

## MEDICINE

# New Relief for Arthritics

**A gland chemical and vitamin combination may substitute for cortisone and ACTH in arthritic treatment. Good results of this treatment are reported.**

➤ A COMBINATION of a plentiful gland chemical and a vitamin may become a substitute for scarce cortisone and ACTH in treatment of arthritis.

Good results with this treatment are reported by Drs. E. Lewin and E. Wassen, of Sahlgren's Hospital, Gothenburg, Sweden, in the LANCET (Nov. 26), British medical journal.

The gland chemical they used is from the adrenal gland cortex, which is also the source of cortisone. But it is a different chemical, known as desoxycorticosterone acetate. The vitamin is ascorbic acid, or vitamin C.

Both vitamin and gland chemical were given by injection, the gland chemical into the muscles and the vitamin into the veins. Within five minutes joint pain in arthritis patients began to ease and the joints could be moved more readily. Fifteen to 20 minutes later, the pain had practically disappeared. The joints could be moved as much as the wasting of muscles and changes in the joints from the disease would allow.

All of the nine patients given this treatment reacted in the same way.

"In some cases the improvement was astounding," the Swedish doctors report. "One of the patients was completely crippled by pain and contractures after rheumatoid arthritis for 15 years. After one combined injection, she sat up with ease and moved her arms and legs about freely. All her pain had gone. It was noted that the skin became warmer and redder in the articular (joint) regions after the injection.

"Some patients became greatly exhilarated after the injections, more than one would expect," the doctors state, "from the mere relief of pain.

"The effect lasted from one to six hours, occasionally more than 24 hours. It seems as though it lasts longer with each further injection. In more acute cases one or two injections have been enough to banish the pain for two or three weeks (the present observation period)."

The good results with desoxycorticosterone are "unexpected," the LANCET editor points out. The Canadian scientist, Dr. Hans Selye of Montreal, has found that rats treated with this hormone over a long period often developed arthritis.

An American scientist, Dr. Edward F. Rosenberg of Chicago, tried this hormone in arthritis patients and found it of no benefit.

The Swedish doctors seem to have changed this chemical's action "profoundly",

the LANCET editor states, by giving it with vitamin C. But the editor warns that much more work will be needed before their observations on patients can be reconciled with Dr. Selye's experimental work.

If the Swedish doctors' results are confirmed, the editor states, "the discovery will be a great step forward" because desoxy-

corticosterone is made synthetically and is relatively plentiful, as is also vitamin C, whereas both cortisone and ACTH are rare and likely to remain so.

Vitamin C, the Swedish doctors found, was not effective in combination with the gland chemical when the vitamin was given by mouth.

Relief obtained from the combined treatment lasted four days after a pellet, or pill, of the gland chemical was implanted in the muscles of the patient and the vitamin injections were given every sixth to eighth hour. At the time of their report this had been tried only in one patient and only four days had elapsed since the pellet was planted in the patient's body.

Science News Letter, December 24, 1949

## GENERAL SCIENCE

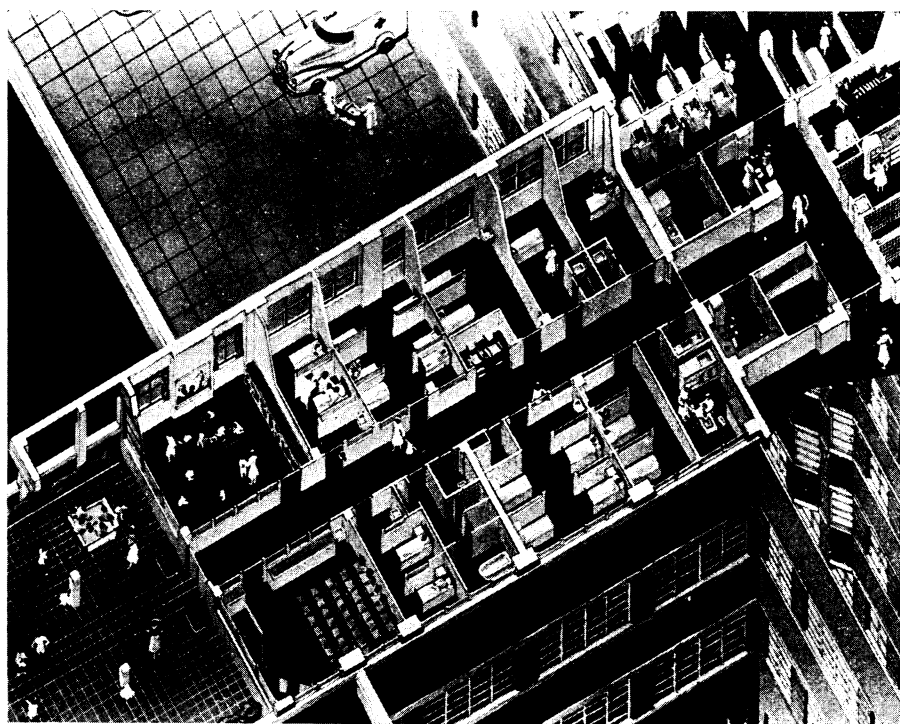
# Unified Science Is Possible

➤ THE welding together of all the sciences into one "unified science" lies in the imminent future. It is being made possible by the discovery of certain principles of interaction between things, beings, and groups, which are applicable to all sciences.

These ideas were presented at Yale University's Osborn Biological Laboratory in New Haven, Conn., by Edward F. Haskell,

research associate of the Foundation for Integrated Education.

By reducing the basic axioms and concepts of a given science, such as biology, to mathematical values, it is possible, Mr. Haskell said, to plot them geometrically, on a graph. This graph, which he calls a "coaction rose", is basically two straight lines at right angles to each other, like the



**FOR CHILD CANCER VICTIMS**—The proposed Children's Wing at Memorial Cancer Center, New York City, as shown above in three-dimensional drawing, is part of the expansion program planned by Memorial Cancer Center. John D. Rockefeller, Jr., has pledged a donation of \$2,000,000 toward the \$5,250,000 construction and teaching program, contingent upon the raising of a matching sum by the Center.