THE "BLACK DEATH" OF 1918-1919. W. B. Hinsdale, M. D., Ann Arbor, Mich.

Every person is sadly familiar with the general effects of the epidemic that manifested itself a year ago. However, there is uncertainty and doubt as to how many epidemics there were at the same time. The sickness that prevailed was universally referred to as having been influenza, which implies there was but one primary cause, with pneumonia, pleurisy, hydro-thorax, pyothorax, myo- and endo-carditis, persistent systemic after-pains and nerve irritability as complications or immediate sequelæ.

Some describe an independent epidemic of streptococcus pneumonia, said by Flexner to be a phenomenon almost, if not quite, new among epidemic diseases which first prevailed as a secondary phenomenon with measles. Poliomyelitis, streptococcus pneumonia and influenza have been especially destructive in the western world during the past three years. The first of these diseases had spent itself or at least had quieted down by 1918, but the other two came on and prevailed independently and in association. By association is meant a single victim had them both; the influenza coming first and the pneumonia apparently as a complication. I have not heard that the order was discovered to be reversed, that is a pneumonia and then with it influenza. The academic question might be raised: had there been no influenza how much and how severe and what kinds of pneumonia would there have been?

I have chosen to describe the pneumonia of that time, whether primary or secondary, as a "black death;" not that the black death of history was pathologically simulated but because the pneumonic processes in the severer forms were liable to have hæmorrhages that were dark and sometimes black as well, and because of the great malignancy.

In the older text-books references are made to a hæmorrhagic or black form of common infections, as black measles, black smallpox, black erysipelas. The term black refers to the dark color of the hæmorrhages that occur as characteristic of some and various epidemics. In this sense I deem it also proper and

descriptive and not a mere figure of speech to speak of black pneumonia; a clinical description of some significance.

According to some reports, epistaxis occurred in fifteen per cent. of the cases, a few had intestinal hæmorrhages. In my own experience, with seventy pneumonia cases under observation at one time, fifteen were expectorating blood when first seen. Two of them were thought to be spitting only blood that trickled from the posterior nares. There was a marked tendency for the blood to become dark in color and thin in consistence: but could not be referred to as "rust colored sputum" or as "prune juice," as we ordinarily use these descriptive terms. Finding the offending microbe, bacteriologists say, was not the difficulty, but in making the differentiation of the streptococci causing the disease from the streptococci of the ordinary properties, or from those commonly present on the mucous membrane of the upper air passages that do not cause widespread disease. Strong suspicion, however, attaches to what they call the streptococcus hemolyticus.

If we refer to the infections under consideration as a single or mass epidemic we are disposed to regard it as the most explosive and fearful manifestation in which influenza has been in historic times either a whole or a part. It is possible we have exaggerated in this regard, owing to our loss of perspective and magnification of the immediate field. Eichorst, writing twenty years ago, speaking of the pandemic of the ten years previous, which would be three decades past, says complications in influenza occur with extraordinary frequency and were justly feared on that account. Of the complications he says, "Pneumonia is most frequently observed, at times resembling bronchopneumonia, at other times, rather fibrous pneumonia, occasionally being converted into abscess and gangrene of the lungs, also pleuritis, and pericarditis, less commonly myocarditis and endocarditis occurs." He also remarks upon gastroenteric symptoms, and that at times stools contain blood. As the causation of inflammatory complications, he mentions streptococci, and pneumonia cocci, in addition to the influenza bacilli. Many of the articles upon the subject of influenza and its fellow conspirators written during the past six months sound in substance very much like this and fail to adduce any facts, and descriptions not found in the chapter of Eichorst's whose book was picked up at random in order to make the comparison of a writer of the last century with one of the year 1919.

Doctor Lewis A. Connor (J. A. M. A., Aug. 2, 1919) says, comparing the last epidemic with that of 1889-'90, the virulence was greater, a larger proportion of the population was attacked, incidence of pneumonia was greater and the mortality somewhat increased. When in saying somewhat increased, I take it, he means not very strikingly increased.

Statistic are at wide variance as to the number of cases of influenza that were complicated with pneumonia. Some large hospitals placed their percentages at eight, others at twenty-three.

If we wished to make an apology for the last epidemic for its mortality, we would call attention to one complication that was artifically enforced upon it and for which it should not be blamed. The general use of aspirin increased its complications and hence its mischief. Aspirin poisoning is a handicap that the cult of modern medicine feels obliged to enforce upon the as medicatrix naturae in case of nearly all diseases, nowadays. Influenza's natural statistical record was tampered with to her embarrassment in the making.

Why, may I ask, is not preventive medicine made to include the prevention of dangerous medicines being used to the detriment of mankind as well as to the stamping out of the breeding places of diseases and the restraint of distributors? We want to think, as we ought to be able to think, that in these days epidemics are disappearing or becoming milder when they prevail. We can hold such beliefs, no doubt, in regard to many deadly infections but not in regard to others of very general prevalence and severe types; polimyelitis since 1907 with its outbreak of more violent severity in 1916, la grippe and pneumonia, for example.

Homeopathists started in the campaign with two advantages, and it could have been foretold they would come out with better statistical showing. First, they did not have the aspirin and other coal tar complications in their cases to increase the life risk, and second, they had a few remedies upon which they could place

reasonable reliance and were not obliged altogether to experiment their way from day to day and patient to patient.

At the last meeting of the American Institute of Homoeopathy Dean Pearson, of Philadelphia, presented a tabulated statistical report based upon a questionnaire. His showing was interesting as well as convincing. According to his presentation of data, the death rate swung between physician number thirty-seven, who, from one hundred and eighty patients treated, had thirty-five deaths or the appalling death rate of over nineteen per cent. to physician number eighty-eight, treating three hundred patients with no deaths. Out of 26,785 patients reported, the average mortality was one and fifty-nine thousandths per cent. He adds, "It only remains to compare these results with the colossal epidemic of influenza mortality, averaging about thirty per cent., to realize how very much better chances a patient had when treated by a homoeopathic physician."

No matter how good a comparison we can make as to recoveries and deaths, it was a staggering experience. Our homœopathic record is not particularly a piece of work of which to be proud, although somebody else did considerably worse. At the best it is only a negative consolation that we derive from comparison. As we had it at the university, with about two hundred students, it melted the heart to see even one side. It is a gruesome joke of text-book writers that pneumonia has been the blade of Nature's scythe with which she harvests more of her elderly victims than with all her other tools together. One has remarked it is the legitimate door through which old men pass out of life; but the young men also, for once, last fall and winter rolled up big and horrid in a tremendous swath.

The onset of the pneumonia was so shocking and so rapid in its progress that it was fatal to make a wrong prescription to be corrected at a subsequent call or for "rule of thumb" treatment. The old "expectant" lines of practice only gave time for a fatality to occur unless perchance, in a fortuitous case, the self-limiting nature of the pneumonia, the endurance of the sufferer or other kind of good luck conducted to favorable reaction. With him who treated three hundred cases of influenza without a death or with him who reported twenty-seven deaths out of one hundred

and eighty-five cases, it is not recorded whether the influenza was simple or complicated. The reports would have very much more value if we could know this and just how many pneumonia as well as influenzas the one lost and the other saved.

Pneumonia travels slower than influenza which accounts in part, possibly, for the earlier cases in the epidemic being milder or less complicated than those occurring after the pneumonia had caught up. Pneumonia seems to spread by immediate contact between the infected and the susceptible and has a very limited striking distance from case to case; whereas, influenza moves with the same celerity as the means of travel across the territory over which it advances. No other disease appears to spread so rapidly or to attack simultaneously so many individuals exposed to it. As modes of travel become faster we should look for future epidemics to increase accordingly their daily mileage of advancement. The railroad train has been about the limit of high speed, but influenza in the future will abide in its world sweep the development of aerial service for accelerated spread. Everybody seems to be anticipating a return of the dual epidemics at the onset of their favorable season which is now opening. The question is pertinent, will it be a return or an exacerbation of what we had? Almost all acute infections undergo seasonal variation. How long then will it take the general wave with its varying ebbs and flows to spend itself entirely?

The public is pretty well informed how to minimize an outbreak in numbers and severity, but, of course, will be heedless and will have to be restrained in some respects and coerced in others. They must physiologically behave themselves, clothe warmly, eat nutritious food, keep their feet dry and warm, avoid crowds, not go abroad unless quite necessary, and not then if in the least indisposed, not cough at or upon anybody or be coughed at or upon. With the first symptoms of severe cold or systemic pains they should gargle their throats with hot water in which has been dissolved a pinch of salt and send for a homeopathic doctor if for no other reason than to avoid being aspirinated, coal tarred and dosed with Dover's powder and other narcotics.

The prophylactic treatment is simple and entirely advisory from the standpoint of the physician. It can be summed up in

two phrases; first, avoid exposure, second, keep yourself so fortified hygienically as to resist or survive the shock of attack. To the homeopathic physician we insist upon our fundamental principles; the discriminating differentiation of cases and the selection of the correct remedy in each affected individual and at the first time. To non-homeopathic physicians we say, for God's sake, throw aspirin where Macbeth threw the laxative.

A great deal was anticipated from vaccines. The serologist worked unceasingly to find or produce in his laboratory a bacterial product that would prevent or neutralize the infection of both the influenza and the streptococcus pneumonia. But the proof of any bacterial vaccine being either preventive or curative is forthcoming and not conclusively demonstrated, if we accept the statement of the Director of the Hygienic Laboratory of the United States Health Service who introduces his comments as follows:

"We hear of numerous examples of the cure of cases by means of vaccine. I have heard related the most astonishing examples of apparent great benefit from vaccines in the pneumonia that follows influenza. When the records were scrutinized, however, it was found that these remarkable cases could be duplicated by others that had done equally well without vaccine."

After giving four pitfalls in determining the value of vaccines he finds all positive assertions of benefit do not stand critical analysis. The concluding remarks of his brief are:

"In the only examples with which I am familiar in which vaccine was used on alternate cases (every other one being a control), no better results were secured in the vaccinated than in the control group.

"The only way in which we are to secure promptly acceptable evidence of the value of a bacterial vaccine is by the verification of only a portion of the individuals in a large group, holding the remainder as controls, age, sex and conditions of exposure being the same in the two groups."

P. C. Rosenow in the Journal of the American Medical Association, January 22, 1919, discussing the results in cases during 1918-1919 influenza pandemic remarks concerning experimentations with vaccine, that the results obtained are considered pre-

liminary, and final conclusions cannot be drawn at this time. He adds the comforting comment that the vaccine used was, at least, harmless, and thinks a certain degree of protection was afforded, although no percentages are given as to the probability of protection.

Please bear in mind that the foregoing paragraph applies to the streptococcus pneumonia "which presents a phenomenon almost if not quite new among epidemic diseases" and not to the familiar lobar or croupous form induced by pneumococci with types one, two, three and four.

It would be very interesting to pause to consider the pleuritis, hydrothorax and pyothorax that was mixed up in the mischief, but time limitations prevent such digression.

I wish to comment in passing, tuberculosis is one of the diseases that sanitarians claim to have diminished in frequency during a decade or two, but they may look for a rise in the death curve for a few years to follow because all the sequelæ of influenza and its associations are not over and tuberculosis will be conspicuous as an after effect.

In speaking of the remedies briefly, I may be personal, but I trust. honest. When the sufferer grew cyanotic, the blood thin, dark and non-coagulable, or, in other words, when the pneumonia was black and of the streptococcus kind, how much did Lachesis, Crotalus, Naja, Carbo vegetabilis, Nitric acid, or anything else do to save? If you had comforting verifications please speak up. In that stage, and frequently it seemed to be the first stage, I ask myself, is not dissolution really taking place? To use the language of the ordinary layman, is not the patient already struck with death? The battle for life must be won earlier in the fight, but, of course, if possible, then we fight the harder but seldom are the victors.

Were my dissertation before a body of newly qualified doctors or a class of senior students, I would consider it only just commenced with the foregoing as a preface. I should regard it my duty to make it heavy, heavy in more senses than one, with the only specific justification there is for a physician's existence, which is not merely to think something called diagnosis but to do something called treatment and to administer such treatment as

has the greatest probability of restoration to comfort and health. Since I am speaking to those, many of whom have had wider experience than myself and all of whom are presumed to know thoroughly the ranges, reaches and limitations of particular drugs homeopathically indicated, I shall not give any symptomatic detail. I have taken particular pains to ask of many physicians whether their experiences during the epidemic gave them confidence and self-reliance, should the situation repeat itself, to the extent that they would enter into it without trepidation and with confidence?

When I attend church I want to know if all the fellowship are growing in grace; if their constructive spiritual metabolism is in the ascendency over the destructive: if they feel their souls are rooting deeper and firmer in the rocks of the eternal verities. So in the medical vineyard I sought a frank, positive or negative response to my foregoing question.

The other day I assembled three men of mature experiences and all seasoned with the exigencies, vicissitudes and pleasures of long years of medical practice. One was from central Indiana, one from central Ohio, the other from a hospital connected with a medical school. I subjected them to a quiz from which my stenographer took the following notes:

Aconite: For a few cases, if it did not act promptly, dropped it within few hours.

Gelsemium: The cases who had it, upon indications, early in influenza seemed to resist subsequent pneumonia.

Ferrum phosphoricum: Continue, when called for by symptomatology, about forty-eight hours. Results were strikingly beneficial. (I have had at least fifty replies similar to this for this medicine in the epidemic.)

Bryonia: Two were highly gratified with it upon its signal symptoms. The question was raised that others had been more or less disappointed in this staunch old polychrest. It was explained that there has not been an importation of many fresh European grown drugs since the war began and our stocks on hand are deteriorated. Bryonia is a medicine that must have the snap of freshness.

Phosphorus: Very frequently indicated, generally followed

Bryonia, and was regarded indispensable. One gave the sign of rust-colored sputum as a very prominent *Phosphorus* call.

Arsenicum: One very discerning physician who has been in the homoeopathic harness since 1872 and who has not permitted himself by any means to become encrusted with a carapace, said he used Arsenicum early, just so soon as restlessness, thirst and gastric disturbance came into the symptomatology. He gave it in anticipation that pneumonia might intervene and was sure he had been extremely fortunate with it. He used the word preventive in connection with this drug and pneumonia. He anticipated in several cases the patient to be already afflicted with pneumonia, and said he knew he had prevented it from fully developing and had headed off sepsis. He had administered it frequently before Bryonia and Phosphorus.

Iodine: Violent onset, quick advancement toward consolidation, panting respiration, dark hæmoptysis. Rapid depletion of patient's physical substance.

Antimonium tartaricum: Non-productive cough with fine rales, expectoration holds back, hence scanty, if there be any, yellowish when it appears.

Lycopodium: Profuse purulent expectoration, fever still hanging on. Between Tartar emetic and Sulphur stage, Dr. H. H. Baxter used to say that Lycopodium, twelfth decimal, would clear up a delayed pneumonia as a fog vanishes before the morning sun. However, Doctor Baxter in his day, like the rest of us in our day, had had but slight, if any experience, with streptococcus, hæmolyticus pneumonia. This kind of pneumonia is like the driving storm—never fog-like.

One who was present at my oral questionnaire spoke of *Mercurius* with muco-purulent expectoration, worse at night, dreads fresh air.

All those who had used it said their confidence in *Sulphur* had been strengthened, of course, in *Sulphur* cases.

Veratrum viride: Without the restlessness and mental states of Aconite, but otherwise quite like it.

One who subjected himself to the quiz spoke of Arsenicum iodatum as a cardinal means with which to combat the aftereffects of such diseases as pneumonia, typhoid and influenza. The

indications he gives for it would appear to be also present in some of the early effects as well as those following after, viz., heart muscle becomes weakened and hence the sounds not distinct in character, the pulse, of course, soft, compressible not from lack of arterial tone but from myocardial changes. These symptoms, is associated with disseminated weakness, some shortness of breath, beginning anamia indicate this drug clearly, and it can be dispensated with confidence. Its field would seem to be in the stage of a weakened myocardium, just about to come to an acute failure to compensate.

Brentwood, Md., May 22, '20.

My Dear Mr. Editor:

Dr. Lutze (page 211) spoiled his epilepsy case by following *Calc. c.* with *Sulph*. He set his patient back and came near killing her by this serious error. Let us all take warning.

That she finally rallied and eventually recovered was more than we had a right to expect.

Yours for scientific prescribing,
JOHN F. KEENAN, M. D.

Rats cost every person in the United States one-half of one cent a day, says the United States Public Health Service. Write to the Surgeon General, Rupert Blue, Washington, D. C., for an instructive bulletin on how to get rid of them.