THE CANADIAN PRACTITIONER'S DIAGNOSIS OF PULMONARY TUBERCULOSIS

By A. F. Miller, M.D.

Medical Superintendent, Provincial Sanatorium, Kentville, N.S.

I IMAGINE that if those in charge of the various sanatoriums on this continent for the treatment of pulmonary tuberculosis were asked what has been the most outstanding fact of their medical work, the majority of them would say, The inability of the general practitioner to diagnose incipient, moderately advanced, and often far advanced tuberculosis, and the needlessness of much of the advanced disease that comes to their institutions for treatment. I know that such has been my experience, and I shall show in the course of this paper that in Canada, at least, this has been, and is, the experience of the other men who are at present devoting their time wholly to tuberculosis institutional work.

The fact, indeed, is too often impressed upon us to be overlooked or forgotten; it is a fact which is brought afresh to our minds almost daily, and despite its recurring impact it never seems to dullen or make apathetic the sensibilities—it is too full of tragedy, too needless, to do that. It is a fact, too, which in view of the campaign that is now being waged against the disease, is thoroughly discouraging to those intimately associated in this work; a fact so outstanding, that one is almost forced to believe that it is not the indifference of the public, not the ignorance and delay of the patient in seeking advice, but the inability of practitioners to diagnose the disease in time, that is to-day the greatest clog in the forward movement to meet and cope with tuberculosis.

Many will doubt whether I am justified in using so freely and insistently this word "fact", and will be inclined to attribute the failure of the practitioner to diagnose early tuberculosis of the lungs rather to the tardiness with which patients come for consultation than to poor diagnosis on the part of the physician. Let me at once, then, give my reasons for such statements as I have made in

Read at the annual meeting of the Canadian Medical Association, St. John, N.B., July 7th, 1914.

my opening paragraphs. I am of opinion, from my experience first as a general practitioner and then wholly in tuberculosis work, that ability to interpret correctly the various normal and pathological lung sounds can come only from coaching at tuberculosis clinics, presided over by men specially trained in diagnosing pulmonary tuberculosis. This the great majority of practitioners have not had. Although most of them visit at some time in their careers various clinics, it is a rare thing for any of them to attend tuberculosis clinics, and in view of the inadequate training in diagnosing tuberculosis that is given in most of the medical schools to-day, and the fact that but a few of the text-books, and those only in the latest editions, are of any value in setting forth modern methods of diagnosing early tuberculosis, a difficult matter at the best, it is not surprising that there should come from sanatoriums everywhere the same counsel to practitioners: You are not diagnosing this disease in the stage when it could and should be diagnosed; and until you awaken to this fact the campaign against tuberculosis must fail.

But the clearest proof of what I have said may be had in the cases that are sent to the sanatoriums for treatment. It is the rarest thing to have a full and adequate diagnosis made of any case sent in; the ordinary case, the case that presents itself almost every day, is the one where the history pointed to symptoms that long ago were brought to the notice of the physician, and that either were overlooked or dismissed as of no consequence, the typical case of the lung "as sound as a bell", which later on developed into the moderately advanced and often into the far advanced stage before a diagnosis was haltingly made.

All this unfortunately sounds like the exaggeration of one who has made a specialty of a small corner of the wide field of disease, and who sees in a distorted fashion the weeds that crop up there. I realize as well as anyone the Herculean task that confronts the student and practitioner of to-day; I know, too, that often where he suspects a beginning tuberculosis and gives advice that should prove helpful, that advice is all too seldom followed; and yet I am also forced to realize that the disease which he is called upon oftenest to meet is the one which he is least capable of diagnosing. To confirm my opinion, if possible, and to assure myself that this state of affairs is not confined to any one portion of the country, some months ago I wrote to all those engaged in sanatorium work in Canada, submitting to them certain questions, which they, with kindness, answered. As their answers justify my title, and serve

in succinct form to place before you the work that is being done to-day in Canada in diagnosing tuberculosis, I shall present the questions and the answers given, and then draw such conclusions as may seem fair and proper.

The questions submitted were the following:

1. (*a*) What is your impression of the average practitioner's ability to recognize incipient tuberculosis? (*b*) Moderately advanced tuberculosis? (*c*) Far advanced tuberculosis?

2. Has it been your experience that the majority of cases of tuberculosis come to the physician when good arrest or recovery of the disease may be expected?

3. Is there any opportunity given in your sanatorium or province for students and practitioners to become familiar with the diagnosis of tuberculosis?

4. What suggestions would you offer for improving the diagnosis of tuberculosis in Canada?

Answers were received from all the sanatoriums in Canada, except one, and also from a number of prominent workers in the United States. The answers from the Canadian men I shall as quickly as possible run through, grouping together the replies to each question.

1. (*a*) What is your impression of the average practitioner's ability to recognize incipient tuberculosis? "Poor." "Absolutely impossible." "The average practitioner, especially those practising for some years, scarcely ever recognizes incipient tuberculosis. The hope of this recognition is with the recent graduates, and even with them it is the few that are finding the early cases." "No good." "Average doctor does not diagnose incipient tuberculosis." "Poor." "Uusually fails." "Never recognized." "Does not recognize real incipient tuberculosis more than once in every ten times. Our sanatorium statistics may not bear out this impression on their face, but on closer investigation I believe it would be shown that practically all our early cases were sent by the tuberculosis dispensaries and by a very limited number of general practitioners." "We have found such difficulty in having the physicians send in cases that were at all suitable that we changed our form of application sheet, hoping that by this means the physicians would get a much better interpretation of what we meant by an incipient case." "Incipient tuberculosis is rarely recognized by the average practitioner. If it is recognized, it is more likely to be so through a summing up of symptoms rather than by physical examination, in those cases where bacilli are absent."

1. (*b*) Moderately advanced tuberculosis?

"Occasionally.' "Fair." "Almost as difficult as incipient tuberculosis." "Sometimes." "Fair." "Frequently fails." "Much more often, but even then not as advanced, but believes it to be incipient. Perhaps he recognizes tuberculosis in the moderately advanced cases in, say, half the cases or a quarter." "Always called incipient if recognized.' "Moderately advanced tuberculosis, as it is usually bilateral, is often considered to be bronchitis, when bacilli are absent; if recognized, it is generally graded by the practitioner as incipient."

1. (*c*) Far advanced tuberculosis?

"Often called 'incipient,' never recognized as 'advanced' unless 'hopeless.'" "Excellent." "Less difficult." "Generally, if sputum is positive." "Good." "Usually, but not always. Generally called incipient." "Occasionally fails, even when in the far advanced stage. Also I might add that when the presence of the disease is not overlooked the moderately advanced and even the far advanced cases are put down as 'incipient' sometimes; in other words, the true extent of the lesion and stage of the progress of the disease is seldom correctly recognized." "The advanced I believe he recognizes in from two-thirds to three-quarters or even nine-tenths." "Is often called incipient if it is recognized at an early visit by the practitioner."

2. Has it been your experience that the majority of cases of tuberculosis came to the physician when good arrest or recovery of the disease might have been expected?

"Yes." "To be fair and just, the usual history is that the patient was warned in time, but argued the point, and the doctor gave in to the patient's whim to wait a while and see what happens. As a rule, the patient tries to throw it on the doctor, but a careful cross-examination usually brings out, 'Yes, he told me, but he did not insist hard enough,' or something to that effect." "About 40 per cent. of the blame for late diagnosis, and late and wrong treatment can be charged to the doctor; and 60 per cent. to the patient." "Yes." "Yes.' "There is not the least doubt but that a goodly number of the cases come to the doctor when there is every hope of help and permanent restoration, but whether the majority, I am not prepared to say." "At least half the advanced cases consult a physician in the early stages." 'Owing to the fact that in my case records, I have not made a practice of noting with regard to the subject of this question, I would hesitate to state definitely that a majority of cases present themselves to some physi-

cian in the earlier stages of the disease. However, I certainly can recall a considerable number which had apparently been more or less under the observation of a physician at a stage of their disease when good results might have been expected if a correct diagnosis had been made, and promptly followed by proper treatment kept up for a sufficient length of time." "I do not think that the majority of cases come to the physician when good arrest and recovery may be expected." "The majority, that is over half of the number of tuberculous persons, came to their physician at a time when an arrest of the disease or a very fair recovery, if not a cure, might reasonably have been expected." "In 60 per cent. of cases the diagnosis is not promptly made; in 40 per cent. of cases the treatment is bad after the diagnosis has been made. The treatment of incipients is best, because the diagnosis has been made by keener men. In a large number of cases, especially those in middle adult life, the diagnosis in an incipient stage is difficult to make. Also a large number of cases do not present themselves for diagnosis in an incipient stage. The disease can, however, in the majority be recognized when a good result from treatment is still possible. Nearly half the responsibility for bad treatment after the diagnosis rests with the patient."

The general conclusion seems clear. In the opinion of the Canadian sanatorium physicians (and I may here state that the answers I have received from a number of the prominent men in the United States are in all respects similar to those I have presented above, and are in terms even more vigorous and unmistakable), in the opinion of these workers, the Canadian practitioner is diagnosing the commonest disease in Canada in a manner that, were it any other disease, would stamp him as careless and inefficient. There has been so much written of late on the dangers of tuberculosis, so many warnings have been uttered, that I think our physicians have come to look with a mild contempt on it all, that they do not consider tuberculosis of the lungs either a difficult disease to diagnose, or a difficult one to treat. It is the every-day experience of the sanatorium physician that they are doing neither the one nor the other properly; that they do not recognize the disease until it is well advanced, and then often fail to regulate the life of the patient intelligently enough to effect an arrest of the disease.

Why they do not, I have already hinted at. Further reasons are to be had in the answers to the question asking what opportunities are given in the various provinces for students and practitioners

to become familiar with the diagnosis of this disease, and from replies to letters sent to the different medical schools, asking what the courses offer to students in making them familiar with methods in diagnosing incipient tuberculosis. These revealed the fact, first, that only one medical college requires its students to spend a certain time in its provincial sanatorium, though in another a post-graduate course in tuberculosis has been established; so far as I can find out, and I am very willing to be corrected in this matter, clinics are given almost wholly in the hospitals where the cases are naturally not incipient but well advanced, and where the demonstrators are rarely men who have had any special training in diagnosing tuberculosis; secondly, that physicians rarely or never visit the sanatoriums either for inspection or for improving their methods of diagnosis; and thirdly, that the wealth of material at the different sanatoriums is practically never used or taken advantage of in any way for clinical or other purposes.

How present and future diagnosis can best be improved may perhaps be suggested by the answers to the fourth question. As I have but a few minutes more,—I shall give the ideas in briefest form: For students,—a chair of phthisiotherapy in our various medical schools; the use of *incipient* cases for students' clinics, the demonstrator to be a man who has had a special training in diagnosing tuberculosis; two or three weeks' residence in a sanatorium. For practising physicians,—interesting groups of practitioners to visit sanatoriums; establishing good clinics in sanatoriums and dispensaries, where practitioners can go, as they go to other clinics, to brush up their methods of diagnosis; the consistent examination of sputum, repeating this a number of times when negative; and, until diagnostic methods are improved, basing the diagnosis on a carefully taken history rather than on physical examination. For nurses,—have them before they graduate spend at least a fortnight in a sanatorium.

This, then, is the case I lay before you. These criticisms I believe to be fair and just. I can say that my own experience is very definite on the subject; and since the experience of every other sanatorium worker I know is the same, it seems very clear to me that it is a state of affairs which you, as members of the Canadian Medical Association, must consider now seriously and honestly, and endeavour, in some practical manner, to improve.