NEUROSES AND PSYCHONEUROSES


The investigations of the writer started with the major anxiety attack. This somatic syndrome is composed of intense vasoconstriction of the skin (parasthesias, sensation of cold, pallor), tachycardia up to 150, inhibition of salivation, cold sweating, mydriasis, arterial hypertonus up to 150 mm. (of mercury), and relaxation of the voluntary muscle system. This indicates a stormy excitation of the sympathetic system, which may be combined at the end with parasympathetic phenomena. It was found that this syndrome could be removed by choline preparations, which by their stimulating effect on the parasympathetic nerve produced an effect exactly the opposite to the anxiety syndrome: by an intramuscular injection of 0.1 c.cm. acetylcholine the anxiety attack can be stopped also in its psychic effects, and even chronic anxiety attacks can disappear after a few days by oral administration of the choline preparations pacyl or hyptan. We can therefore suppose that the fear of an anxiety neurosis arises primarily in a somatic way. The vasoconstriction here plays an important part, and the character of the anxiety syndrome corresponding to the adrenaline effect may be traced back to a primary action of the adrenal glands. Since some sexual damage is found, such as the inhibition of normal relief, and since the anxiety could be removed both by the prevention of this and by choline preparations, this confirms Freud's theory of the damming up of libido, and Reich's theory of the origin of anxiety in a sympathetic-toxic action of the sexual hormone.

The somatic genesis of neurotic anxiety can be designed in the following way. There is always a disturbance of the course of sexual irritation to be found. This results either from sexual abstinence caused by external or neurotic reasons, or from neurotic sexual hypesthesia while relatively great libido is present, and leads, with a certain sympathicotonic disposition, to a strong excitation of the sympathetic system. At this point the mechanism can be interrupted by choline medication. According to the working through of the state of sympathetic excitation there results either the syndrome phrenocardia, or, with corresponding psychic preparedness, the anxiety neurosis. If this continues for some time it can become fixated and psychically worked through so that anxiety can then also arise from the psyche. The somatic neurosis only lasts for a certain time and then becomes built over in a psychoneurotic manner so that then it may only be treated by a long-continued psychotherapy.

C. S. R.
[65] The vestibular apparatus in neurosis and psychosis.—P. Schilder.  

A long discussion of the functions of the vestibular apparatus and its reciprocal influence with consciousness. Disturbances of the vestibular apparatus may result from conflicts and dissociations in the personality while subjective experiences due to primary disturbances of the vestibular apparatus may complicate or distort various neuroses and psychoses. The general conclusions are that the vestibular apparatus consists of two different parts, the semicircular canals and the otoliths. Both deal with the perception of acceleration, the latter also with the perception of gravity. The vestibular apparatus is not only a perceptive organ, but also a reflex organ which reacts to movements and to positions of the head in space. There is a peripheral and a central vestibular apparatus. The central apparatus consists of the nuclei in the medulla oblongata, of primary cortical centres and of centres which are connected with the elaboration of the primary impulses in the parieto-occipital lobe. But the vestibular system is also under the influence of the personality of the brain function as a whole. In the first part of this paper the symptoms are discussed which occur in organic lesions of the vestibular apparatus.

The vestibular influence on the visual field is darkening of the field, narrowing of the field and scintillation. There is a difference between peripheral and central lesions.

There is a multiplicity of apparent movements which are only partially dependent on the nystagmic movements of the eyes. The apparent movements have a great tendency to transformation.

There is also the perception of direction which can be changed by vestibular lesions. There are also transformations from one plane to another. Micropsia may occur. Polyopia and micropsia belong also to the symptomatology of vestibular lesions. It seems that these vestibular changes can be unilateral in central lesions. They are homolateral to the side of the lesion. Also the haptic sphere is changed by vestibular lesions.

Homolateral weakness and homolateral troubles in sensibility belong also to vestibular symptomatology. Changes in tone and in reaction movements are well-known symptoms of vestibular lesions. Special importance is ascribed to the changes in the postural model of the body by vestibular influence. Under vestibular influence a part of the substance of the body may be dissociated from the rest of the body. Heaviness and lightness of the body in its subjective sense are largely dependent on the vestibular apparatus.

There are also changes in the vegetative system. Changes in consciousness are directly due to vestibular influence.

Optic images, tactile images, tactile and optic eidetic pictures can be influenced by vestibular irritation in a similar way as after-images. In hallucinations vestibular influences change the appearance and add move-
ments to the picture. In delirium tremens the multiplicity of hallucinations is brought in connexion with vestibular influence. Multiplicity of hallucinations, macropsia, micropsia, and dysmetamorphopsia, indicate a vestibular influence on hallucinations. The postural mode of the body is in the same way influenced in alcoholic psychosis in which the vestibular apparatus is affected as in organic neurological cases or in normals in which the function of the vestibular apparatus is changed. Vestibular changes disrupt the unity of the postural model of the body. The symptomatology of delirium tremens and alcoholic hallucinosis is considered from this point of view.

A case of barbital intoxication and a case of an eclamptic psychosis are studied from this point of view and the importance of the vestibular influence for the symptomatology of toxic psychosis is shown. But in psychosis the utilization and elaboration of the vestibular impulses in connexion with the activities of the whole brain are of special importance. The vestibular apparatus has a special function among the senses and is therefore in connexion with particular life experiences. Dysfunction of the vestibular apparatus is often the expression of two conflicting psychic tendencies. Giddiness occurs therefore in almost every neurosis. The neurosis may produce organic changes in the vestibular sphere. Giddiness is a danger signal in the sphere of the ego and occurs when the ego cannot exercise its synthetic function in the senses, but it occurs also when conflicting motor and attitudinal impulses in connexion with desires and strivings cannot be united any longer. It is as important from the psychoanalytic point of view as anxiety. The vestibular apparatus is an organ the function of which is directed against the isolation of the diverse functions of the body.

R. G. G.

**PSYCHOSES**

[66] Heat production and heat control in the schizophrenic reaction.—

The results obtained by observing the temperatures of schizophrenic and nonschizophrenic groups afford confirmation of the statement that heat production in the schizophrenic reaction is low. Approximately 10,000 temperature readings in 50 schizophrenic and 50 control subjects showed that the internal temperature in the schizophrenic group was throughout the day slightly lower than in the nonschizophrenic group, both groups being at room temperature, and there was evidence to show that at room temperature the mechanism of heat control in the schizophrenic group was more active than in the nonschizophrenic group. Findings on exposure to extreme cold suggest that the mechanism of heat control acts more sharply and more strongly in the schizophrenic than in the nonschizophrenic group. On the