

MEDICINE

Asthma Clue From Horses

► RESEARCH INTO the deaths of thoroughbred horses, especially foals, has produced an entirely new approach to the treatment of asthma, hay fever and skin troubles in human beings.

Dr. W. R. Wooldridge, scientific director, Equine Research Station of the Animal Health Trust, Newmarket, England, said the new approach was so promising that the British Medical Research Council and the Medical Research Development Council are cooperating in its further development.

During the course of the investigation on horses, a substance was found in certain white cells in the horses' blood that played an active part in the control of histamine, frequently the cause of surgical and accidental shock, skin lesions of the nettle rash type and such allergies as asthma and hay fever.

"Most of the allergy conditions in humans and in animals are caused by excess production of histamine in the body," Dr. Wooldridge said.

Earlier research work has shown that the

effects of this excess were automatically reduced in the presence of white blood cells (leucocytes) known as eosinophils. This suggested that injections of eosinophils might be used to combat histamine, provided that means could be found to separate live cells from the blood stream.

This process is extremely difficult because all cells normally die rapidly on removal from the body.

After more than a year of work, the Equine Research Station developed a technique by which eosinophils, alive and normal in all respects, could be recovered from the blood in a high degree of purity.

It is now possible to make an extract of eosinophil leucocytes containing a substance proved to be more powerfully anti-histaminic and anti-inflammatory than any so far discovered.

The veterinary and medical scientists are now cooperating to isolate, identify and produce the mysterious substance.

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5:629, 1960. They made the investigation with the cooperation of the Chicago Board of Health, the Heart Disease Control Program and the Department of Medicine, Northwestern University.

Autopsies have previously shown "silent," painless or unsuspected cases of myocardial infarction that have escaped detection but the physicians said there are few reports describing totally asymptomatic cases during life.

They said that routine periodic electrocardiography would uncover "a significant number of cases which would otherwise go unrecognized." This is particularly important at the present time among adult men, they reported, when effective "secondary prevention of coronary heart disease may be a real possibility."

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VETERINARY MEDICINE

Dwarf Cattle Inherit Metabolic Disorder

► "SNORTER" DWARFISM, which is a major problem among cattle breeders, is probably an inherited disorder, Dr. Andrew E. Lorincz, University of Florida College of Medicine, Gainesville, reported at a New York Academy of Sciences meeting in New York.

Dr. Lorincz said this was the first known inherited disorder of metabolism in animals.

Only within the past ten years, Dr. Lorincz reported, "have hereditary disorders of connective tissue acid mucopolysaccharides, which are complex organic chemical compounds, been recognized.

The first such disorder in humans was recognized through autopsy specimens of patients with the Hurler syndrome, which is a fat disturbance involving the cartilage, bones, tissues under the skin, the brain, cornea, liver and spleen.

Dr. Lorincz reported information showing similar findings in two other inherited disorders in man involving bone deformities, begun in childhood when active growth occurs.

He also reported information showing excessive accumulation of acid mucopolysaccharide in the livers of snorter dwarf cattle.

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MEDICINE

Unfelt Heart Attacks

► AN ESTIMATED 10% to 15% of heart attacks among urban, middle-aged men occur without causing any signs of distress, four Chicago doctors report.

Their estimate is based on three cases of heart attack found among 20 middle-aged men who did not have any distress.

In a comprehensive study of 756 medical case records of a Chicago utility corporation's employees during a four-year period, 41 new cases of coronary heart disease of

all types were diagnosed. Of these, 20 definite cases of myocardial infarction were verified by electrocardiograph, but three, or 15%, were without symptoms. A total of 756 men from 50 to 59 years of age were studied, of whom 667 had no evidence of heart disease.

Drs. H. A. Lindberg, D. M. Berkson, J. Stamler and A. Poindexter, all of Chicago, report their study in the American Medical Association's Archives of Internal Medicine,



CHANGES IN TREMOR MEASURED MOMENT-BY-MOMENT

MEDICINE

New Monitoring Device Used During Surgery

► A MONITORING DEVICE has been developed at Northwestern University Medical School, Chicago, for measuring moment-by-moment changes in tremor during surgery for Parkinson's disease, also called "shaking palsy." The device utilizes an instrument originally developed for testing aerodynamic surface vibration in airplane wings and guided missiles.

Reporting on the technique at the Chicago Neurological Society were Drs. Joel Brumlik, Nicholas Wetzel, Benjamin Boshes, with Mathew Petrovick, electronic engineer who devised the instrumentation technique.

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