

MEDICINE

Treat Ulcers by Continuous Drip of Milk Into Stomach

Kidney Extract That Reduces Blood Pressure in One Type of Disease, Auto-Transfusion, Also Reported

A CONTINUOUS feeding of milk, drop by drop, into the patient's stomach is the new method of treating stomach ulcers reported by Dr. Asher Winkelstein of New York to the Medical Society of the State of New York meeting at Rochester.

Frequent feeding of small amounts of milk and cream has for years been part of the standard medical treatment of stomach ulcer. The milk together with alternating doses of alkaline powders, such as bicarbonate of soda, is given to neutralize the acid normally secreted by the stomach but which irritates the ulcer and prevents its healing.

Dr. Winkelstein's modification of this method into a constant feeding of milk, a drop at a time through a tube, is based on studies of stomach secretion especially at night.

The importance in connection with stomach ulcers of nervous over-secretion of acid by the stomach was emphasized by Dr. Winkelstein.

Blood Pressure Reduced

A kidney extract which not only reduces the high blood pressure accompanying one kind of kidney disease but has saved lives of dying patients and restored the eyesight of others threatened with blindness was described by Dr. Benjamin Jablons of New York.

About half the patients treated showed a definite drop in blood pressure with definite improvement in general condition, Dr. Jablons reported. Kidney function and salt excretion were improved, dropsy disappeared, and the uncontrollable nausea and vomiting, headache and shortness of breath of chronic uremia were relieved.

Auto-Transfusion

Blood sucked mechanically from the mother's body and injected back into her own veins has helped 38 women recover from childbearing that was dangerously complicated by development of the baby outside of the womb, Dr. Arthur J. Wallingford of Albany reported.

Dr. Wallingford hit upon the idea of this autotransfusion when he noticed, during the operation to save the patient's life, that large amounts of blood had escaped from the veins into the peritoneal cavity in these mothers, and that the women were in immediate need of more blood in their veins and arteries.

The advantages of using this blood in autotransfusion, which is performed before the patient leaves the operating room, are that there is no need for another donor and that the blood is immediately available when it is urgently needed.

PALAEOBOTANY

Newly Discovered Plant Fossil Doubles Life of Land Plants

THE WORLD'S oldest land plant, estimated to be about 500,000,000 years old, or almost twice as old as previously discovered specimens, has been detected from its fossil remains by a Harvard scientist.

The primitive shoot, found in black oil shale from Sweden, is believed to have lived during the Cambrian era, a fact that substantially doubles the known age of higher plant forms on earth. Previous evidence has indicated that plant life first emerged from the water during the uppermost Silurian period or just under 300,000,000 years ago.

Investigators have for some time suspected that land plants probably existed during the earlier Cambrian period from a study of the fossils of animals of that era which must have depended to some extent on plants in their diet. This indirect evidence, however, has never previously been confirmed by discovery of the remains of the plants themselves.

William C. Darrah, instructor in botany and research curator of Harvard's Botanical Museum, identified the Cambrian plant, an accomplishment enabled

Anesthetic Recommended

Vinyl ether, one of the new anesthetics, was "highly recommended" in cases of childbirth attended by the general practitioner and the less experienced anesthetist in a report by Dr. Wesley Bourne of Montreal, Can.

This anesthetic, Dr. Bourne said, is safe for mother and child, is easy to give, acts rapidly, can be readily controlled, and recovery from it takes place quickly and uneventfully.

Vinyl ether resulted from the pencil-and-paper calculations of a California scientist, Dr. Chauncey D. Leake, who figured that a compound which combined the structural characteristics of ethyl ether, the ordinary ether anesthetic, and ethylene, which had to be abandoned because of its danger, would be a good anesthetic.

For experienced obstetricians, Dr. Bourne recommended nitrous oxide for intermittent anesthesia during the early stages of labor followed by cyclopropane, another new anesthetic, in the last stages.

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by a new process in which a transparent cross-section only one twenty-five-thousandth of an inch thick can be peeled from a fossil for microscopic study.

Examined with the new peeling technique, however, the shale was found to contain minute plant spores, barely visible to the naked eye. Each is marked by a small three-pointed star or tetrad-scar, a characteristic of early growth stages in higher plants but not found in the more primitive water plants.

Another characteristic of land plant spores was also detected, their wax coating which wards off water and decay. Because of this coating the spores have been preserved through the ages while the fleshy parts of the early plants have been crushed and destroyed.

The plant itself, Mr. Darrah believes, was probably a very simple green shoot, devoid of either leaves or flowers. It had only the bare essentials of land life. While considerably more primitive, it was in many respects similar to the *Rhynia* of the Silurian period, oldest previously known plant form.

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