HADASSAH HOSPITAL DEVELOPS NEW TESTS FOR HEREDITARY DISEASE

New York -- A new screening test for mucopolysaccharides in urine, known as "MPS Papers," was devised at the Hadassah- Hebrew University Medical Center in Jerusalem, and has been tested in the United States with favorable results. Mucopolysaccharidoses are a group of hereditary diseases with manifestations of dwarfism, mental retardation, skeletal dysplasias and eye tissue degeneration.

A two month trial run of the test in the U.S. market resulted in orders exceeding the forecast by 50 per cent. The response of the physicians was very positive.

The announcement was made by Mrs. Faye L. Schenk, national president of Hadassah and Mrs. Charlotte Jacobson, chairman of the Hadassah Medical Organization.

The "MPS" Papers" (TM) were devised by Professor Elaine R. Berman, Head of the Biochemistry Research Laboratory of the Department of Opthalmology of the Hadassah-Hebrew University Medical Center, and are being manufactured by Ames- Yissum Ltd., of Jerusalem, a science-based industry formed by Miles Laboratory Inc. of Elkhart, Indiana, and the Hebrew University of Jerusalem, to develop commercially discoveries made in the University's laboratories. "MPS Papers" are available worldwide by direct order from Specialty Systems Department, Ames Company, Elkhart, Indiana 46514.

Mucopolysaccharidosis is an inborn error of metabolism which results in an accumulation in various tissues of mucopolysaccharides (MPS). These are viscous, high molecular weight complex carbohydrates. Until the "MPS Papers" test was devised by Dr. Berman, there was no commercial screening test to detect suspected cases of mucopolysaccharidoses.

The test is marketed as a kit containing enough material for ten separate tests. The paper itself is specially treated so that it can absorb a dye that interacts with MPS. A drop of urine is placed in the center of the paper and allowed to stand for three minutes. It is then rinsed with a special solvent, prepared according to directions that come with the kit. If the level of MPS in the urine is elevated, the spot where the drop of urine had been placed turns a strong purple. When the spot test is negative, the paper does not change color.

Unfortunately, there is no known cure for the mucopolysaccharidoses. Nevertheless, it is important that there is now a simplified convenient test available which will enable doctors, geneticists and others to screen infants for existing cases of the disease. "MPS Papers" are now being tried out in the big medical centers of the United States, where a larger number of children with a wider variety of rare syndromes, that may or may not be related to mucopolysaccharidoses, are being tested.

It is suspected that what causes the disease is a fault in an enzyme that activates other enzymes which, in turn, affect the mucopolysaccharides. Medical research workers are today making a tremendous effort to alleviate these genetic enzyme error diseases by supplying the missing factor, even though the doctors may not be sure what exactly this is from the blood of normal persons, either by plasma transfusion or by extracts from blood cells. It is believed that if treatment is started early enough, then the develpoment of the more severe stages of the syndrome, such as brain damage, may be prevented.

The new "MPS Papers" test, which enables possible early detection of the accumulation of mucopolysaccharides through an enzyme error, may be of vital importance in fighting the disease even though the cause is not fully understood

ISRAELITE ADS PAY