medical sciences

THERAPY

Vitamin E relieves leg cramps

An accidental discovery that vitamin E relieved the leg cramps of 24 patients and the "restless legs" syndrome of two others could lead to more thorough confirming research. So far there has been no really effective treatment for these conditions.

Drs. Samuel Ayres Jr. and Richard Mihan of Los Angeles report in CALIFORNIA MEDICINE that they had started out to investigate the usefulness of vitamin E, or tocopherol, in the management of several obstinate skin conditions.

One of the most commonly observed results of a deficient vitamin E diet in many experimental animals, including the rhesus monkey, is an acute and degenerative change in skeletal muscles and, in some instances, in heart muscle. When some of the doctors' dermatology patients mentioned that they had suffered from severe nocturnal leg cramps until they began taking vitamin E, the doctors questioned others in the thought that the cramps might be related to a deficiency of the vitamin or a faulty utilization of it in the leg muscles.

The researchers emphasize that their research included no laboratory studies of any kind, but they believe their brief clinical report may be of assistance to others who wish to carry out more detailed investigations into this common disorder.

The original work on several rare and incurable skin diseases involving connective tissues has been going on for three years with promising results. The diseases include scleroderma, epidermolysis bullosa and pseudo-xanthoma elasticum.

ASTHMA

Overuse of inhalants dangerous

Warnings against overuse of powerful inhalant drugs by asthmatics continue to appear in the United States as well as in England and Wales, where studies have linked excessive asthma death rates with these pressurized aerosols.

Since last December, aerosols have been obtainable only by prescription in the United Kingdom, but The Lancet says that in the period when they were directly available to the public, from 1961-1967, excess deaths were estimated to have numbered more than 3,500. Dangerous inhalants in the United States are available only by prescription. Those available without are not involved in the warnings.

In one report published in the U.S., 9 of 17 asthmatic patients who died during acute attacks were said to have been using one of the powerful bronchodilator aerosols excessively. In 12 nonfatal cases, asthmatics developed severe wheezing while using 6 to 50 times the recommended dosage of the aerosol drug.

Some British patients were found dead with empty or near-empty bronchodilators in their hands or nearby. Some asthmatics have inhaled as much as 500 breaths in 10 minutes during severe attacks.

Excessive doses of bronchodilator aerosols can cause a chemical bronchitis and by changing the stickiness of bronchial mucus can cause bronchial plugging. The drugs also can cause the heart to fibrillate or beat irregularly.

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PROPHYLAXIS

Polio could come back

Only eight cases of paralytic polio have been reported in the entire United States so far in 1969. But the Public Health Service's Communicable Disease Center in Atlanta, Ga., says if infants and young children are not vaccinated as they come along, pockets of the disease could get larger.

Four of the eight cases this year have been in Texas. But there was one case in Connecticut, one in Kansas, one in Alabama and one in Florida. The disease occurred among young children who were not vaccinated in spite of the fact that local health departments supply the vaccine free in cases of need.

Dr. Joseph L. Melnick and his co-workers at the Baylor College of Medicine in Houston, Texas, report the reappearance of polio in that city after a five-year period in which it was free from the disease following the mass vaccination of 1962. One child died last year, and deaths could occur again unless children are vaccinated.

Writing in the JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION of Aug. 25, the Houston researchers say it is clear that a large proportion of Houston children from families in the low-income group are either completely unprotected against polio or inadequately protected.

Either the Salk or Sabin vaccine is recommended against the three polio viruses.

PREDNISONE

Lowering side effects

Cortisone drugs have been successful in the treatment of rheumatoid arthritis and other inflammatory diseases, but potentially serious side effects have made physicians cautious about prescribing large doses.

A group of researchers at the National Institute of Allergy and Infectious Diseases at Bethesda, Md., now reports remarkably mild reactions when patients were given prednisone, a corticosteroid, every other day.

They treated a dozen patients who had a variety of inflammatory disorders, accompanied by fevers of unknown origin, using an average dose of 62 milligrams of prednisone on alternate days.

Large doses of corticosteroids increase a patient's susceptibility to infection, suppress his adrenal gland output and make him susceptible to diabetes and the bone disease osteoporosis. They also slow the healing of wounds. But the researchers say their alternate-day dosage reduced all of these reactions.

Dr. John N. Sheagren, one of the institute researchers, says that their study was aimed at delayed responses. These are thought to reflect normal resistance of cells to infecting organisms. Treating patients every other day would make them less susceptible to infections than if they had steroids every day.

The drug dosage eliminated the fever in 11 of the 12 patients, along with their debilitating discomforts, weight loss and other symptoms, so that they were able to work and lead otherwise normal lives.

In addition to Dr. Sheagren, the researchers were Drs. Rob Roy MacGregor, Mortimor B. Lipsett and Sheldon M. Wolff.

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