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GRIP, AND ITS EFFECTS ON THE NOSE, THROAT, AND EAR.

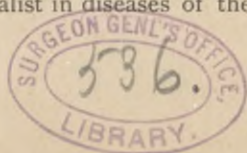
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While we are in the midst of the widespread epidemic of grip, and the high and the humble alike are laid low, it is profitable to take account of its methods of attack, and our most potent weapons against it. This disease cannot be called one of filth or fright. In England Herbert Spencer, the Prince of Wales, many members of Parliament, and other distinguished personages, are struggling in the clutches of the grip. Germany and Russia are also afflicted. In America the condition is similar. Those in high places, as well as the poor, are afflicted. Members of the medical profession are no more exempt than the laity. Since the middle of January last the disease has made itself felt, and I have had constantly under observation and treatment a large proportion of physicians among the sufferers.

The term "influenza," as applied to the epidemics that have prevailed during the years from 1889 to the present time, is a misnomer; for, although there have been many typical cases of influenza, there were very many others (purely epidemic in nature) that lacked the characteristic symptoms of influenza: I have seen frequent instances in which the symptoms were referable almost wholly to the digestive tract—nausea and copious diarrhoea. It may be argued that such cases should not be classed in this category; but how, for instance, would you class such a case as this, which I saw only yesterday: A physician, first taken with a violent diarrhoea, was sick for five days, and on recovering was immediately attacked with the nose and throat symptoms characteristic of influenza. Another has no symptoms referable to the nose or throat, but suffers from profound nervous depression, muscular weakness and soreness, with circumscribed pneumonia in one lung: this is the present condition of a well known physician of my acquaintance. The epidemic character of the malady was never better illustrated than by the present experience of the inhabitants of Chicago. All the members of various families I could mention have been stricken at the same time; father, mother, and all the children, in some instances, have been confined to the house or the bed at once.

But it was my purpose to speak more particularly of the disease as it affects the patients of a specialist in diseases of the nose, throat,



and ear. Those who were under treatment when the epidemic made its appearance, and who were making good progress, were set back, and a change of tactics was necessitated to combat the new element introduced; in other words, treatment had to be addressed to the general as well as to the special condition. Considerable work had to be done over again. The nasal mucous membrane would become turgid, swollen, and hyperæsthetic. Hydrorrhœa and stenosis made the patients miserable and discouraged. In follicular pharyngitis, where the cautery had been applied the membrane became thickened, and minute granulations puffed up like erectile tissue. Stiffness and soreness of the muscles of deglutition rendered swallowing painful; the appetite was impaired; the tongue was covered with a pale, dirty gray coating, was flabby, tremulous, and indented by the teeth; and wakefulness at night added to the general discomfort.

There were numerous cases suffering from an extension of the naso-pharyngeal inflammation along the Eustachian tube, producing pain and difficulty in mastication and deglutition. The closure of the tube and the swelling of the membranous lining of the tympanic cavity diminished the hearing distance in those whose hearing had been growing more acute, and the distressing tinnitus was intensified. There was a sensation of fullness or stuffiness in the ears, and actual pain in some. However, I do not remember to have seen more than a few cases of acute inflammation supervening upon chronic non-suppurative inflammation during the epidemic. Such cases are very rare at other times, but I have had a few under treatment during the past six weeks. A number of old patients whom I had cured of middle-ear suppuration a long time ago, and who had remained well up to the present prevailing epidemic, have returned with a new outbreak of the discharge.

Both in private practice and in my clinics I have observed the influx of acute middle-ear diseases, beginning in the latter part of January. The ear manifestations of the grip do not appear to develop usually at the first onset of the disease, but are often delayed until the fourth or fifth day or even later. Then, as a rule, there is sudden and violent pain in the ear; the upper segment of the drum-head assumes a cherry-red color, the malleal plexus of vessels is injected with blood, fugitive pains radiate over the temporal and parietal regions, and the mastoid periosteum is prone to involvement in the inflammation. The otitis media resulting from the grip is likely to terminate in suppuration unless prompt and effective treatment is employed. Most of the dispensary patients were already in the stage of otorrhœa when they first presented themselves, though the attack of otitis may not have come on more than thirty-six or forty-eight

hours before. In such cases the discharge was not purulent, but watery, and in some the serum was mixed with blood. A notable feature was that these people presented a decidedly sickly appearance, weak, depressed, and despairing—characteristics unusual in simple acute catarrhal attacks, even when they result in suppuration.

These facts suggest a slight digression to mention the remote results of previous epidemics of the grip in diseases of the ear. The most hopeless cases of sclerosis of the middle ear are those that were caused by such attacks. Even when the inflammation was unaccompanied by much pain, and when there was no discharge, there was a progressive impairment of hearing that resisted the most painstaking treatment. The labyrinth was sometimes involved, so that perception of sound by bone-conduction was diminished, although there was not actual paresis of the auditory nerve. Indeed, the condition resembled very closely those old hopeless cases of quinine deafness that tax the ingenuity and skill of the otologist.

Since the epidemic began I have made it a rule to inquire of all patients with recent ear disease if they have had the grip. The term is so common in Chicago that few patients of the reading class seem to be ignorant of it. The reply usually is either an affirmative one, or to the effect that they have had a cold in the head. But these colds in the head come in groups. Just before the advent of the epidemic I saw but few cases of acute coryza; but one day every case, except one, that came into my office complained of having taken cold. This one exception very rarely has even a slight cold, but has a chronic suppuration of the tympanic attic. Every day after the one mentioned I had cases of influenza, up to the present date (March 1st), and now the excepted case spoken of is suffering from it.

Another feature relative to the grip is that acute suppurative inflammation of the middle ear does not respond to treatment with the brilliant results that we now obtain in simple cases occurring during the interval between these epidemics. This is undoubtedly due to the great depression of all the vital forces, the loss of ordinary resistance to disease, the reduction of the normal recuperative power of the tissues. When the latter are once invaded by the suppurative process they respond less readily and more slowly to such treatment as effects the most radical changes in a few days in uncomplicated otitis. But if the patient can be put under treatment within a few hours of an attack, the disease can be deprived of its virulence. It can be aborted—just as in the case of a burning building, if deluged with water at the first outbreak, the fire can be quenched; and the sooner the water is used, the quicker the quenching and the greater the salvage. To illustrate: A neighboring physician came into my office a few days ago suffering

from coryza and a severe pain in the middle ear. Examination revealed an inflammation involving the upper part of the drumhead. The vessels along the malleus were greatly injected, but the attack was only about fifteen hours old. The general condition of the patient was not promising; his tongue presented the appearance which I have already described. I immediately gave him one-eighth grain of morphia with $\frac{1}{400}$ grain of atropia; threw a spray of *lavoline* through the Eustachian tube into the middle ear by means of the improved inflator; filled the external auditory canal with pure vaselin as warm as could be comfortably borne, keeping the medicament in place by a pledget of cotton; and used mustard over the mastoid process for counter-irritation. The nose was deluged with a spray of a 3-per-cent. solution of camphor-menthol in *lavoline*. On the following morning not a vestige of the inflammation remained; the drumhead appeared as natural as before the attack, and the coryza had vanished.

The morphia not only relieves pain, it checks all the secretions and relieves the irritation of the nerves distributed to the affected organs. The atropia has a similar effect, and in addition has a special affinity for the blood-vessels of these parts; while it does not check the secretion of the kidneys, it relaxes the bowels and increases the tonicity of the circulatory system. There is no remedy or combination of remedies I have ever found, after the most diligent experimenting, that will compare with these two drugs in the proportions given. Neither one alone will accomplish these results, but they supplement each other in the most efficient manner. I ought to say that I never under any circumstances permit a patient to know what this remedy is. I never write a prescription for it, and am of the opinion that no physician should reveal the name or nature of it to a patron, for fear of becoming responsible for a possible pernicious drug-habit.

The emollient effect of the *lavoline* in the middle ear, and of the warm vaselin on the outer side of the drumhead, restored the membrane to a healthy state in a few hours, and it has remained so to the present time. This patient's previous experience with an attack of acute otitis media is in strong contrast with the one here outlined. When I examined him for the first attack, there was already a bulging of the drumhead from the secretions that had accumulated in the drum. I opened the drumhead in the posterior inferior quadrant, and removed the discharge. I treated him but twice during the next eighteen days, for the reason that he was under the care of an eye specialist. Nearly seven weeks after I performed paracentesis to relieve his suffering, the suppuration had not yet yielded to daily treatment; it had diminished, but not ceased.

A serious mistake is made in giving quinine in large doses for

such attacks. Quinine does harm, while the treatment I employ is devoid of harm. Quinine produces congestion of the middle ear and impairs the functions of the acoustic nerve. Antipyrin, acetanilid and phenacetin are preferable to quinine in such cases, but are infinitely inferior to the combined morphia and atropia.

It is not intended to claim that one dose only of this remedy will always be sufficient to cut short an attack of the grip. One full dose should be given at the outset, and in a certain limited proportion of cases may not need to be repeated, but in the majority of attacks it will need to be given several times. In severe attacks I have been obliged to administer three or four doses a day for two or three days, when the worst would be over and convalescence begun.

It is interesting to note how typical cases of influenza under this treatment, combined with sprays of camphor-menthol, would pass rapidly, within the space of two or three days, from the first to the third stage of rhinitis, and make an excellent recovery in a few days more. The whole history of an influenza that naturally would occupy three or four weeks if treated on the old-fashioned lines, is limited to the space of four or five days with a minimum of suffering and inconvenience under this method. Many patients who would be compelled to keep in the house or bed under the old management, with sweating and quinine and concentrated wretchedness, are enabled, by the treatment I have used in the past and present epidemics of the grip, to attend to their occupations in comparative comfort. Within an hour after the first dose is taken the sneezing ceases, the watery discharge is controlled, the nasal stenosis is eliminated, the pain disappears, and the harassing, exasperating irritability of the nervous system gives place to a grateful sense of relief.

The sprays of the 3-per-cent. solution of camphor-menthol in lavoline are used at home, by the patient himself, three or four times a day. The lavoline is emollient and protective to the mucous membrane, while the camphor-menthol contracts the capillary blood-vessels, corrects and diminishes the acrid secretions, reduces the swelling, and to some extent anæsthetizes the inflamed tissues.

Another good topical remedy for the throat is guaiacol, especially when there is fever. It cannot be applied in full strength in sensitive throats, however, as the burning and smarting it produces is something appalling, even to a pugilist. It is best to dilute it until it can be borne without much discomfort. Glycerole of tannin is another excellent remedy to control the angina, but it must be applied by means of cotton on a carrier, the same as in the case of guaiacol.

It is not necessary to enter into a discussion of the general prin-

principles of hygienic management, since they are familiar to every physician. When tonics are indicated or rest required, they will naturally enter into the treatment. In all these cases—and indeed this should be set down as an important medical maxim—the surface of the body should be protected, the temperature kept equable by woolen garments from neck to toe, and the bowels, the great sewer system, kept well flushed.

