

MEDICINE

Anticoagulants May Fail

The use of anticoagulants as preventive treatment in coronary heart disease has been criticized since it fails to account for the stress factor.

► THE ANTICOAGULANTS President Eisenhower has been taking were unable to prevent his recent "stroke" because of the emotional strain he is under.

Dr. Henry I. Russek, U. S. Public Health Service Hospital, Staten Island, N. Y., spoke about the use of anticoagulants in coronary heart disease to the American College of Chest Physicians meeting in Philadelphia, saying that the failure of such agents is not unusual in cases like that of the President.

"Despite meticulous administration of anticoagulant drugs by eminently qualified physicians, the President has suffered a stroke resulting from closure of a cerebral vessel by a blood clot," he said.

The explanation for this failure in preventive treatment can be found in recent evidence that blood clotting is speeded up by emotional stresses.

Anticoagulant drugs may delay certain chemical reactions involved in blood clotting, but they fail to give full protection in persons under stress.

"Modern physicians must inevitably return to the concept of a generation ago which recognized emotional 'stress and strain' as the leading factor in the causation of 'coronaries' and 'strokes,'" Dr. Russek said.

Daily stresses not only accelerate clot formation but raise the cholesterol level of the blood. A study of 100 young coronary patients, between the ages of 25 and 40, showed the 91% of the victims were either holding down two jobs or working 60 hours a week or more.

The skillful management and prevention of coronary disease can only be achieved by proper balance between work, rest and play. During periods when undue stress is unavoidable, tranquilizers and sedatives may be valuable in lessening the damaging effects of the emotions on the body, he concluded.

Strokes to Be Studied

► A LARGE-SCALE study to find out if anticoagulant drugs can prevent what has happened to President Eisenhower has been announced by Surgeon General Leroy E. Burney, U. S. Public Health Service.

The research project is specifically concerned with preventing cerebral "stroke," a term often used by laymen to describe the President's attack, by means of anticoagulants. These are drugs that lower the blood's ability to clot. They have been used to treat the President.

The study will be made by six medical research centers and will be completed within three years. A group of about 1,800 patients will be studied and will provide

a faster evaluation of anticoagulant treatment than could be made by any one institution in the same time.

Strokes and cerebral vascular diseases rank after heart disease and cancer as killers, and take an estimated 172,000 lives annually in this country.

The study is companion to a broad, nation-wide cerebrovascular research project launched last April by the National Institute of Neurological Diseases and Blindness, Bethesda, Md., to collect and evaluate data on the nature and causes of cerebral strokes as well as on treatment methods.

Science News Letter, December 14, 1957

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Treatment of Strokes Tough Medical Problem

► "STROKE" conditions put doctors between the devil and the deep blue sea as far as treatment is concerned.

Dr. Derek E. Denny-Brown, Harvard Medical School, Boston, Mass., told the American Medical Association meeting in Philadelphia that vascular spasms in the brain are best treated by lowering the blood pressure. However, when this is done it can cause an equally serious condition known medically as cerebral vascular insufficiency.

This is actually a problem of supply and demand. The brain does not get the full amount of blood it needs and, as a result, such symptoms as aphasia, or speech difficulty, weakness and mental confusion occur.

The whole problem is immensely complicated by high blood pressure and atherosclerosis, Dr. Denny-Brown said.

Vascular spasms take place in persons with continued high blood pressure when segments of the brain arteries constrict or close down because of internal pressure. Brain damage related to the spasm begins as even more persistent narrowing of the constricted vessels continues, until not enough blood gets through to nourish part of the brain.

Blood pressure-lowering drugs can be used when this happens, and they bring the most rapid and direct relief, Dr. Denny-Brown said.

But if the pressure then falls below a certain critical level, it cannot drive the blood through these same arteries, partially closed down from pressure and aging.

Too little pressure, then, brings back the symptoms of aphasia and confusion.

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