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MEDICAL MEETINGS AT ATLANTIC CITY

HIGH blood pressure, one of the unsolved medical problems, is more common in women but more serious in men, according to a report by Dr. R. L. King, Dr. Thomas Carlile and Dr. J. M. Blackford, of the Mason Clinic, Seattle, to the American Heart Association meeting in Atlantic City. Among 794 patients found to have high blood pressure in general examinations given between 1924 and 1930, the women predominated in a ratio of 3: 2. However, twice as many women as men were living 10 to 16 years later. Of the total group followed up 10 to 16 years later, 128, or a little over one fourth, were still living, with 353 dead. Fourteen lived 15 years or longer after their high blood pressure was first noted. Heart failure caused twice as many deaths in this group as any other single cause. Heart enlargement may occur in high blood pressure patients in a relatively short time. This depends for the most part on how high the blood pressure is and how long it remains high. The influence of high blood pressure on the expectation of life is "striking," they said. Men 40 to 45 years old, with a life expectancy normally of about another 25 years, lived only about five years longer. The seriousness of the outlook for high blood pressure patients is, in general, influenced by the height of the blood pressure, advancing age, and the presence of signs of progressing changes in the blood vessels, especially in the brain, heart and kidneys.

Cause of the undue fatigue, shortness of breath, dizziness, fainting and even distress or pain around the heart in patients with varicose veins of the legs is the pooling of the blood in the varicose veins, was announced by Dr. Earle M. Chapman and Dr. Erling Asmussen, of Massachusetts General Hospital and the Harvard Fatigue Laboratory, at the meeting of the American Heart Association. "In the aged and in those with known heart disease, the added burden from varicose veins may be enough to provoke severe symptoms." Wearing elastic stockings or an operation to cut off the blood supply to the varicose veins relieves the symptoms. The reason why the cause for the symptoms had not previously been recognized may have been because the symptoms usually are moderate in nature and seldom lead to actual heart failure. The problem was investigated after the examination of a patient who was thought to have angina pectoris or some other kind of serious heart trouble. Careful examination disclosed no sign of heart disease, but when the patient got off the examining table one of the doctors noticed the large varicose veins in her legs enlarging as they filled with blood. He suddenly had the idea that the pooling of the blood in these veins might have caused such a decrease in the amount of blood returned to the heart by the veins that there was a deficiency in blood flowing through the heart's own artery which would cause heart pain. This patient obtained relief by wearing elastic stockings on both legs. Investigation then revealed that almost a fifth of the patients with varicose veins, 47 out of 250, complained of undue shortness of breath that was relieved when they lay down. Studies of blood circulation in normal persons and those with varicose veins when changing from recumbent to standing posture confirmed the idea that the pooling of the blood in the varicose veins could interfere with the circulation enough to cause the heart pain and other symptoms.

Fever artificially induced by certain chemicals or by triple typhoid vaccine will significantly reduce blood pressure, particularly in patients suffering with high blood pressure, according to Dr. Herbert Chasis, Dr. William Goldring and Dr. Homer W. Smith, of New York University College of Medicine. Repeated doses of the fever-inducing substance will keep the blood pressure at lower levels, even when the fever itself is kept from developing by first giving amidopyrin. The treatment, however, can not be called a "cure" since it does not correct the fundamental process that causes the high blood pressure. The substances used besides the triple typhoid vaccine were a kind of sugar called inulin and tyrosinase, the enzyme that blackens potatoes which had previously been reported as a blood pressure reducing chemical. None of these caused any harm so far as could be observed, but they must be used cautiously. This was shown by the alarming experience with one patient whose blood circulation was slowed down so far that she became unconscious following treatment with the triple typhoid vaccine. The blood pressure lowering effect of the fever-inducing substances is believed to be the result of an "adverse" reaction of weakness on the part of the heart and blood vessels. The practical value of the results of the treatment was not the discovery of a new remedy for high blood pressure, but the new light thrown on the action of other remedies that might at first seem to be effective in treatment of this condition. They may owe their apparent effectiveness as high blood pressure remedies, it now appears, to the fact that they are contaminated with common bacteria related to the typhoid fever group of germs. These germs and substances from them may cause fever and may also reduce blood pressure. The chances for blood pressure reducing remedies becoming contaminated with these germs are plentiful. It is pointed out that such contamination must be ruled out before the remedies themselves can be credited with reducing blood pressure.

Scleroderma, the strange hidebound condition of the skin sometimes seen in "the man who turned to stone" of the circus side shows, is a disease affecting the entire body and not just the skin, was reported by Dr. A. Wilbur Duryee and Dr. Irving Leinwand, of New York Post-Graduate Medical School, Columbia University, to members of the American Heart Association and the American Therapeutic Society. Brain wave records, the first ever taken on such patients, showed abnormal tracings in a high percentage of cases. It is possible these reflect injury or disease of the blood vessels of the brain, although no definite conclusions on this point can be made yet.

The trouble begins with the blood vessels, and not with the skin, in the opinion of the authors. The outlook in scleroderma is more serious than is usually believed. No specific treatment has yet been discovered. Thyroid and female sex hormone extracts, vitamins C and B, and mecholyl iontophoresis to increase blood flow to the affected parts of the skin are preferred methods of treatment. All possible factors that could cause inflammation of the arteries or spasm of the blood vessels, such as heavy metals, arsenic, tobacco, ergot and allergens of various kinds and mechanical injury, should be eliminated if possible.

More sneezes and other trouble for hay fever sufferers this summer is expected by Dr. O. C. Durham, chief botanist of the Abbott Laboratories, North Chicago. He warned members of the American Association for the Study of Allergy to be on guard against new sneeze trouble from the pernicious weed known as Mexican fireweed, burning bush, fireball, firebush and summer cyprus. The weed is now rampant in Iowa, Nebraska, and Colorado and is threatening adjacent states. It has been found as far east as Detroit and as far south as St. Louis. For many years small colonies have been found from time to time along the Atlantic coast. It did not come from Mexico, in spite of one of its aliases, but from southern Europe or Asia. It may have got its start as a weed pest by reversion from a cultivated variety commonly used as a decorative plant under the name summer cyprus. The botanical name for the weed is *Kochia scoparia.* The acreage of the weeds in the newly infested areas so far is more impressive than the output of pollen, but it takes only a small amount of the pollen to cause a great deal of suffering. This weed may drive out some of the ragweed which causes so much hay fever, but, says Dr. Durham, even if it "should succeed in replacing as much as half of the acreage of ragweed in the farming area of the Mississippi Valley, the reduction of the ragweed content of the air could probably hardly be noticed by ragweed sufferers. An appreciable volume of a new and unrelated air-borne allergen in that area would certainly complicate a difficult situation."

Prospective brides and grooms of the future may have their brain waves studied before marriage to rule out epilepsy in their offspring just as many now are required by law to have pre-marital blood tests for detection of unsuspected syphilis. This possibility appears in a report by Dr. William G. Lennox, of Boston, to the American Medical Association. "Epilepsy is not inherited but a predisposition to epilepsy may be inherited. The predisposition may possibly be evidenced by a hereditary cortical dysrhythmia (disturbed rhythm of the gray matter of the brain). The problem of epilepsy and related disorders is the personal concern not merely of the half million persons who are subject to seizures, but of the 10,000,000 or 15,000,000 persons who have abnormal patterns of brain wave activity. This means that questions of marriage and children apply not only to persons with seizures, but to this very much larger group who may be capable of transmitting the dysrhythmia and the predisposition." Physicians may be able to give specific instead of generalized advice to epileptics and their relatives about marriage and children, taking into account the brain wave record of the supposedly normal marriage partner and other valuable and inheritable traits which may outweigh the presumably undesirable trait of abnormal brain waves. Abnormal brain wave rhythm, Dr. Lennox stated, "is not a fixed trait but may be modified and perhaps corrected by chemical means. This possibility is enhanced by the beneficial effects observed from the use of the non-sedative drug, phenytoin sodium (also known as dilantin sodium). Other disorders of the nerves or of conduct not generally identified with epilepsy also have disturbances of brain rhythm. Of children with 'behavior problems,' inmates of prisons, the victims of migraine or of schizophrenia, a third or more have disordered brain rhythms." He stated that new possibilities of treatment are opened by these observations.

Near-sightedness could be eliminated, bred out of the human race, by banning marriages between near-sighted people, according to Dr. Lawrence T. Post, of St. Louis. The large number of near-sighted Germans today is probably due to the fact that such eugenic mating was not practiced in Germany. There is little evidence to show that this is anything but a hereditary defect and is handed down just as other physical characteristics are. Even if complete eugenic mating can not be achieved, it may at least be possible to prevent the marriage of two people afflicted with extreme near-sightedness. Besides eyeglasses to correct the near-sighted condition, Dr. Post advised the following treatment for the near-sighted child: "a well-rounded diet with a quart of milk or its equivalent in calcium each day; maintenance of a good posture, especially not stooping when reading, in which position the eye hangs by the optic nerve almost unsupported, as a grape from its stem; a good light, work at not too close a distance from the eyes, and if general examination indicates it, adequate dosage of thyroid."

Dr. Philip Cohen and Dr. Samuel J. Scadron, of New York, announced that new-born babies can be protected from whooping cough by vaccinating their mothers during the last three months before the babies are born. "Whooping cough is the dread contagious disease of infancy. During the first two years of life it is the cause of more deaths than measles, diphtheria, infantile paralysis and scarlet fever combined." Babies are usually born with an endowment from their mothers of immunity against these latter diseases, the immunity lasting about six months. Against whooping cough, however, they have no such protection and efforts to make them resistant to the disease by vaccination early in life have been unsuccessful. Apparently the new-born baby is not capable of producing antibodies against whooping cough, even under the stimulus of vaccination. But if his mother is vaccinated before his birth, defensive forces against whooping cough which develop in her blood are transferred through the womb to the baby. The importance of this new method of protecting new-born babies from whooping cough by vaccinating their mothers was emphasized

by the report that when this disease attacks a very young baby, it may prevent his normal mental and personality development. More than half of a group of 58 children who had had whooping cough before the age of two years showed "definite behavioral, intellectual and personality changes later in life, apparently as a direct result of this infection," according to Dr. Louis A. Lurie and Dr. Sol Levy, of Cincinnati. In most cases, the attack of whooping cough occurred between the third and seventh months of life, but the children were first brought to the Child Guidance Home at the ages of 10 and 11 years. Besides the behavior problems, ranging from incorrigibility to behavior indicative of mental disease, below-average intelligence was found in 24 of the 58 children and 10 were definitely feeble-minded. This amount of subnormal mentality is much greater than in the entire group of children at the Child Guidance Home. Dr. Lurie stated that in all probability the changes found "are due to definite organic lesions (injuries) produced in the brain during the attack of whooping cough."

Safer operations, with fewer complications and smoother convalescence, may be achieved with the aid of one of the new sulfa drugs, succinyl sulfathiazole, was reported by Dr. Edgar J. Poth, of Baltimore. This drug is given before and after operations on the lower part of the digestive tract, where chances for serious germ infection are especially great. Within one to seven days after starting to give this drug, the bacteria ordinarily found in the colon have dropped from an average of 10,000,000 to less than 1,000. The drug not only checks the growth of the bacteria, but actually kills them, it appeared from studies in which the decrease in numbers of bacteria could only be accounted for by their death, since they could not escape to other parts of the body.

Approximately 60 per cent. cures of alcoholism in 1,000 cases followed for from six months to six years after treatment were achieved by the "conditioned reflex method," according to a report made by Dr. Frederick Lemere, Dr. Walter L. Voegtlin, Dr. William R. Broz and Dr. Paul O'Hollaren, of Seattle. The patients are treated by injections of emetine, which produces prompt vomiting of imbibed alcoholic beverages which are urged on the patient for 30 to 45 minutes after giving the emetine. This is said to establish a reflex aversion to the sight, taste, smell and thought of alcoholic beverages. Reason why the vomiting many alcoholics do in the course of their drinking does not create the curative aversion to liquor is, it was explained, "that by the time the vomiting occurs the patient is foggy mentally and does not care much what happens to him. In order to establish a conditioned reflex the patient's mind must be clear." Patients under thirty years of age and women were especially difficult to treat, the relapse rate being over twice that of other patients.

Eating a reasonably good diet and taking extra vitamins in the form of pills or other preparations will not ward off colds or other infections of the upper part of the breathing tract. Studies showing this were reported by Dr. Donald W. Cowan, Dr. Harold S. Diehl and Dr. A. B. Baker, of Minneapolis. Tablets of synthetic vitamin C, the anti-scurvy vitamin of citrus fruits, were given daily to a group of 183 students at the University of Minnesota throughout the "cold season" of 1939–1940. Candy tablets of the same size, shape, appearance and taste as the vitamin C tablets were given to another group of 194 students. Students getting the vitamin C tablets had 1.9 colds per person during the season, as compared with 5.5 colds per person the previous year, a reduction of 65 per cent. The students getting the candy tablets, however, had a reduction nearly as great, 62.7 per cent., in the number of colds over the previous year. Statistically, this is a significant difference "and vitamin C supplement to the diet may therefore be judged to give a slight advantage in reducing the number of colds experienced." However, the practical importance of such a difference, it was stated, may well be questioned. The following year students were given not only vitamin C but also doses of vitamins A, D, B_1 and B_2. There was no difference in the number of colds among students getting these vitamins and those getting the candy tablets.

A greater risk of getting stomach ulcer comes from eating hurriedly, overeating, eating when tired, worried or angry than from eating any particular kind of food, according to Dr. Russell S. Boles, of Philadelphia. Only persons of a certain type will "produce an ulcer," Dr. Boles stated. This type is characterized by instability of the autonomic nervous system, which acts without conscious control. In some of these people, "outward calm may hide inner chaos. As a rule these individuals have effectual energetic personalities and they live in a constant state of excitement, anxiety, fear or some other emotional ferment." Dr. Boles's advice to ulcer-susceptible persons: Feel free to eat what agrees with you, but avoid eating it when tired or in a bad state of mind; generally speaking, alcohol and other irritants to the stomach should be used, if at all, in great moderation; tobacco should be restricted to not more than six cigarettes daily, and these should not be smoked on an empty stomach; rest after eating when possible and don't subject the nervous system to the effects of too great application of the mind and too little manual activity.

Babies of cigarette-smoking mothers apparently develop a tolerance to nicotine before they are born and are not affected by the nicotine that gets into the milk of all smoking mothers. Studies showing this were reported by Dr. H. Harris Perlman, Dr. Arthur M. Dannenberg and Nathan Sokoloff, of Philadelphia. The quantity of nicotine that would produce poisonous effects in an infant is not known. The first poisonous symptoms from nicotine, it has been shown, appear after the intake of one to four milligrams. The actual amounts of nicotine obtained in a feeding by the infants in the study were practically all below the poisonous threshold. No reduction in supply of milk was found in the 55 mothers who had all smoked before their babies were born and continued to smoke within two days after confinement.—JANE STAFFORD.