

family moved away, and I have not since seen him. But at last accounts he had had no fits for eight weeks. He had never gone that length of time before without several attacks.

In the past few years much of the misery of this world has been laid to the organ of smell, and justly too, no doubt, in many cases. That epilepsy has other causes goes without saying, but the favorable result of the treatment in the first case, with the entire disappearance of the conditions named, and the unmistakable improvement in the second, is proof without any reasonable doubt that, in these cases at least, the condition found in the nares and naso-pharynx was accountable for it all. If in these two cases why not in others?

Since the completion of this paper I have ascertained through the brother of the patient referred to in case No. 2 that the young man had a very slight convulsion immediately after removing from town, about a week after the last operation, since which time there has been no recurrence. It is now about five months since the last convulsion.

## EPIDEMIC INFLUENZA.

*Read before the St. Louis Academy of Medicine.*

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*Mr. President and Fellows of the Academy:* In compliance with your request to open the discussion upon this subject, I find myself somewhat at a disadvantage. The absence of reliable statistics regarding the prevalence and progress of this now wide-spread disease makes its exact study somewhat difficult. Doubtless many cases have been reported as of epidemic origin which were but ordinary catarrhal conditions, and certainly the number of cases in many localities has been greatly exaggerated.

After making due allowance for error there is little doubt but that a very large proportion of the population of cities visited by the epidemic become its victims. This fact alone justifies a close examination of the clinical history of this disease, but there is an additional incentive to such investigation from the knowledge we have that while epidemic influenza is not in itself a grave disease, yet its complications and the sequences are sometimes most important.

It is interesting to note that several forms of epidemic disease are now existing in the old world. Cholera is now reported to be ravaging Persia at Hamadan, advancing towards Teheran and Kurdistan, thus threatening Eastern Europe. Dengue, (father of the knees, as the Arabs say), well known in its epidemic form in this country, has been epidemic along the eastern coast of the Mediterranean since August. Dr. Glover, the

attending physician to St. John's hospital in Beyrout, Syria, writes that at the latter place 75,000 of the 100,000 population have suffered from dengue during the last five months. Many of the symptoms which he finds in the epidemic are similar to those seen in the earlier stages of influenza. There is a chill, followed by fever, and severe pains in the knees and back, and headache and sometimes swelling about the throat. Catarrhal opthalmia is a frequent complication, though the marked catarrhal conditions of epidemic influenza are absent.

Is there more than a coincidence in the fact that influenza is epidemic in Russia and has rapidly advanced westward through Europe to America, while cholera is, as the *Lancet* states, threatening Europe through the familiar Caspian channels and epidemic dengue has extended from Alexandria to Constantinople?

There is something suggestive in the date of the outbreak of these three epidemics. As nearly as I can learn, the cholera in Persia only attained much headway late in the past summer, the epidemic of dengue in September, and the first cases of influenza were noted in St. Petersburg in October. While these diseases are clinically distinct, yet as far as we know have we not in the date of origin, the general prevalence and westward advance of each a reasonable premises for the hypothesis that there is a common climatic or atmospheric factor which influences their progress and direction?

The history of epidemic influenza has been repeatedly given during the last few months in the columns of both the medical and daily press, so that I need not detain you long in here reviewing it. Nearly all the accounts seem to be founded upon a book published in 1848 by Dr. T. B. Peacock, of the Royal Free Hospital, London, entitled "The Epidemic Catarrhal Fever of 1847 and 1848," or taken from a later article by the same author in Quain's Dictionary of Medicine.

Through the courtesy of Dr. A. S. Barnes I am able to present to you a book which antedates that of Dr. Peacock by more than half a century, in which our subject is treated with an exactness that would do credit to any observer of the present day.

"The First Lines of the Practice of Physic," by William Cullen, M.D., of Edinburg, was published 1792. I quote from his second volume, section 1061-1063:

"There are two species of catarrh. One of these, as I suppose, is produced by cold alone, as has been explained above; and the other seems manifestly to be produced by specific contagion. Of such contagious catarrhs, (these epidemical catarrhs have been lately termed influenzas), I have pointed out many instances occurring from the 14th century down to the present day. In

all these instances the phenomena have been much the same, and the disease has always been particularly remarkable in this, that it has been the most widely and generally spreading epidemic known. It has seldom appeared in any one country of Europe without appearing successively in every other part of it; and in some instances it has been even transferred to America, and has spread over that continent, so far as we have had opportunities of being informed.

"The catarrh from contagion appears with nearly the same symptoms as those mentioned (1047-1049). It seems often to come on in consequence of the application of cold. It comes on with more cold shivering than the catarrh arising from cold alone, and sooner shows febrile symptoms, and these likewise in a more considerable degree. Accordingly it more speedily runs its course, which is commonly finished in a few days. It sometimes terminates by a spontaneous sweat; and this in some persons produces a miliar eruption. It is, however, the febrile state of this disease especially that is finished in a few days; for the cough, and other catarrhal symptoms do frequently continue longer, and often, when they appear to be going off, they are renewed by any fresh application of cold.

Considering the number of persons who are affected with catarrh, of either the one species or the other, and escape from it quickly without any hurt, it may be allowed to be a disease very free from danger, but it is not always too be considered as such; for in some persons it is accompanied with pneumonic inflammation. In the phthisically disposed it often accelerates the coming on of phthisis; and in elderly persons it frequently proves fatal."

Is not this classical description by a master mind worthy of attention, especially when we remember how comparatively limited were the opportunities a century ago for such collective researches as are needed in the study of all epidemic diseases. From the 14th to the 18th century many epidemics of catarrhal fever are spoken of by the older writers, and we have the records of nine which occurred in the 18th, and four in the first half of the present century. The epidemic of 1782 extended all over every country of Europe, affecting more than one-half of the inhabitants and frequently proving fatal.

The present epidemic seems to have been more rapid in its progress from country to country than any of its predecessors. Some believe this due to the more rapid means of travel in these days.

This brings up the unsettled question of its etiology. Is the present disease contagious or is it due to miasmatic influence? The answer may not yet be positively given. The equal distribution of the disease has prevented the entire relegation of its cause to the idea of contagion, and the rapid spread and transitory effects of the

causative agent suggests a miasm. It is true that Cullen believed that this form of influenza is disseminated by contagion, but as Tanner pointed out in discussing the epidemic of 1833, "the influenza pervaded a large tract of country in a manner much too sudden and simultaneous to be consistent with the notion that its prevalence depends exclusively upon any contagious properties that it may possess." He adds: "The occurrence of epidemic catarrh is unquestionably connected with some particular state or contamination of the atmosphere."

In harmony with the proposition let me refer to a statement in the third volume of the "Transactions of the College of Physicians." On May 2, 1782, Admiral Kempenfelt sailed from Spithead with a squadron, of which the *Goliah* was one. The crew of that vessel were attacked with influenza on May 29, and the rest were at different times affected; and so many of the men were rendered incapable of duty by this prevailing sickness that the whole squadron was obliged to return into port about the second week in June, not having had communication with any shore, but having cruised solely between Brest and the Lizard. This happened in one part of the fleet. In the beginning of the same month another large squadron sailed, all in perfect health, under Lord Howe's command, for the Dutch coast. Towards the end of the month, just at the time therefore, when the *Goliah* became full of the disease, it appeared in the *Rippon*, the *Princess Amelia*, and other ships of the last-mentioned fleet, although there had been no intercourse with the land. Similar events were noticed in the epidemic of 1833.

The curious will find much more of interest upon this subject in these "Transactions" in Cullen's "Nosology;" in the *London Medical and Physical Journal*, volumes IX and X; in the compilations of Dr. Hancock in the "Cyclopædia of Practical Medicine," and in the further discussion by Tanner in his "Practice," volume II, page 39, *et seq.*

Let me here offer the proposition already hinted at, that the dissemination of all far-reaching epidemics does not depend alone upon contagion, and that there may be a causative factor common to all epidemics. Gairdner's observations, as quoted by Flint, "go to show that during the prevalence of influenza other diseases are unusually severe, and the rate of mortality from all diseases is increased." The reports from the large cities affected by the present epidemic seem to confirm the statement.

The symptoms of epidemic influenza are now quite well understood by every physician who is in any sense a student. A sudden attack, a chill, more or less complete, a succeeding fever, frequently severe pains, general prostration, more or less dryness of the throat and nares, often followed

by free catarrhal secretions, with convalescence in from five to seven days, is perhaps an outline of the average case.

Many variations are seen, generally dependent, I believe, upon personal characteristics of the patient. In some instances the nervous symptoms predominate, and while the respiratory and digestive tracts seem unaffected, there are neuralgic pains most intense, resembling those of dengue. These, according to St. Petersburg authorities, are sometimes erroneously thought to be incipient typhoid fever cases.

A large proportion of the cases exhibit catarrhal changes of the naso-pharynx, larynx, and bronchial tubes. These are cases in which I believe there is the most danger of serious complications, such as capillary bronchitis in the young, and catarrhal, and even croupous, pneumonia in the aged. The inflamed mucous membrane of the respiratory tract, denuded of its epithelium, offers slight resistance to diphtheritic germs. I have recently seen a very severe attack of diphtheria suddenly develop in a child that had not fully recovered from influenza, and I think we shall see more of such cases in our city.

A number of authors speak of a variation of influenza in which the gastric symptoms are severe, where there is more or less jaundice and sometimes persistent vomiting. I have seen but one such case, and it was scarcely typical. Notwithstanding the severity of the symptoms in this class of cases, the record is that most of them do well.

In the ordinary case of epidemic influenza the prognosis is favorable, exceptions being those in which serious complications arise or disastrous sequela result. The average patient is well in a week. The danger from influenza is more in the complications than in the disease itself, and the increased death rate during the epidemic must necessarily put every careful physician upon his guard in the care of such cases.

The treatment of this disease depends largely upon the special symptoms as they arise. In brief, let me mention the use of acetanilide to quiet the patient and reduce the temperature, combined with quinine, in all cases where the fever is persistent. If the pains simulate those of rheumatism, one of the salicylates, preferably the salicylate of ammonia, in full and repeated doses. I have not hesitated to order sponging with tepid water where the skin has been hot and dry, and have, in several instances, used pilocarpine to meet the same indications; but such a remedy should be used very carefully where there is much depression. The administration of belladonna in repeated one-drop doses of the tincture gives a most happy result in those cases where there is excessive secretion from the mucous membrane of the upper air passages, or atropia may be used instead of the belladonna. This drug

should not be pushed until its toxic effects are produced, but only as a stimulant to the vasomotor nerves.

Some cases, especially those in which there is gastric irritability or hepatic fault, administration of a mercurial is demanded in small doses once or twice repeated. All depressing agents should be avoided, simple nutritious diet should be used, and after the acute symptoms have passed, I have thought it best to substitute a good tonic for all other medication.

I am not aware that much dependence has been placed in any plan of prophylaxis, but if protection can be afforded it will probably be by the use of small doses of quinine and the avoidance of exposure and fatigue. I have not much faith in the use of sulphurous acid fumes or the inhalation of eucalyptol and similar agents.

I need scarcely add in closing that in this, as in all other diseases, we should not be over-zealous in our medication. Just enough of the proper agent—not too much—to meet the indications. The condition is in itself self-limiting; it is better judgment to care for the symptoms than to attempt to cut short the disease.

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CONTAGIOUS BALANO-POSTHITIS.—BATAILLE and BERDAL have reported to the Société de Biologie, of Paris, a contagious variety of balanoposthitis, which is characterized as follows:

1. Clinically by special erosions of crescentic shape with the convexity toward the meatus. These are limited by a delicate whitish border, which is extremely friable, somewhat elevated, and turned outward. The erosion extends eccentrically, its external border gaining little by little upon the healthy epithelium, while its internal border sloughs so that the more it extends the larger the ulceration becomes. In the circular manner of its spread this form of balanoposthitis is comparable with certain circinate parasitic affections of the skin.

2. Experimentally it is recognized by its contagious and inoculable properties. The authors have in fact succeeded in reproducing a series of the erosions which they describe by means of the inoculation of pus with the lancet. The authors propose to make a further communication, giving the results furnished by pus cultures and determining the character of the pathogenic agent.

The virulent contagious and specific character of the balanoposthitis furnish a sufficiently well-defined morbid entity, and one which should have a place among the venereal diseases, properly so-called.—*La Sem. Méd.*

DR. H. NEWELL MARTIN, of the Johns Hopkins University, has been elected President of the American Society of Naturalists.