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## A CASE OF PHTHISIS WITH NUMEROUS BACILLI. COMPLETE ARREST OF THE DISEASE.<sup>1</sup>

BY VINCENT Y. BOWDITCH, M.D.

OWING to the universal discussions which have been carried on in the medical world during the past year or two over the bacillus tuberculosis, the following case will, I think, be of interest to you this evening, and if I present it to you rather in detail, I trust I may be pardoned, as it is for the purpose of seeing, if possible, what deductions can be drawn from it as to the significance of bacilli in the sputa of phthysical patients.

On June 20, 1883, I was called to see Miss H—, a young lady aged twenty-three, who gave the following history: Always remarkably strong and well, with the exception of a severe "congestion of the lungs of short duration when a baby." All of the bodily functions had been perfectly regular. The father, mother and the whole family were healthy people without history of lung trouble in any branch. During the previous winter the patient had interested herself greatly in photography and had had one or two severe headaches which increased in number and severity during the few weeks previous to my visit, and four or five weeks before, a slight hacking cough had begun with greenish sputa. A rapid and marked loss of

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appetite, flesh and strength together with feverishness, occasional night sweats, and increasing languor, after a visit to the seashore, so alarmed her mother that she felt a physician must be consulted immediately.

The patient was tall, of fine physique, the face somewhat pale, with a languid expression, the whole appearance being that of one accustomed to robust health, but temporarily indisposed. The voice was slightly hoarse. Upon physical examination I found very marked dulness at the right apex above and below the clavicle extending down to about the second intercostal space, and auscultation revealed very numerous loud, moist mucous râles, with prolonged expiratory murmur and decided "nearness of voice" in the region of dulness. Once or twice there was a suspicion of a "squeak" in the left apex. Elsewhere in the chest the physical signs were normal. The temperature was 100.2 and the pulse 94.

Nourishment was ordered in the form of milk to be given every two hours with Murdock's Food, and the patient was told to take Fellows' Syrup of the Hypophosphites, to paint over the region of dulness with Tincture of Iodine for several weeks, and to inhale once or twice a day a mixture of equal parts of Tincture of Opium, Tincture of Hyoscyamus and Tincture of Conium, the inhaler to be placed in a bowl of hot water.

On June 26th, a consultation was held with Dr. Henry I. Bowditch, and, on examination, dulness, moist râles and bronchial breathing were noticed above and below the right clavicle, the râles being not quite so numerous as before. Temperature and pulse were normal. The patient was able to eat more, felt stronger and coughed less. The sputa were mummulated, greenish, and once or twice during the week had had a reddish tinge.

June 27th. Sputa examined by Dr. W. W. Gannett, who reported that *the specimen contained numerous bacilli.*

June 30th. Examination showed that the signs were certainly less marked but still distinct in the right apex and the patient reported, "No headache for two weeks." I prescribed, as a residence for the summer, Bethlehem, N. H., having refused to allow the family to go to the seashore as proposed, and ordered the same medicines to be continued, with instructions that the patient should be in the open air every moment possible during the day, to be back by sunset at the hotel and never to remain outside the house after eight P.M.; to take no long fatiguing excursions and to eat all the nourishing food possible.

One month later, the mother of the patient wrote that her daughter's health had steadily improved from the first day of their arrival, and that she was beginning to take active exercise without the slightest fatigue. The patient, however, complained of a slight pain in the right side near the axilla. The cough had nearly disappeared; the menses had appeared within a day or two of the normal time, and improvement was so marked that all medication except painting the chest with iodine had been discontinued. I recommended a simple liniment to be rubbed on the chest over the seat of pain, and ordered the Hypophosphites to be continued.

Three months later the mother again wrote enthusiastically of her daughter's gain. The patient had gained seven pounds in six weeks, played lawn tennis and took long walks without the slightest fatigue, slept all night like a child, and only had a slight "hemming" through the day. The record of the morning and evening temperature for five days at this time

showed it to be normal; the pain in the chest had ceased and the patient looked "the picture of health."

In spite of the continued favorable reports, I was skeptical as to the permanent restoration of health, and thought it to be probably but a temporary gain to be followed soon by a renewal of the symptoms.

About the middle of September, after a stay of two and a half months in Bethlehem, the family returned to Boston for a few days en route for Texas, a part of the country I should not have selected as a winter resort, but which for various urgent reasons seemed the best place for the patient, whom I would not allow to remain in Boston for the winter.

Upon examination, the general appearance was of excellent health, the patient being much stouter than in the early summer.

A slight huskiness of the voice was noticeable, however, and an occasional clearing of the throat and slight cough after laughing were enough to strengthen my suspicions that there was still trouble left. No sputa could be obtained at any time for examination. The patient complained of occasional slight "stitches" in the chest, but no localized pain, and felt perfectly well.

Physical examination showed dulness still present in the right apex. Râles of a finer, drier quality, and much fewer in number than before, were heard in this region and the coarser râles had disappeared. The expiratory murmur was marked, with slight bronchophony. Respiration in the left apex normal. Pulse 68, temperature 97.8. During the stay of a few days in Boston, as the patient's appetite failed and the slight cough increased, I hastened her departure as much as possible.

For the next eight months, which were spent in



various parts of Texas, I continued to receive enthusiastic accounts of the daughter's health from both parents, with one exception, when, having been subjected late in the winter to very heavy fogs in Galveston, the patient complained of a great sense of oppression in the chest, and of general debility, symptoms which speedily disappeared upon her going to San Antonio, where she remained until the following spring, the early part of the winter having been spent in the interior of the State, where, in spite of great household discomforts and exposure to the blasts of the so-called "Northerners," icy winds, which suddenly rush over that region in winter, she remained perfectly well, while other members of her family suffered with severe colds and coughs. A slight clearing of the throat was occasionally noticed, but so slight that her mother remarked that had it not been for the previous summer's experience, a second thought would never have been given it and was no more than had been present at times ever since childhood, and the patient weighed more than ever in her life before, namely, one hundred and fifty-five pounds.

On May 19, 1884, nearly one year after my first examination, the patient returned by sea to New York and thence to Boston, where she arrived with a heavy cold taken in New York during a violent rain storm. Headache, with a return of slight pain occasionally noticed in the upper right chest, were also present, but in a few days all these symptoms disappeared.

Examination showed upon inspection a slight hollow under the right clavicle. Dulness noticed as before. The respiratory murmur was less pure than on the left, but it was almost impossible to get any definite râle, even after cough, but occasionally an indistinct "click" could be heard. Voice rather nearer than on left. Temperature 99.

The patient remained in Boston until the last of June and then went at my recommendation to spend the summer near Lake Champlain and in the Adirondack region, a spot which had seemed to me peculiarly suited for such a case. Here she remained by my advice, in spite of the adverse criticism of many of her friends, who insisted upon her absolute health, until the following spring, and then returned to Boston the picture of robust health, and declaring that, with the exception of an occasional neuralgic headache, she felt absolutely well; that the pains in the chest had disappeared, that long walks and rough climbing caused no shortness of breath, but merely a healthy fatigue; in short, giving a description of as perfect health as one could desire. All medication had been given up several months before.

Examination of the chest showed a return to its normal contour, the hollow under the right clavicle having disappeared. The percussion note revealed little difference between the two sides, although at the upper right there was still very slight dulness and a feeling of inelasticity was marked. The respiratory murmur in this region was rather harsh, and after a slight cough under the right clavicle a faint "crackle" was occasionally heard, but the moist coarse râles heard in the examination of two years before, had entirely disappeared, while the "nearness of voice" at the upper right, was not quite so marked as before.

Considering it wiser for the moral effect upon the patient that she should be told, at the end of my examination, of her recovery, and thus be relieved from the depressing effect of a constant watch upon her symptoms. I bade her, although recognizing in my own mind the possibility of a renewal of the morbid process in the future, to forget that she had ever needed a

physician, merely cautioning her against foolishly exposing herself in any way in the future. Up to the present time I have had no reason to think my advice unwise, and in my occasional interviews with the patient during the past few months, I have watched in vain for any symptom, apart from those to be noticed only in a physical examination, which to the medical eye and ear would suggest anything other than a condition of perfect health.

We have, then, the history of a young lady, previously strong and well, seized with sudden and alarming symptoms of acute tubercular disease in the apex of one lung, followed in a few months by a cessation or "drying up," as it were, of the morbid process and consequent shrinking of the lung substance in the affected region, and, so far as outward appearance are concerned, a complete renewal of the patient's health.

What have we to learn from this case?

Two facts of marked importance, it seems to me: *first*, that the rapidity of the fatal result in phthisical cases is not *always*, as thought by some, in direct ratio to the number of bacilli found in the sputa, (that is, the greater the number of bacilli, the more rapid the course of the disease,) and *second*, that the presence of even numerous bacilli in phthisical sputa is not inconsistent with complete arrest of the morbid process and subsequent renewal of the patient's health.

One case like the above, as proof of these assertions, is, of course, of great value to us in making our prognosis, in similar instances when, following the teachings of those whose opinions we respect, we are led to give the gravest prognosis and feel no hope for the recovery of our patient whose sputa reveal the presence of the bacillus tuberculosis.

In an article entitled "The Pathological and Prac-

tical Relations of the Doctrine of the Bacillus Tuberculosis," printed in the *Philadelphia Medical News* of January 19, 1884, Prof. Austin Flint writes, "So far as my experience goes, an abundance of bacilli in the sputa of phthisical patients is evidence of active progress of the disease, and vice versa," and in a conversation with him last spring, he stated that although unable to say absolutely that he had ever so expressed himself in writing, his decided impression was that the presence of bacilli in large quantities in phthisical sputa was a sign of a rapidly fatal termination of the disease, an opinion which, coming from such a source, we are bound to respect, while it makes the case in question of still greater importance.

I have used the term "complete arrest of the disease," rather than the word "recovery," in this case to satisfy those who with justice claim that we have no right to use the latter term unless the part affected shall have resumed its normal condition. The use of the former term, however, is justifiable, inasmuch as it does not preclude the possibility of a renewal of the trouble at some future time.