

THE PARA-CATARRHAL SYNDROME.*

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It is exactly forty years ago since Dr. Guye, of Amsterdam, drew the attention of the Section of Otology, at the annual meeting of the British Medical Association held in Leeds in 1889, to the presence of certain mental disabilities, designated aprosexia, which may appear, both after as well as before puberty, in the subjects of chronic nasal disease. I submit that mental symptoms additional to those described by Guye are due to diseased conditions of the nose which produce a persistent catarrh.

Post-mortem examination of cases of mental disorder frequently reveals diseased conditions of the nasal sinuses; all types of inflammatory states have been found, at all ages from adolescence to senility, and associated with many types of mental disorder.

To a certain degree it may be said that acute inflammatory processes are associated with the acute phases of the mental disorder. My colleague, Dr. Pickworth, Director of the Research Laboratory associated with the Birmingham Mental Hospitals, has published evidence suggesting that infection may pass directly from a diseased sphenoidal sinus to the pituitary gland and hypothalamic region of the brain, the latter containing the head ganglion of the sympathetic nervous system.

In relation to these findings many physical symptoms met with in cases of mental disorder are explicable on the basis of toxic disturbance in this region, and recently I have met cases of sphenoidal sinus disease in which there was failure to give a normal response to pyrexial therapy, indicating functional inertia of the thermal centre in this part of the brain. Case-histories of newly admitted patients frequently contain references to nasal catarrh persisting from childhood, associated sometimes with a family history of nasal catarrh, to which we attach considerable importance.

* A contribution to the discussion on "Persistent Nasal Catarrh, Especially in Children." Section of Oto-Rhino-Laryngology Annual Meeting, British Medical Association, Manchester, 1929.

In a typical case the sequence is as follows: Nasal catarrh, sometimes before or definitely following an acute infectious malady, such as measles or scarlet fever; later, headaches appear, then an acute exacerbation of headache is followed by mental symptoms, and so the case passes into an acute phase of mental disorder.

Sometimes before the onset of the mental symptoms, the catarrh apparently diminishes, pointing to the deeper extension of the pathological process responsible for the catarrh.

Examination of the nasal sinuses, shortly after admission, has demonstrated the existence of sinusitis in a number of patients amounting for the year 1928 to 33% of the admissions. In many cases, following irrigation, ventilation and drainage, with non-specific protein therapy in some instances, there has been an amelioration of or recovery from the mental and physical symptoms.

I submit summaries of a few cases of certified mental disorder at different ages to illustrate these observations. The surgical work was carried out by Mr. W. Stirk Adams, F.R.C.S.

CASE 1.—Female, æt. 17 on admission. No insane relatives; mother suffered from menstrual headaches.

Measles at 5. Douching for nasal catarrh since 8 years of age. At about 17 had a vaccine for nasal catarrh and "nerves" and later developed a headache, succeeded by mental symptoms, which rapidly intensified to a condition of acute confusion with hallucinations and hyperacute excitement.

Septic tonsils and adenoids were removed and purulent antra were drained.

Definite physical and mental improvement followed, enabling discharge. Subsequent reports satisfactory.

CASE 2.—Female, æt. 19 on admission. No insane relatives; a family history of nasal catarrh.

She had scarlet fever at 3, followed by otitis media and persistent nasal catarrh. Mental symptoms were shown early in her nineteenth year, and later intensified to a condition of acute confusion with hallucinations and excitement followed by a depressed phase with *cacosmia*.

Removal of septic tonsils and drainage of purulent sinuses was followed by clearance of depression and *cacosmia*.

Reports after discharge satisfactory.

CASE 3.—Male, æt. 22 on admission. No insane relatives.

Two attacks of measles in childhood, followed by nasal catarrh, constant colds, rheumatic fever, osteomyelitis of the tibia, cutaneous sepsis and impaired vision. Nasal catarrh continued; attacks of *tinnitus aurium*. At 22, after a period of mild mental exaltation, he developed acute confusion with excitement and grandiose delusions.

Purulent sphenoidal, ethmoidal and antral sinuses were drained, and septic tonsils were removed. From then onwards he improved rapidly both physically and mentally and was discharged. Subsequent reports were satisfactory.

CASE 4.—Male, æt. 26 on admission. No insane relatives.

A history of frequent colds from childhood, and persistent nasal catarrh. After a cold, aged 23, his conduct became erratic, and later definitely abnormal. Mental confusion with grandiose ideas increased in intensity, with fluctuations, during the ensuing years until admission, when purulent antra were drained and septic tonsils and adenoids removed.

A considerable mental and physical improvement followed. Following discharge reports of his progress have been very satisfactory.

CASE 5.—Female, æt. 34 on admission. No insanity in family, except youngest sister, who developed a confused depressed psychosis associated with nasopharyngeal sepsis.

The patient under consideration had measles at seven, and has had persistent nasal catarrh and repeated sore throats ever since.

At 30 a severe sore throat was followed by a progressive right frontal headache and reduction in capacity for work.

A month before admission she developed severe bilateral headache, followed rapidly by depression, fear, agitation and threats of suicide.

Septic tonsils and adenoids were removed and purulent antra drained.

The bilateral headache diminished after the operation, but persisted, in less degree, in the right frontal region, together with depression (which was more marked at menstruation). The antral wash-outs became clear. Later a course of non-specific protein therapy was followed by the temporary appearance of green pus in the right antral wash-out. The right frontal headache, which had persisted since the severe sore throat, now passed away, together with the depression and other mental symptoms, and there was no further nasal catarrh. She was discharged and later reports were satisfactory.

CASE 6.—Female, *æt.* 35. Father suffered from persistent nasal catarrh. His sister committed suicide.

The patient had measles at 6, nasal catarrh since school age, and attacks of tinnitus aurium. At 34 influenza was followed by severe headache, which persisted. Nasal catarrh diminished, but anæmia increased, and a septic cutaneous rash appeared. Depression developed and became acute, rapidly passing into mental confusion with auditory and visual hallucinations and desperate suicidal attempts. Proptosis, especially of right eyeball.

Septic tonsils and adenoids were removed and an empyema of the right sphenoidal sinus was drained, and this was followed by clearance of confusion and hallucinations and cessation of the suicidal attempts. Proptosis diminished, anæmia passed away. Some depression persisted, but this cleared after non-specific protein therapy.

Discharged; subsequent reports satisfactory.

CASE 7.—Female, *æt.* 42. No insanity in family.

Measles at 7 and scarlet fever at 13, persistent nasal catarrh, constant colds. At 21 an attack of depression. Headaches and otalgia continued with the chronic catarrh; attacks of gastritis occurred for several years. Mild depression reappeared at 41 and continued with increasing intensity. At 42 she made two serious attempts at suicide.

Septic tonsils were removed; both sphenoidal sinuses and the left antrum were drained for empyema.

Improvement followed, enabling discharge. Subsequent reports have been satisfactory.

I trust that these remarks have shown that symptoms of mental disorder may appear in cases of persistent nasal catarrh, and that the catarrhal state requires radical treatment if mental sequelæ are to be avoided.