

MEDICINE

Nervous Stimulation Can Produce Ulcers in Stomach

MOST PATIENTS suffering from stomach ulcers and ulcers of the intestinal tract just below the stomach can be helped by medical treatment. Many of them get well, temporarily at least, without any treatment at all. Even in the worst cases, where an operation must be performed, there is slightly better than a four out of five chance for "cure."

This cheerful message was presented to the American College of Physicians by Dr. Walter C. Alvarez of the Mayo Clinic.

Dr. Alvarez described the efforts physicians and surgeons are making to find ways of curing the unlucky patient who does not get well with operation or present methods of treatment.

"Some persons show such a strong tendency to ulcers that if one is cut out another will form within the year," he explained. "Physicians are looking now for ways in which they can recognize these individuals immediately so that the operation can be avoided, or if this is impossible, so designed that there will be much less likelihood of recurrence of the trouble."

Nervous influences play a large part in the disease. Experiments have shown that stimulation of the nerves or irritation of certain parts of the brain will produce ulcers in the stomach. Persons with brain tumor are very apt to get ulcers. There are even cases of persons of nervous temperament who have all the symptoms of ulcer without an ulcer.

"One experimenter has become so convinced of the importance of the temperamental and psychic factors in the production of ulcer that he has given up experimenting on animals and says he will begin again when he finds some way of getting them to worry about the stock market," observed Dr. Alvarez.

"In many cases what the patient needs most is to let down on the strain of life, to shorten hours of labor, and to take a little vacation now and then when the stomach gets to hurting," he advised.

The gastric juice has been found to have a corrosive action on the lining of the digestive tract, but recently a way has been found to protect the walls of the stomach from the acid. This con-

sists in giving washed and dried and powdered mucin from the mucous lining of animals' stomachs.

"Some of the results obtained are encouraging but it is too early yet to estimate the value of this treatment," Dr. Alvarez commented.

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ARCHAEOLOGY

Corroded Coins May Set Date of Persian Palace

ANCIENT COINS, badly corroded, are being closely examined by archaeologists, in the hope that these bits of metal will establish the age of the Persian Palace unearthed in Tepe Hissar, said C. Ross Smith of the University of Pennsylvania Museum, in a radio talk under the auspices of Science Service, over the Columbia Broadcasting System.

The palace, recently unearthed by the museum's Persian expedition, belongs to the Sassanian Dynasty, which ruled between 220 and 650 A. D. Prior to the recent discoveries, not much had been known about this early dynasty.

GEOLOGY

Great Submarine Gorge Acted As Dump Cart for Glaciers

HOW the mysterious "new" submarine canyon in the sea floor off Georges Bank and the New England Coast made its sudden debut by acting as a huge dump wagon, sliding its load of Ice-Age debris out when jarred by an earthquake, is told by Prof. Francis Parker Shepard of the University of Illinois.

Corsair Gorge is the name of the new feature on oceanographic maps of the North Atlantic. It apparently wasn't there before the earthquake of November, 1929, which wrecked most of the transatlantic cables off the Grand Banks, 600 miles to the north. It was there by Christmas of the same year, when it was

The palace, built of burnt, sun-dried brick, was admirably planned, Mr. Smith stated. The entrance he described as having been impressively beautiful. The portal was flanked by columns, apparently with life-sized lions as guardian deities. The columns were covered to a height of six feet with richly modeled stucco ornament.

The main hall of the palace was vaulted, and supported by eight large columns. Rich mural paintings in purplish red, blue, carmine, white, and ochre evidently covered the walls. From the fragments that remain, the excavators could distinguish the picture of a horseman at full gallop, other pictures of boars' heads, and the portrait of a smiling Sassanian queen or princess wearing a pearl necklace and with her hair bound in a simple fillet. Some of the pictures contain Sassanian symbols which have not yet been identified, but which may throw an important light on the date of the building, the speaker said.

"The ornaments of some of the vaulted arches are particularly beautiful," he continued, "and clearly indicate unsuspected origins of certain Islamic patterns that were common in sixteenth century Persian carpets. The exact nature of these patterns has hitherto been obscure."

The date when the palace was occupied is tentatively set at about 300 A. D., Mr. Smith reported.

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first detected by the sounding apparatus of the steamer *Transylvania*. Its presence was confirmed through a careful survey by the U. S. Coast and Geodetic Survey.

Corsair Gorge stood as a challenge and a mystery to oceanographers. It did not appear to be the result of a sudden drop in the ocean floor. Neither did it seem to be a drowned river valley.

Prof. Shepard disposes of its newness by advancing the hypothesis that it is not new at all. He holds that the gorge originated as a deep cut, excavated by a river when the land was much higher than at present, probably millions of years ago. Then subsidence of the land decreased the valley. Later, during the