

MEDICINE

Multiple Sclerosis Laid To Blood That Clots Too Easily

Reverse of Bleeders' Disease Caused by Too Much Fibrin Results in Clots in Small Veins of the Brain

BLOOD that clots too easily, a condition quite the reverse of hemophilia, the bleeding condition made famous because it afflicts members of European royalty, was put forward as the fundamental cause of the hopeless nerve disease, multiple sclerosis.

Experiments indicating this blood abnormality plus such outside influences as injury or infection cause the mysterious nerve disease were reported by Drs. Philip Solomon, Mary E. Dailey and Tracy J. Putnam of Harvard Medical School and Boston City Hospital at the meeting in Atlantic City, N. J., of the American Society for Clinical Investigation.

Pinning the disease onto a blood condition gives an entirely new and possibly more hopeful approach to the attack on the disease, since medical scientists have till now concentrated their efforts on finding an infection or poison which might be the cause of the malady.

Increasingly Common

Multiple sclerosis, once considered a rarity in America, is today becoming increasingly common, according to medical authorities. A patient rarely dies of the disease but he may be virtually helpless over a long period of years. Its most marked symptom is a progressive inability to walk. It is characterized by episodes of weakness from each of which a marked recovery is made, although the patient is left slightly weaker each time until paralyzed. Hardening of disk-like patches on the nerves gives the disease its name, multiple sclerosis, which translates into "many hardenings."

The discovery that a blood condition is at the base of this nerve disease rests on recent research of Dr. Putnam's. He found evidence that the disease is due to many blood clots forming in the small veins of the brain and spinal cord and obstructing these blood vessels.

Following this lead, Dr. Putnam's colleagues investigated the blood of multiple sclerosis patients to find whether it clotted more easily than blood of healthy persons.

A large proportion of the patients, they found, had more fibrin in their blood than normal persons. Fibrin is the essential portion of blood clots. The blood of multiple sclerosis patients does not ordinarily clot any more rapidly than that of normal persons. Its clotting, however, is greatly increased when the patients are given adrenalin or typhoid vaccine.

Explains Onset

This explains for the first time, Dr. Solomon pointed out, the well-known fact that the onset or increases in severity of multiple sclerosis are often associated with injury, operation, exposure, infection, immersion, pregnancy or severe emotional excitement.

Any of these factors, but probably chiefly infections and injuries, occurring

to persons whose blood clots more easily than normal, probably cause the numerous blood clots in veins of brain and spinal cord which, in turn, bring on the disease.

Science News Letter, May 18, 1935

MEDICINE

Convulsions in Childbirth Laid to Lack of Protein

FAULTY diet was blamed for many of the cases of convulsions in mothers at childbirth in a report by Dr. Maurice B. Strauss of Thorndike Memorial Laboratory, Boston City Hospital, at the meeting of the American Society for Clinical Investigation.

These convulsions are characteristic of a group of diseases known as toxemias, which accounts for one-fourth of all maternal mortality, Dr. Strauss explained.

Feeding a diet containing a large proportion of protein foods in the early stages of this disorder, together with the injections of certain extracts, caused all symptoms to subside in the patients studied, Dr. Strauss reported.

"If the expectant mother does not eat enough protein food—meat, fish, eggs and milk—instead of losing weight she gains weight excessively, but this weight



GOOD JOB WELL DONE

Drs. John Strong and Enrique Gaviola of California Institute of Technology inspect the gleaming surface of the great 100-inch mirror of the famous Mt. Wilson Observatory telescope, just coated with aluminum instead of the customary silver. Dr. Gaviola, professor from Buenos Aires on leave in this country on a Guggenheim exchange fellowship, assisted Dr. Strong in applying the aluminum by the latter's evaporation technique. Also assisting in the gigantic operation, which increases the light-gathering power of the telescope, were Milton L. Humason and Ferdinand Ellerman of the Observatory staff.

consists of water or 'occult dropsy,' Dr. Strauss said in reporting his latest studies on the condition.

In many cases this condition leads to what physicians term eclampsia, with convulsions and coma, or complete loss of consciousness, which frequently results in the death of both mother and child.

Studies which he began five years ago suggested that many of the toxemias which take such a toll of mothers and in-

fant are the result of diets lacking proper nutritive qualities. For example, if the expectant mother does not receive enough iron in her diet, one type of anemia results. If she eats food low in the vitamin B complex, she may get a form of nerve paralysis or a primary type anemia. The importance of protein in the the expectant mother's diet is the latest discovery Dr. Strauss has made in the course of these studies.

Science News Letter, May 18, 1935

ORNITHOLOGY

Voices of Southern Birds Recorded For Movie Films

WANTED: the sweetest-voiced mockingbird in the South.

This is not the announcement of a radio audition for budding opera stars down in Dixie, but part of a sober scientific program being carried on by the Cornell University-American Museum Ornithological Expedition, now in the field in the Gulf Coast region. The scientists in charge have already succeeded in recording the voices of several mockingbirds, and when they played them again, in a Georgia garden, they drove all the other mockingbirds in the neighborhood crazy. They flew frantically about, and even peered into the apparatus, seeking the singer.

The expedition is travelling in a truck specially equipped for taking motion pictures and song records of birds. It even has a light tower which can be run up quickly on top, to get the observers and records into the birds' treetop homes. This set-up has caused a good deal of excited interest among the people of the countryside as well as among the birds.

Already, reports Dr. A. A. Allen of Cornell University, leader of the expedition, a considerable number of birds have been placed on record. These include wild turkey, bald eagle, fish hawk, wood ibis, egret, pelican, cormorants and various species of gulls and other shore birds. Less familiar species which have also been filmed and recorded are limpkin, anhinga, Audubon's caracara and the exceedingly rare sandhill crane.

One of the main objectives of the expedition has been to find the ivory-billed woodpecker, which is now very near extinction. Ten years ago, after it was thought to be extinct, Dr. Allen rediscovered a few last individuals in a remote cypress swamp of central Florida, and he recently completed a search in the same region for a final remnant of this beautiful bird, but as yet without success. At present the expedition is in Louisiana, where a few ivory-bills still remain, and Dr. George Sutton, the artist of the expedition, making studies from life of the ivory-bill and other rare species.

The expedition is a joint enterprise of Cornell University and the American Museum and is being financed by A. R. Brand of the Museum, who is also an associate in ornithology at Cornell University.

Science News Letter, May 18, 1935

ARCHAEOLOGY

Writing by Babylonian Wife Tells of Buying Second Wife

LETTERS written by women of old Babylonia are harder to decipher than the writings of male correspondents, but more interesting to read.

Thus is letter writing of 4,000 years ago summed up by John B. Alexander, graduate student of Yale, who has deciphered love letters, royal messages, and business documents in the Yale Babylonian Collection.

The surprising discovery of a Babylonian wife purchasing a second wife for her husband was mentioned by Mr. Alexander as he reported his researches before the Semitic and Biblical Club at Yale.

Describing this strange business transaction, Mr. Alexander said:

"The record of the purchase of a second wife is in the form of an adoption, the first wife adopting the second wife as her sister and giving her to her husband as a wife.

"The possibility that all might not go smoothly is provided against in the stipulation that if the husband should decide to divorce his first wife, she shall take away with her all the property of the second wife. But if the first wife becomes jealous and wishes to leave her husband, she shall have nothing!"

The picture of women attempting to get money from men is as old as Babylonia, as shown in a letter described by Mr. Alexander:

"Tarish-matum writes to Kubutum begging him to send her a shekel of silver. She has written ten times and he hasn't answered her. She hasn't a single measure of meal. In the name of Pa-bil-sag, would he send her one shekel. A second part is appended to the letter, ad-

dressed to another man, asking him in honeyed words to use his influence and see that Kubutum sends her the money."

This shows that people in Babylonia sometimes could not read and had to have their letters read to them, for the second part of this letter was not intended for the eyes of the tight-fisted Kubutum.

Another ancient "gold-digger" resorted to poetry, calling the man addressed "her cedar in whose shadow she finds shelter." The home of her fathers, she explained, would have to be sold. But all she asks is enough to bury her. The reply to this eloquent appeal has not been found.

Science News Letter, May 18, 1935

PHARMACOLOGY

Pharmacist Given Highest Professional Award

THE Remington Honor Medal, highest award in pharmacy, was awarded for 1935 to Samuel Louis Hilton, retail pharmacist of Washington. Dr. Hilton receives this award for his many years of service to his profession and particularly for his efforts in connection with the building of the American Institute of Pharmacy which was completed this year.

Dr. Hilton is a native of Washington and has conducted a retail pharmacy here for 46 years in addition to giving much time to activities of pharmaceutical associations. All the medicine given to the late William Howard Taft, former President and Chief Justice, was prepared by Dr. Hilton.

Science News Letter, May 18, 1935