint National Committee report, which updates the 1980 Joint National Committee report, redefines hypertension categories and offers guidelines for nondrug treatment, stepped-care therapy, and treatment in various population groups, including blacks, children, and the elderly.

The 1984 report defines the categories of high blood pressure as follows. A diastolic blood pressure of less than 85mm Hg is considered normal, 85 to 89mm Hg is high normal and bears watching, 90 to 104mm Hg on repeated visits is mild high blood pressure, 105 to 114mm Hg is moderate, and a reading of 115mm Hg or higher is severe. The high normal blood pressure category is a new concept, first published in the report. The Committee also classifies two new categories based on systolic blood pressure: borderline isolated systolic hypertension (systolic pressure of 140 to 159mm Hg when the diastolic pressure is less than 90mm Hg) and isolated systolic hypertension (systolic pressure at or above 160mm Hg when the diastolic pressure is less than 90mm Hg).

The report continues to emphasize nondrug treatment for certain classes of patients. Some patients may be able to avoid drugs altogether if they respond to these forms of treatment. The nondrug therapies recommended by the Committee include modifications in diet for weight loss and moderate exercise (which may be beneficial even to persons who are not overweight). The report also recommends that patients decrease their dietary sodium intake (sodium restriction may also enhance the effectiveness of drugs used to treat hypertension) and reduce alcohol consumption and saturated fats. Smoking cessation is recommended for all hypertensive patients.

Although these nondrug therapies may be effective for some patients with mild high blood pressure, not everyone will respond to them alone. The physician should allow a reasonable time for nondrug methods to work and then initiate drug treatment if blood pressure remains elevated.

The Joint National Committee continues to recommend the stepped-care approach to treating high blood pressure. In this approach, treatment begins with low doses of one drug and progresses to higher doses until the hypertension is reduced. Other drugs are added in sequence, as needed, in increasing doses until pressure is

controlled. The use of lower dosages of several drugs instead of the highest dosage of a single drug minimizes intolerable side effects, while still providing effective treatment for high blood pressure.

To obtain a copy of the 1984 Joint National Committee Report, write to the Adult Health Program, Texas Department of Health, 1100 West 49th Street, Austin, Texas, 78756 or call (512) 458-7534.

This article was prepared by Donna Nichols, MSEd, Health Program Specialist, Adult Health Program, Bureau of Chronic Disease Prevention and Control, TDH.

* * *

CONTACT SPREAD OF VACCINIA FROM A NATIONAL GUARD VACCINEE - WISCONSIN

This article first appeared in the Centers for Disease Control (CDC) publication, Morbidity and Mortality Weekly Report, Vol. 34/No. 13, April 5, 1985.

On Jauary 24, 1985, a 15-year-old female was referred to a dermatologist in a clinic in La Crosse, Wisconsin, for evaluation of an ulcerated lesion on her left upper lip. On examination, the patient had a 2-cm diameter ulcer on her left upper lip, five 4-mm diameter oval vesicles on the arms, and marked conjunctival injection of the left eye. She appeared mildly sick with low-grade fever, fatigue, and tender cervical lymphadenopathy. The patient was otherwise in good health, with no history of eczema, malignancy, or immunologic deficiency.

The patient has a male friend who is a member of the Wisconsin National Guard. He had received a smallpox vaccination in a US Army facility in Wisconsin at the end of December 1984. In early January, the patient assisted her friend in applying compresses to ease the discomfort of a successful smallpox vaccination. As a child, the patient had received a smallpox vaccination but had never developed a reaction. She has no scar compatible with smallpox vaccination.

She was treated with trifluridine in the left eye, oral erythromycin, and topical neosporin for the ulcer on her lip. In addition, she received a total of 30ml of vaccinia immune globulin (VIG) intramuscularly over two days. Vaccinia virus was cultured from the skin lesions. On follow-up visit on February 6, all lesions were healing well, and it appeared that the lesion on the left lip would heal without scarring.

An investigation conducted to determine whether the patient had transmitted disease to her contacts involved five immediate family members and 45 participants in a girls' gymnastics meet on January 21 in which the patient competed. By January 31, none of these 50 individuals had subsequent evidence of vesicular or pustular skin lesions.

MMWR Editorial Note: Since the successful global eradication of smallpox, vaccinations of civilians in the United States have decreased to several hundred a year. Smallpox vaccine is now recommended only for laboratory workers occupationally exposed to orthopox viruses.

The US Department of Defense (DOD) routinely vaccinates all active-duty personnel and members of the National Guard and Reserves on entry into military service and every five years thereafter. Under current policy guidelines, several hundred thousand DOD personnel are vaccinated against smallpox each year. In line with World Health Organization recommendations, the DOD policy recommends vaccination of military

personnel in circumstances that would limit the potential contact between recent military vaccinees and potentially unprotected civilian contacts. For example, smallpox vaccinations are given during basic training and, for the National Guard, are recommended at the start of extended training activities, such as two-week summer training. Contact spread of vaccinia from recently vaccinated military personnel has occurred in Canada and Louisiana.

Apparently, this case resulted because of an incomplete application of this policy. The National Guard member was not vaccinated at the start of an extended training period. Although this patient's illness was relatively benign, the potential for serious or fatal complications would have been much greater if she had had eczema or immunologic deficiency because of malignancy or chemotherapy.

* * *

UPDATE: REYE SYNDROME PILOT STUDY -- UNITED STATES, 1984

This article first appeared in the Centers for Disease Control (CDC) publication, Morbidity and Mortality Weekly Report, Vol. 34/No. 8, March 1, 1985.

The results of a pilot study examining the possible relationship between Reye syndrome and medications were recently reported for 29 Reye syndrome patients and 143 controls. An independent expert panel that reviewed hospital records for cases included in this analysis has determined that supplemental laboratory and autopsy results obtained for one additional patient, originally excluded because of insufficient information, are consistent with the diagnosis of Reye syndrome.

Analysis of medication data for the 30 patients, including information obtained for this case and its matched controls, revealed that 28 (93%) of 30 cases (compared with the originally reported 28 [97%] of 29 cases) were exposed to salicylates during antecedent respiratory or chickenpox illnesses (and before a clinically defined onset of Reye syndrome), compared with 28% of emergency room, 23% of inpatient, 59% of school, and 51% of random digit-dialing controls matched for similar antecedent illnesses. The association between Reye syndrome and salicylates remains statistically significant.

* * *

WOMEN WHO EXERCISE NEED MORE RIBOFLAVIN

According to research done by Daphne Roe, MD, Division of Nutritional Sciences, Cornell University, Ithaca, New York, women who exercise regularly need twice the current Recommended Dietary Allowance (RDA) for riboflavin (vitamin B_2) in their diets than women who do not exercise regularly. Furthermore Dr. Roe reports that even sedentary women may need 80% more riboflavin than the current RDA.

These findings are based on a series of three human studies conducted with 12 subjects per study including active, sedentary, and dieting women. Body riboflavin levels were determined by measuring levels of erythrocyte glutathione reductase, a red blood cell enzyme that needs vitamin B_2 to function. Riboflavin is essential to the production of energy from carbohydrates, proteins, and fats. Its depletion in women who exercise regularly may indicate that working muscles have an increased requirement for riboflavin.

Good sources of riboflavin include milk, cheese, yogurt, and other dairy products as well as whole grains and enriched breads, cereals, and pastas. The current RDAs, published in 1980, are based on scientific knowledge prior to 1980. The RDAs are periodically revised, with the next revision scheduled for release in late 1985.

Whether the RDA value for riboflavin will be increased in the 1985 RDAs is uncertain at this time.

This report was prepared by Nancy Robinett-Weiss, MS, RD, LD, Director, Nutrition Services, Texas Department of Health.

REFERENCE:

1. Anonymous. Women who exercise need more vitamin B_2. J Am Dietetic Assn 1984; 84:691.

* * *

ERRATA

PDN, week no. 18, ending May 4, 1985, contains a number of errors. The title of Table 2 should read "Number of viral isolates by age of patient, January 1 - December 31, 1984, Texas," not 1983. Also in Table 2, the third age range should read "5-9", not 509. Pages 2 and 3 were reversed in the production process. Finally, on page 3, the all-terrain vehicle article was adapted from a US Consumer "Product" Safety Commission release, not Produce. Editor

TEXAS PREVENTABLE DISEASE NEWS ( ) is a free, weekly publication of the Texas Department of Health, 1100 West 49th Street, Austin, TX, 78756-3180. Second-class postage paid at Austin, TX. POSTMASTER: Send address changes to TEXAS PREVENTABLE DISEASE NEWS, 1100 West 49th Street, Austin, TX 78756-3180.

TEXAS PREVENTABLE DISEASE NEWS
Texas Department of Health
1100 West 49th Street
Austin, TX 78756-3180

APPLICATION TO MAIL AT
SECOND CLASS POSTAGE RATES
PENDING AT AUSTIN, TX

RETURN POSTAGE GUARANTEED