

Eyestrain May Be Caused by "Nerves"

Medicine

"Ocular Neurosis" Often Results From Fear

EYESTRAIN, so-called, is more apt to be the result of "nerves" than of any disease of the eyes.

Dr. George S. Derby, of Boston, described to the American Medical Association a number of cases he had seen in which the patient recovered from his eyestrain when his bodily condition was treated and when the psychologic cause of his eyestrain was explained and he was persuaded to use his eyes normally. He suggested that the term eyestrain should be banished from our vocabulary.

"If the general public could learn that eyes are seldom strained, this would be a much happier world to live in," he said. "The fact of the matter is that the eye is provided with a large factor of safety and that healthy eyes do not become diseased even by excessive use."

Most of these cases of ocular neurosis, as Dr. Derby called it, are found in sensitive nervous persons. Fear is the commonest factor in these cases. Some ocular pain or discomfort makes the patient afraid that he is injuring his eyes permanently, that he cannot continue his occupation and perhaps will become dependent. Many of Dr. Derby's patients had given up their work and many pleasures, and were devoting themselves to resting their eyes as much as possible.

Dr. Derby asked ophthalmologists not to overlook the psychologic factor in causes of eyestrain, and to treat the mental condition of their patients as well as to correct their vision with eyeglasses.

X-Ray for Boils

X-RAYS have been found helpful in the treatment of many diseases for which they are not generally used. Among these conditions are boils, carbuncles, certain cases of pneumonia, erysipelas, inflammation of the kidneys, inflammation of the parotid gland and many other inflammatory conditions, Dr. Arthur U. Desjardins, of Rochester, Minn., told the American Medical Association.

Irradiation tends to destroy the white blood cells or leucocytes, which gather to defend the body against infection. It would seem that a destruction of these defender cells

would do more harm than good, but Dr. Desjardins explains that the white cells contain a substance that enables them to destroy the invading germs. Irradiation, by destroying the cells, liberates the protective substance and makes it even more readily available for defensive purposes than when it is in the intact cells.

Sympathetic Disease

ACTUAL organic disease may result from mental disturbance. Dr. Cornelius C. Wholey, of Pittsburgh, described the case of a fourteen-year-old girl who had attacks of what seemed to be gall-bladder disease in imitation of and in sympathy with a real case in her mother. There was no evidence of organic disease but the child's digestive system became so upset that she will probably never be healthy.

Another healthy girl aged 18 grieved so over the death of her mother that she took to her bed six weeks later and remained there until the age of 40 when she died of exhaustion, toxicity and lack of nourishment.

In these and similar cases described by Dr. Wholey, the mental and emotional disturbances upset the normal functions of the sympathetic nervous system which regulates the body's secretion, circulation, digestion and respiration. If the upset persists too long, it is likely to become organic.

Vital Hormone

STUDIES with cortin, the vital hormone, were described by Dr. Frank A. Hartman of the University of Buffalo at the meeting of the Association for the Study of Internal Secretions. This hormone comes from the cortex of the adrenal glands, two small, cap-shaped organs that lie just above the kidneys and are essential to life.

Animals from which both adrenal glands have been removed live a normal existence indefinitely if injected with cortin, Dr. Hartman said. Cats with both adrenals removed live an average of not more than eleven days if untreated. Prominent symptoms in these animals are loss of appetite, loss of weight and a lack of interest in their surroundings.

The treated animals eat as much as

or more than normal, gain weight, play and fight. They recover from wounds and resist infections and show all the reactions of healthy animals.

It has been possible to revive animals which were near death after removal of the adrenal glands by injection of the vital hormone. In a little more than an hour after the treatment, one animal sat up and in two hours was eating.

The cortin on which Dr. Hartman reported was prepared so as to be nearly free from epinephrin. This hormone is secreted by the medulla, that part of the adrenal gland which is not the cortex. Epinephrin has a strong restorative action itself, but animals can live without epinephrin or the part of the gland that secretes it, while they cannot live without the cortical part of the gland and its secretion.

Gland and Arteries

THE probable role played by the pituitary gland in the development of arteriosclerosis, more familiarly known as hardening of the arteries, was discussed by Dr. Robert C. Moehlig, of Detroit.

The effect of feeding animals on high fat diets, on normal diets with injections of the posterior lobe of the pituitary gland, and on high fat diets with the pituitary injections were reported. Control animals were fed on normal diets alone and compared with the other groups.

Four of the five animals fed on the high fat diet alone showed gross arteriosclerotic changes of the aorta, the main blood vessel from which the arteries of the body proceed. Those fed on the high fat diet plus the pituitary extract showed the most intense lesions of all. Eight of the ten animals showed marked arteriosclerotic changes and microscopic examinations disclosed changes of the type seen in human hardening of the arteries.

The injection of the pituitary extract alone, without any dietary influence, produced overdevelopment of the cortex of the adrenal glands. Dr. Moehlig called this an important link in the chain of arteriosclerosis.

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