

MEDICINE

New Light Shed on Ills

Study of ferritin, a body chemical, has revealed the important role it plays in the regulation of blood flow to body tissues under conditions such as shock.

► NEW light has been thrown on the basic mechanisms of such diseases as high blood pressure, cirrhosis, circulatory shock and heart failure.

The important role played in the regulation of blood flow to the tissues in the body by a substance called ferritin has been investigated by Drs. Abraham Mazur and Ephraim Shorr of the Cornell University College of Medicine. They reported their findings at the meeting of the Federation of American Societies for Experimental Biology in Detroit.

Ferritin is a protein containing iron. It is somewhat similar chemically to hemoglobin. Previously known to serve as a storage reservoir for iron for the regeneration of red blood cells, ferritin has important effects on blood vessels.

The substance is released by the liver into the blood under conditions of oxygen shortage, such as occur in shock from blood loss or injury to tissues. And in heart failure it has the effect of relaxing the muscular vessels in the capillaries.

Together with another substance formed by the kidney, also under conditions of oxygen lack and with opposite effect on the capillary blood vessels, it appears to act as an important mechanism for the regulation of circulation to the tissues. This was shown through a series of tests on experimental

animals. A variety of disturbances of the circulation, such as circulatory shock, high blood pressure, heart failure and cirrhosis of the liver bring about the action of these two substances.

GEOLOGY

Is Crater Meteor-Made?

► A HOLE in Australia of tremendous proportions, estimated to be over half a mile wide, may prove to be a meteor crater second in size only to that in Arizona.

The rocky rim of the crater in places is a hundred feet or so above the level of the surrounding desert. On the inside the walls rise about 200 feet above the floor.

This "big hole" was found recently on the northeastern fringe of the Desert Basin. Its precise location is 64 miles south of the tiny hamlet of Halls Creek and some 400 miles inland from the coast, almost due east of Bromme.

There was no urge for any cattleman to climb what was seemingly a sterile stony ridge for no cattle would be there, Charles H. Holmes reports in *WALKABOUT*, the Australian Geographical Magazine. If cattlemen from leases on better country nearby knew of its existence, they apparently attached

Ferritin also has been shown to reduce urine flow when given intravenously in small amounts—an action which may be concerned with the formation of edema, which is the accumulation of water in the tissues, as in dropsy. This action on the urine flow can be prevented if the animal is immunized to ferritin prior to its administration.

The Cornell scientists reported chemical studies of ferritin which are designed to provide a background for further study of the manner in which the substance is dealt with in the body.

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little importance to it. There is no record available to indicate that anyone ever reported its existence in earlier years.

Then in June of 1947 Dr. Frank Reeves, geologist, and N. B. Sauve, geophysicist, both of the Vacuum Oil Company, flew over the region. They were intrigued to see below them a huge, perfectly shaped crater.

The geologists wondered whether the crater was of volcanic origin or whether it had been caused by a meteorite. It resembled in contour the great crater near Canyon Diablo in the Arizona Desert. This crater is believed to have been formed by a gigantic fireball striking the earth, but although many meteorites have been found in the neighborhood, its central core has never been unearthed.

Dr. Reeves visited the crater by traveling overland with geologist H. J. Evans and Dudley Hart, who piloted the Zinc Corporation plane from which the crater had first been sighted. The trip to the rim was made largely by jeep, then completed on foot.

At first the scientists thought the crater was probably of volcanic origin, for it was hard to believe that a meteorite blast could tilt the strata so regularly. But it is situated on a flat plain, and there is no evidence of a volcanic cone. Also volcanic or igneous rocks are lacking, so the meteoric theory won out.

Although excellent pictures of the crater have been taken from the rim and the floor, a well-equipped scientific expedition to the region is needed to study its origin.

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A railroad at Salton, Calif., is nearly 200 feet below sea level.

Norway is building a number of hydroelectric plants underground.

"Loon Able" is not a bird; it is the Air Force's term to designate a 2000-mile air "tract" from the Aleutian Islands over the Pacific which planes fly regularly to report weather conditions for international use by weather forecasters.



MAY BE METEOR CRATER—This gigantic hole, estimated to be over half a mile wide, was photographed from an airplane flying low over the Desert Basin in northwestern Australia. It may prove to be a meteor crater, second in size only to that in Arizona.