PAROXYSMAL RHINORRHŒA.*

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PAROXYSMAL Rhinorrhœa connotes two things—catarrh and spasm. These are common, together or successively, to the whole respiratory tract, and, as the causes are similar if not the same throughout, it would be short-sighted to limit consideration of them to the nose. In general, they are due to toxæmia largely produced by dietetic and hygienic errors.

Laryngitis stridula and laryngismus—distinguished from each other without any etiological reason—exemplify these conditions as in the larynx: laryngismus is asthma of the larynx. The recurrent bronchitis of children ends, unless prevented, in asthma; these are the catarrhal and asthmatic equivalents in the bronchi and bronchioles. Acute pulmonary œdema, the paroxysmal bronchial flux of Gee, is a fulminant combination of catarrh and spasm similarly produced.

My remarks are based mainly on the analysis of 850 cases of asthma. This shows that 42 per cent. begin in the first decade, usually as what is called recurrent bronchitis, afebrile, and rightly recognised by Gee as asthma, which it typically becomes after a few years. The asthma is often preceded by attacks of laryngismus. Manifest dietetic and hygienic errors were found in 92 per cent. of these cases of the first decade, and in at least 77 per cent. of cases starting before the age of 50. Of the 42 per cent. arising in the first decade over 21 per cent. gave a history of eczema, which is catarrh of the skin produced by the same toxæmia and curable in the same way as asthma, and as, at least, some forms of rhinorrhœa. Rhinorrhœa, laryngismus, urticaria, epilepsy, goitre, and Raynaud's symptoms all arise as more or less frequent complications of asthma—all toxæmic in origin.

The cause of asthma, as I stated twenty-five years ago, is a toxæmia resulting from carbohydrate excess, especially in respect of what are called milk foods, interfering with proper metabolism of the more complex protein molecule. The eosinophilia, typical of asthma, laryngismus, etc., is the chemotactic reaction of the polymorphs to the acidosis so produced.

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In support of this toxæmic view I can give here only summary statements.

(1) Therapeutic results.—About 75 per cent. are cured by attention to diet and hygiene—mainly outdoor exercise—a weekly mercurial and other simple drug treatment, always provided that sources of sepsis—nasal, oral, colonic, etc.—are attended to, and that sources of nasal irritation are removed. If treated in the first decade nearly 100 per cent. should be thus cured. The same treatment succeeds with laryngismus, eczema, and, in its early stages, epilepsy.

(2) Periodicity.—Most cases of asthma are worst at night; some occur only at night. Only in a minority of cases is asthma due to supersensitiveness to feathers—call it anaphylaxis if you like. Week-end periodicity, that is asthma on Sunday or Monday, brought on by the large meals and the long rest of the week-end, occurred in 24 per cent. of the total, men, women, and children. Week-end periodicity occurs also in many cases of epilepsy and other affections.

(3) A score of men subject to asthma for the best part of a lifetime, got rid of their asthma under the strenuous conditions and not too generous diet of army life; they suffered again after their return to the softer conditions of civilised life.

(4) Through Dr Grenfell, I learn that the Eskimos of Labrador have no asthma; they have no butcher's cart or grocer's van; they have to hunt and fish for what they eat.

(5) Veterinarians say that "broken-wind" can be produced in any colt by bad feeding; wheeziness in pet dogs and canaries, and in animals in the Zoo arises in the same way. The chapters in Law's *Veterinary Medicine*, dealing with "broken-wind" in horses and asthma in dogs, might have been written from a study of human asthma. I have recorded cases of broken-wind in horses, and asthma in canaries and dogs, cured or improved by attention to the feeding.

(6) Analyses made during the last three years show that in asthma the proportion of urea to non-protein N in the case of the blood, and to total N in the case of the urine, is much less than normal; in the latter case nearly 20 per cent. less on an average. The 20 per cent. N which should have changed into urea is out for mischief, whether it be as histamin, guanidin, or albumose, or some other of the two trillion odd billion, million compounds which Abderhalden has calculated that the 20 amino-acid constituent of protein may form. At

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any rate the analyses showed that, during asthma, ammonia was in much excess in the urine, clearly pointing to acidosis.

(7) Epilepsy sometimes complicates asthma. Cunéo, in his recent researches on epilepsy, makes the same point which I have made in the case of asthma, viz., that digestion of the starches interferes with protein metabolism thus producing albumoseaemia, a toxic condition of the blood, which causes epilepsy. Twelve years ago I had records of cures of about a dozen cases of epilepsy—most, but not all, in their early stages—effected on the same lines as I have mentioned for asthma, and without bromides.

Anaphylaxis may occur in asthma; idiosyncrasies may be found in 40 per cent., but they are not all anaphylaxis as they are loosely called. Anaphylaxis is not the most important thing in most cases, and sometimes not even in those in which it is thought to be all-important. Let us take what Professor Levi calls the classical case of Widal. A sheep dealer, aged 47, had been in daily contact with sheep from the age of 12; he then began to have typical attacks of asthma with increasing frequency whenever he went amongst sheep, each attack being preceded by the symptoms characteristic of anaphylactic shock. This case has, in Levi's words, "all the precision of a laboratory experiment." But the precision did not arise until between the age of 12 and 47, after 9000 exposures to sheep; and not a word is said about the man's nose, teeth, food, habits—all vitally important and all carefully disregarded.

Someone, a few years ago, mentioned the case of a groom with horse asthma who had no asthma during the war, although his business in the army was connected with horses. The hygiene of the war, not protein shock, cured his anaphylaxis by curing his toxæmia.

In order to bring the above into relation with rhinorrhœa, let me quote two cases. A man, aged 29, sensitive to horses, had rhinorrhœa and sometimes asthma set up by dust, *e.g.* in a railway smoking compartment, by room cleaning, through fog, hay-cutting, from long-haired dogs, horses, roses, and sweet-peas, and got rid of his trouble after resection of his septum and attention to his diet and ways of life. He has remained well for years. Last year his mother came complaining of rhinorrhœa and cough. Being a specialist, I concentrated on her nose; it needed operation. But the cough and breathlessness persisted. Then I found that her

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blood-pressure was 180 and obtained the history that her doctor had X-rayed her and said she had abdominal aneurism. She lived under this suspicion and avoided exertion. I put her on treatment similar to that given in her son's case and thus reduced the pressure; the cough disappeared, the abdominal aneurism became a myth, and she is now a happy, vigorous woman with the blood-pressure permanently at 120.

By simply stopping milk, I have cured at least half a dozen cases of paroxysmal rhinorrhœa, some complicated with asthma or hay-fever. In other cases this failed, and sometimes the treatment mentioned for asthma succeeded. But the typical case of rhinorrhœa shades, I think, into an atypical case with swollen turbinals, excessive discharge of mucus, and often with eczema. Local treatment is not to be despised; but the radical treatment is again diet and hygiene, especially vigorous open-air exercise. In at least 60 per cent. of my total asthmatics there was a nasal condition requiring rectification.

Haseltine of Chicago has come to the same conclusion as myself, and in a communication sent me two weeks ago says:

"Asthma is an abnormal bodily state manifested by various symptoms such as urticaria, eczema, eosinophilia, cyclic vomiting, protein- or non-protein-sensitisation, disturbed calcium- or endocrine-metabolism, hyperæsthetic rhinitis, angioneurotic œdema, acidemia, mucous-membrane hyperæsthesia (hay-fever), to which may or may not be added bronchospasm.

"This last symptom, when it does occur, so dominates the clinical picture that both the lay and the medical mind are somewhat hypnotised. It is now, for the first time, recognised as only the climax of a rather definite sequence of abnormal manifestations. It occurs only when general toxicity reaches a certain stage and when ethmoid irritation becomes sufficient to incite the spasm.

"The asthmatic patient is in a constant state of delicate balance between absorption and elimination. Anything that helps to throw the balance the right way will relieve him; anything throwing it the wrong way will increase his distress. The asthmatic patient has an abnormal ethmoid. Anything that lessens ethmoid pathology will relieve him; anything that increases ethmoid pathology will increase his distress."

La Forge holds the same view. Percepied, in 1912, said much the same thing: "Aperiodic spasmodic coryza, hay-catarrh, asthma, are only various expressions of the widespread

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affections causing vasomotor spasm and secretory disturbance of the aerial tree. The name changes according to the anatomical area involved or according to the exciting cause; but it is an error to consider such manifestations as a separate entity."

On hay-fever I need say only two things. First, if anaphylaxis is more applicable to any human disorder than to another it is to hay-fever. Chloral will sometimes act in hay-fever as it does in anaphylaxis, namely, stop it; it is a peculiarly suitable drug for hay-fever which lasts during only six weeks in the year. Secondly, hay-fever is not quite the same thing as asthma; only 7 per cent. of asthmatics have it, and only 7 per cent. of hay-fever patients have asthma.

The main point which I wish to make is that anaphylaxis, so far as it occurs in man, is often a graft on a preceding toxæmic condition, the result of an unwholesome régime; it is simpler, more radical, and more efficient to deal with this and thus get the patient into a condition of greater resistance by which he becomes insensitive to any ordinary protein, rather than to look for special proteins and act solely against them. The aim should be to detoxicate the patient by attending to all the emunctories and make him observe a healthy life. Thus most rhinorrhœas will disappear with or without operation, according as the disease is treated late or early.

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