



## CYCLONE NEUROSES.

By C. H. HUGHES, M. D., St. Louis.

President of Faculty and Professor of Psychiatry and Neurology, Barnes Medical College;  
Honorary member British Medico-Psychological Association, etc.

**T**HE neuropathic aftermath of the devastating cyclone which swept over St. Louis is now to be gathered in the histories of the men' ily maimed and neuropathically wounded; not alone among those who, bereft of fortune and friends deceased, but among the direct victims of fright and shock.

In relation to this particular visitation of nature's awful violence, we may call them the neuroses of the great cyclone, but the neuropathic manifestations are much the same as those which have followed in the wake of other great violent visitations, such, for instance, as have followed (but have not been so well recorded as they are in our day of advanced neurological knowledge), after wars alarms, the carnage of actual battle, the murders, rapine despair and desolations of hearts and homes that follow advancing, contending and retreating armies and the pestilence that walks in mysterious devastating ways, revealing the noon-day destruction.

Chorea, or the dance of St. Vitus, and the insanities of revolutionary epochs are too familiar to be worthy of renewed extended record. They have filled many pages of the world's history and have marked the track of every great hurricane, as they follow great fires, riots and social upheavals. The neuropathically endowed, the inherently neuropsychiatically inclined are then preferred victims, but even the neurally stable nervous organizations may be so strained by these potent causes of psycho-neural shock as to be,

for the first time in the individual or family life history, strained beyond stable recuperation.

We have noted, however, but few of the latter that we could verify with absolute certainty.

The viscera innervated by the vagus nerve, as well as the brain from which it takes its origin, and the whole cerebro-spinal axis have to our observation chiefly displayed the effect of the cyclone's shock, as in the sequellae of that toxic neurosis which but lately so puzzled the profession, *La Grippe*.

Among my cases, excluding several mental aberrations and chorea without symptomatic signs materially different from insanity or chorea from other causes, have been several cases of tachycardia, rythmic and arhythmic, two of which still persist and one, a lady of forty-eight, who had passed her menstrual climacteric and recovered from all of its incidents and sequellae with steady heart's action, though she had the rheumatic diathesis and had been under many years' surveillance and prophylactic treatment, was riding in her carriage homeward from one of the stores down town at the beginning of the big blow.

On her way she encountered falling wires and flying timbers, the coachman courageously managing his horses but meeting with dangerous obstructions and meeting with a hair-breath escape from a runaway team, finally reached a place of safety for the ladies in a low building and a place of shelter for himself and horses. But the green, black clouds, sweeping whirlwind, the falling trees, poles and wires and surrounding reign of terror made its ineffaceable impress upon the lady's brain and nerves.

She came under treatment for rapid tachycardia, insomnia and psychical symptoms of apprehensive dread at the mention of the great calamity. Neural and psycho-neural quiescence therapeutically induced and properly maintained with treatment adapted to the restoration of neural stability and recuperation has brought about a fairly normal state but the heart has settled into an apparently permanent condition of arhythmic tachycardia with normally strong impulses and the capacity of compensation under ordinary mental

or physical effect, so that the lady now discharges the least laborious of her former household directing duties and carries the lighter cares of domestic life without great burden. Digitalis, artificial digestives, neural tranquilizing agents, neural and haemic reconstructives, with suitable attention to the physiological state of the vital viscera epitomizes the therapeutic management, while discussions or details of the cyclone were prohibited and the range of mental strain and worry was limited, and the psychiatry of her environment was made as psychologic as practicable.

The anxious anticipation of a recurring cyclone with every cloud that appeared or wind that blew was a mental feature for this and all the other cases.

The other grave case recovered entirely, as did some others of minor degree, being less damaged neuropathically.

Two peculiar forms of inspiratory spasm, not such as have been described by Ross, that most practical and complete of all English neurologists in the description of certain forms of non-classical neuroses, also came under my observation and treatment.

The spasm described by this writer "consists of a more or less rapid succession of deep inspirations, while the expirations are performed in the usual noiseless way" with or without singultus. In Ross' cases "the chest is powerfully expanded, the epigastrium is protruded, the auxiliary muscles of respiration are excited to action, the pectoral and sterno-cleido-mastoid are brought into strong relief, the shoulders are raised, the head is drawn backward and the respiratory muscles of the face, alae nasi and eyelids enter into strong contraction. Inspiration is noisy and often accompanied by expirations of gas from compression of the stomach. The spasm usually occurs in paroxysms of variable duration, the abdomen is generally tympanitic and there are, as a rule, other symptoms of nervous derangement, especially those characteristic of hysteria."

The symptoms in my cases were not exactly similar or so numerous or aggravated. They were states of vago-phrenic arhythmia—disordered vagus innervation.

Miss——is a young lady from the East side, living

out of the range of the Cyclone's greatest damage but not out of sight of it, who after it had passed came into East St. Louis to see the ruin it had wrought and learned of the sudden injury and death of many of her intimate young friends. The effect upon her was to produce a sort of choreic hysteria, insomnia, loss of appetite and diaphragmatic spasm and an expression of anxiety and fright. The chorea, loss of appetite and insomnia soon disappeared under treatment leaving the anxious frightened expression and disturbed respiratory rhythm. This was much like a Cheyne-Stoke's breathing at first but became more regularly irregular than the latter, finally settling into regular, slow and jerky inspirations numbering from twelve to fourteen to the minute. There was no thoracic pain but some dyspnoea at first. These, under digitalis and pepsine, ammonium bromide, hypophosphites, strychnia and arsenic, securing adequate rest and nutrition to the respiratory centers and the brain cortex, gradually came up to the normal standard—eighteen respirations per minute—while the pulse beat which had been accelerated and small, became about normal, i. e., from seventy-two to seventy-six beats per minute.

Anxiety and apprehension left the girl's countenance, she improved in flesh and spirits and went home after three months' treatment apparently restored.

A second case similar to this occurred in the person of a struggling medical student's wife, the sole cause being anxiety and solicitude with the superadded and predisposing condition of malarial toxæmia. In this case there was only lowered respiratory movement, fourteen to the minute, an anxious expression, but no thoracic pain or dyspnoea or previous chorea. She is improving on anti-malarial treatment, and on digestives, arsenic and the bromides.

This case in juxtaposition serves to show that the so-called Cyclone neuroses are simply shock and central nerve-strain nervous disorders, and might come as well from other causes of shock more or less profound to the nerve centers and not to unduly magnify the effects of this great cataclysm I may note that numerous lesser neural disturbances have come under my professional observation showing cerebro-

spinal damage among them, cases of paraesthesia, hyperaesthesia, analgesia and hysteroidal shock, neurasthenia and some of the so-called traumatic neuroses and "railway spine" symptoms such as follow the perceptibly uninjured after railway accidents. I saw some similar nervous states to those witnessed after the great St. Louis Cyclone among the women driven from their homes before an advancing army during the great American secession war, while in charge by medical authority of the refuges at St. Louis, from South-East Missouri.

The same causes which produced premature birth, caused nervous disturbances, which I did not so well understand then as now and could not therefore then so well chronicle, being then but a young surgeon of twenty-two years of age with rank and responsibilities far above the merit of my experience at the time.

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