

MEDICINE

Cortisone Helps Hearts

► HEART DISEASE, adhesions and one kind of baldness are the latest conditions for which cortisone may be good medicine.

These new uses for the famous arthritis remedy were announced in Chicago at a meeting of the American Medical Association. They come on the heels of an announcement by one manufacturer, the Upjohn Company, Kalamazoo, Mich., that microorganisms can be used to produce the chemical from such readily available substances as yeast, Mexican yams and soybean by-products.

Because this method does in one step what formerly took a complex and costly series of chemical processes, the price of the drug could be cut 20% below the prevailing price. The manufacturing method is a mold fermentation process similar to that used for production of penicillin.

The kind of baldness which can be helped by cortisone is called alopecia areata. It is not the common type that afflicts middle-aged men. Women as well as men get this sometimes patchy, sometimes complete baldness.

The fact that women with this kind of baldness sometimes grow hair on their heads while pregnant led Drs. Calvin J. Dillaha, Stephen Rothman and Stanley M. Mesriow of the University of Chicago De-

partment of Medicine to try cortisone. The fact that arthritis improves temporarily in pregnancy was one observation which years ago led Dr. Philip Hench, co-discoverer of cortisone, to look for and try as soon as available this adrenal gland hormone in arthritis.

Of the 22 patients with baldness given cortisone, 16 got regrowth of hair. In most cases this began within a month after cortisone was started. In most of the patients, the regrowth was patchy but in some a satisfactory cosmetic result was obtained.

Possible use of cortisone for adhesions and for one kind of heart trouble, myocardial infarction, appears likely on the basis of research on animals reported by Drs. Schayel R. Scheinberg, Aran Johnson, Robert A. Gerisch and Harry C. Saltzstein of Harper Hospital, Detroit.

Myocardial infarction is a condition in which bits of the heart muscle die because of stoppage of a blood vessel nourishing that part of the heart. The dead bit of heart muscle is called an infarct. Cortisone reduced the average size of infarcts by 80% to 85% in dogs, the Detroit doctors report.

Adhesions in the abdomen and chest were reduced 75% to 80% by cortisone treatment, these doctors found.

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MEDICINE

Tube Unstops Intestines

► A METAL-TIPPED tube and a magnet are being developed into a life-saving surgical gadget that was shown for the first time at a meeting in Chicago of the American Medical Association.

The surgeon-inventor, Dr. John W. Devine, Jr., of Lynchburg, Va., got the idea for it from reading a popular account of a magnet five inches high that could lift a motor boat out of the water.

Dr. Devine and the chief engineer of the Indiana Steel Company have adapted this idea to a magnet that will help surgeons guide a tube down the throat, through the stomach, around the sharp bend from the stomach into the intestines and on through the many loops and curves of the intestines themselves.

Such tubes which can suck out fluids from the intestines sometimes prove life-saving in patients suffering from intestinal obstruction due to disease or after operations.

Guiding such a tube around the many curves has always been a difficult procedure. With the new device, a tiny piece of metal is at the end of the tube. The "Alnico-5" magnet, of aluminum, nickel and cobalt, is held over the patient's abdomen.

By watching through the fluoroscope the metal end of the tube the patient has swallowed, and by moving the magnet, the surgeon can guide the tube around the curves through the intestines.

A French surgeon 40 years ago had the idea of using a magnet for this purpose. But the magnet built for him was made the size of a piano in the hope of making it strong enough. It consequently proved impractical. Engineers now know that it is distance rather than size that gives a modern magnet its power.

The tube itself has some new features designed by Dr. Devine. Tubes formerly used, even when they could be gotten into the intestines successfully through the mouth and stomach, often sucked the wall of the intestine against the opening of the tube. This blocked the tube and made it ineffective and further endangered the already sick patient.

To get around this, Dr. Devine puts a tube within a tube. The inner tube acts as an air vent so that the suction built up pulls air rather than intestinal wall into the holes of the outer tube. Suction of fluid and gas thus continues effectively.

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● RADIO

Saturday, June 21, 1952, 3:15-3:30 p.m. EDT

"Adventures in Science," with Watson Davis, director of Science Service, over Columbia Broadcasting System.

Dr. Leon A. Hausman, professor of zoology at the New Jersey College for Women, Rutgers University, New Brunswick, N. J., discusses "A Scientific Look at Hair."

MEDICINE

Lewisite Antidote Treats Chrome Dermatitis

► BAL, A CHEMICAL developed by the British during the war as an antidote to lewisite gas poisoning, is helping patients with chronic chrome dermatitis, Dr. Harold N. Cole, Jr., of Western Reserve University School of Medicine, Cleveland, reported at a meeting in Chicago of the American Medical Association.

This skin disease afflicts lithographers and diesel mechanics as well as workers in the chromium plating industry. The diesel mechanics get the chemical on them because sodium bichromate is used to prevent corrosion in diesel engines and no satisfactory substitute has been found for it.

The skin irritation can be disabling.

Dr. Cole used BAL in a paste or ointment as daily treatment for seven chrome dermatitis patients who had had their skin trouble from one to 13 years. Two workers with mild cases who changed their work were completely cured in two months. Another, who did not change his work, was 75% improved after two months.

Two patients with severe attacks were put in the hospital for two weeks. Daily treatment with the BAL paste completely cleared their skins in that time. The trouble flared up again when they went to work, but BAL gave them 75% improvement, as well as another patient with a severe case.

The seventh patient, also a severe case, could not take the treatment because he developed a skin sensitivity to BAL.

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ENGINEERING

Four-Mile-Long Bay Bridge Spans Waist of Chesapeake

See Front Cover

► A FOUR-MILE-LONG bridge spanning the waist of Chesapeake Bay now is nearing completion. It is believed to be the longest continuous steel structure over water in the world.

Currently being paved, the \$44,000,000 structure of steel and concrete joins Sandy Point, near Annapolis, Md., to the eastern shore. Including approaches, the construction project sprawls 7.7 miles.

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