nodules in the neighbouring skin, the scar itself being apparently healthy.

It has been remarked by a thoughtful surgeon, that he who values his peace of mind will never operate for cancer of the breast. That same surgeon would, however, be the first to admit that the mental ease of the practitioner is not to count before the physical well-being of the patient. It is afterwards a great comfort to a patient to feel that she has had the privilege of operation, even though there be recurrence of the disease.

As time advances, it will probably be found that operative surgery can be of yet greater service in rendering cancer a strictly local disease. If so, the first advance will likely be made in dealing with the enlarged cervical—supraclavicular—glands, which are infected after invasion of the axillary lymphatics, through the apex of the axilla and beneath the clavicle. Although they can be pulled down by the fingers and forceps in the armpit, especially if, at the same time, pressure be made from above the clavicle, still, the better way will probably be to extract them by a direct incision at the root of the neck, after the clearance of the armpit.

After operation, the patient should present herself for inspection by the surgeon at regular intervals, say of six weeks or two months; so that, in case of recurrence of the disease, no time may be lost in operating again. Then, in case of suspicious fulness about the axilla, or of hardness about the scar, the cicatrix may be widely removed, and the armpit again examined, and, if necessary, cleared out. To have operated once should not suffice; time after time must the attack be renewed, whilst there is prospect of operating through uninfected tissue—of getting beyond the disease.

The value of this treatment is shown in the case of Mrs. M., whom you have just seen. She was sent to me on May 10th, 1876, in order that I might carry out the treatment by injection of acetic acid. The patient was in service as a lady's maid, and declined operation by the knife. She called herself 50, but she was really eight years older. For seventeen months a tumour had been growing in the sternal side of the right breast. It was very hard, and the skin was dimpled over, and adherent to it in several places. There were some enlarged axillary glands. For seven weeks the acetic acid treatment was carried out, but without any avail, and operation by the knife was then agreed upon. At the time of its performance, the enlarged glands were removed from the armpit. In the early part of 1877 there was a return in the pectoral region, and a former colleague swept away all the diseased tissue with a knife. In April, 1878, the patient was fairly well, but soon after there was fresh recurrence of the growth. I operated again; and I performed a fourth operation in the beginning of 1879. After this last operation, she secured a pension from the Putney Hospital for Incurables.

As you examined her with me just now, you found the extensive cicatrix perfectly soft and movable, and without tenderness. The armpit, moreover, is perfectly clear of enlarged glands, so far as one can determine by careful examination. It is now more than seven years since the last operation, and the woman seems to be absolutely cured of her disease.

The second case which you examined with me to-day is that of Mrs. W., who came in July, 1884, with cancer of the right breast. She was suckling at the time of her admission, and was but 38 years old. For some time she had noticed a small lump in the breast; and three months ago it had begun to grow very rapidly, and with much pain. There were enlarged glands in the armpit. The family history was interesting, in that both parents, and seventeen brothers and sisters, were alive and well. The breast was freely removed, and the axilla was cleared of cancerous glands. She left the hospital within the month, the wound being healed. In the following November she came in again, for the removal of indurated tissue from the scar; the axilla was again opened. She remained in hospital fourteen days. Three months later (February, 1885) she was readmitted; the brawny scar was again excised, and the armpit again attacked, some small kernels being extracted. This time she was in hospital twenty-three days. In July, 1885, she was admitted for the fourth time, for the removal of a hard nodule from the scar.

It is now but seven months from the last operation, and it is manifestly not advisable to give too favourable a prognosis. All that one can say is that the patient looks well, and that there is nothing suspicious about either the scar or the armpit. I specially refer to her case to-day, because she is known to many of you, and that I may thereby the better emphasise the advice which I have just given as regards operating for cancer of the breast, namely, that you operate promptly and thoroughly, taking away the whole breast and nipple in every case, and laying open the floor of the axilla, whether you have recognised enlarged glands there or not;

that you tear out every gland that you can find, whether it be enlarged or not, for that is the only way of being sure that all the diseased glands are removed; that if scirrhus infiltration recur, you are to go through the entire programme again with as much vigour and hope as on the first occasion; and, lastly, that you are not to refuse to operate whilst there is a reasonable probability of your being able to get beyond the infiltration, no matter how often the disease has recurred, and your art, apparently, failed.

CLINICAL LECTURE ON CERTAIN CASES OF LUNG-DISEASE RESEMBLING ACUTE PHTHISIS.

Delivered at the Liverpool Royal Infirmary.

By A. T. H. WATERS, M.D., F.R.C.P.,

Physician to the Infirmary.

GENTLEMEN,—There are certain cases of acute inflammatory disease of the lungs which so closely resemble in their clinical features acute phthisis, that the differential diagnosis of them is often exceedingly difficult; and I wish to-day to speak to you of such cases, and to refer to some which have come under my own observation.

We are familiar with two forms of acute phthisis; and let me draw your attention briefly to their chief characteristics before I allude to the special subject of my lecture.

First, we have that form of acute phthisis which begins with symptoms resembling those of pneumonia, with crepitation at one apex soon extending to both apices, and followed by rapid extension, and consolidation and disintegration of the lung-tissue. Cavities soon form; there are copious expectoration, rapidly increasing weakness, profuse perspirations, quick pulse, and a temperature reaching a very high level in the evening, and sinking to the normal, or even sub-normal, in the morning. The debility is great, but there is not utter prostration, as in the second form. In these cases, death usually takes place at the end of a few weeks, probably within three months from the onset of the attack; and, after death, we find the lungs more or less solidified throughout, with numerous cavities, but few or no tubercles. Such cases are generally met with in somewhat young patients who come of a phthisical family. To this form of the disease, we give the name *acute pneumonic phthisis*. It is a form of scrofulous pneumonia.

The chart which I show you will indicate to you the character of the temperature in a well marked case of this kind; the temperature was taken between nine and ten in the morning, and between seven and nine in the evening. The patient, in this instance, was a young lady whom I attended some years ago. She did not live many weeks from the beginning of her symptoms. She came of a phthisical family, and, after her death, I attended her sister for a similar disease, which ended fatally.

Then there is the second form of acute phthisis, in which the symptoms at the beginning resemble very much those of typhoid fever, in which there is but little cough at first, with but little expectoration, in which the pulse is very quick, and the prostration extreme. In these cases the temperature is high, but it does not present those variations which characterise the first form. It maintains a more even level, rising slightly in the evening, but not falling to the normal in the morning. The physical signs, at first doubtful, soon, however, show the nature of the case. We hear *râles* all over the chest, fine subcrepitant and crepitant—indications of the existence of a general capillary bronchitis, or pneumonia. These cases usually end fatally in a few weeks, and they are often characterised by the existence of head-symptoms. We know that, when the patient dies, we shall find the lungs riddled with tubercles, around which the lung-tissue has become inflamed. To this form of disease we give the name *acute tubercular phthisis*. The subjoined charts show the temperature-ranges in two such cases.

Now there may be, in such cases as those to which I have referred, little or no difficulty, except just at first, in forming a correct opinion as to their nature; but I have met with cases in which the clinical features so closely resembled those which I have described, that I have expressed a fear that they were really cases of acute phthisis, yet the patients have eventually recovered; and I have therefore

been compelled to ask myself whether I had not made a mistake in diagnosis. Is it possible that cases of acute phthisis can recover?

Whilst I should unhesitatingly say that, when once the second form

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8 9 10 11 12 13 14

of acute phthisis has set in, and the lungs are studded with miliary tubercles, recovery is impossible, I think that, in the pneumonic form of the disease, recovery may take place. The affection is essentially a scrofulous pneumonia, and as such may be amenable to treatment. Again, just as we see that cases of subacute and chronic phthisis, especially those which begin in so-called catarrhal pneumonia—for I cannot, as the result of my clinical experience, admit that all cases of subacute or chronic phthisis begin with the deposition of tubercle—get well, so I think we may hope that cases of a more acute form, although tubercular, may also recover.

Now let me draw your attention to the notes of the following case. Amy S., aged 16, was admitted into No. 15 ward on February 21st,

1877. It appeared that, up to twelve months before admission, she had enjoyed very good health. At that time, some dropsical symptoms appeared. Her abdomen began to swell. Under medical treatment, the swelling subsided in about five weeks, and she remained well up to three weeks before entering the infirmary. On admission, she was suffering from ascites and oedema of the legs, unconnected, as far as could be ascertained, with any organic disease. Iodide of iron, and subsequently iodide of potassium, were administered, and the abdomen was painted with tincture of iodine. I considered the case as probably one of tubercular disease of the peritoneum, or else one of ordinary chronic peritonitis.

APRIL

20 21 22 23 24 25 26 27 28 29

By February 27th, the oedema of the legs had disappeared, and the abdominal swelling was less, but a fresh symptom now set in. She caught cold, and a cough came on early in March; and, on the 10th, she began to expectorate somewhat rust-coloured sputa. She was then ordered carbonate of ammonia and cascarrilla, with four ounces of port wine daily.

On March 12th, the following were the physical signs elicited by careful examination of the chest. There was loud breathing, with moist sounds, at the left apex. There was some dullness, with crepitation and bronchial breathing, under the right clavicle, with dullness, but no crepitation or friction-sound at the right base. The breathing was rapid, and there was severe cough, especially on exertion. The pulse was quick, and the temperature high. I shall refer to these signs later on.

On the 16th, in consequence of the dullness over the right base having extended, and as I feared there might be some fluid in the pleura, I punctured the chest, but no fluid was found.

During the following week, the symptoms increased in gravity. The dullness over the right apex extended downwards, the crepitation became coarser, and appeared to indicate the breaking up of the lung-tissue.

On March 29th, the fluid had almost entirely disappeared from the abdomen, and the general symptoms were somewhat less severe, but there was no improvement in the physical signs.

On April 7th, after the patient had been under treatment forty-five days, and about five weeks after the lung-symptoms had set in, there were dullness and cavernous (?) breathing under the right clavicle, with dullness and crepitation lower down, and coarse crepitation all over the back. Throughout the case, the mischief in the left lung was confined to the apex.

From about the middle of April, the patient began to improve, but it was not till near the end of June that she was able to be removed into the country.

Now, having referred to the physical signs—which were such as characterise acute pneumonic phthisis in its stage prior to the formation of numerous cavities—let me refer to the general symptoms. First of all, the pulse was very rapid; it varied from 140 to 120 in the earlier weeks, never falling below 110 till after the middle of April, namely, about seven weeks after the patient's admission.

And now with regard to the temperature; I wish particularly to call your attention to this. The chart shows its variations. You see that it maintained a high level for some weeks, but it had marked

oscillations, being very high in the evening, and low, nearly normal, in the morning. You will observe that it was taken three times a day, namely, at 9 A.M., 5 P.M., and 9 P.M., and that it was often found highest at 5 P.M. This, as you know, is a very frequent feature of the temperature in phthisis.

Thus we had in this case the characteristic high fever of acute phthisis; we had rapid consolidation of the apex of one lung, with indications of disease in the apex of the opposite lung; we had a steady extension of the disease, signs of the lung breaking up, and of the formation of a cavity, with great weakness of the patient. These symptoms lasted many weeks, and recovery was very slow.

On May 26th, the following physical signs were noted. There was still dullness over the right apex with blowing sound, as of a cavity; over the right back crepitation was still heard. The pulse was quiet, and the temperature normal. The patient was removed to the Convalescent Hospital at Woolton about June 20th, and the physical signs at that time were as follows. The respiration was almost natural at the base of the right lung; there was slight crepitation towards the middle of the lung. Breathing was somewhat bronchial at the upper part of the lung behind. In front, the breathing was loud and bronchial at the right apex, but less so at the left; otherwise, the sounds in the left lung were healthy. There was slight flattening at both apices, with deficient expansion.

The patient returned from the Convalescent Hospital on July 21st, greatly improved in health and general condition. Her physical signs were as follows. There was some flattening under the right clavicle, with deficient expansion; resonance was somewhat impaired; expiration was prolonged; the breath-sounds were harsh; there was fair resonance over the back of both lungs, and the respiratory sounds were fairly good.

Now let me refer to the treatment that was adopted. When the chest-symptoms began, the patient was put on carbonate of ammonia and cascarilla, and for the latter cinchona was substituted on March 17th. On March 23rd, three grains of quinine in mixture were ordered to be taken three times a day; and, on the 26th, fifteen

minims of tincture of digitalis were added to each dose. This treatment was continued until April 2nd, when iron and quinine were given. Subsequently, cod-liver oil was taken. From the date of her admission, and more especially when the lung-symptoms set in, nourishment was given very freely. It consisted of milk, beef-tea, and eggs, and solid food as soon as it could be borne; six ounces of port wine were also given daily from March 12th, and continued (except for three days from the 26th to the 29th, when four ounces of brandy were given) up to May 11th, when porter was ordered.

The case which I have thus presented to you is one of great interest. I think it belongs to the same class as that of which I showed you the temperature-chart at the beginning of the lecture; that it was truly a case of acute pneumonic phthisis, or scrofulous pneumonia. It is very important to note the kind of treatment under which recovery took place namely, free nutrition, and the administration of such remedies as tend to lower temperature and give strength.

I have had under my care a few other cases which have resembled acute phthisis, and which have recovered. I cannot give you to-day the details of all these, but I will refer briefly to one.

Margaret P., aged 33, a servant, was admitted into the infirmary under my care, on December 29th, 1880. She was suffering from symptoms resembling those of typhoid fever; but there was cough and extensive subcrepitant *râles* over both lungs. The pulse was very quick, and the temperature high. Her condition was such that I hesitated in giving a diagnosis; on the one hand I feared typhoid fever, and on the other acute tubercular phthisis. As the case progressed, the symptoms assumed more the character of the latter disease, and for some weeks the condition of the patient was very critical. We had evidence of extensive bronchitis, with some consolidation of the right lung. The pulse remained between 120 and 140. The temperature kept uniformly high, never, however, reaching a great height, and never falling to the normal. Its characteristics were those of the second form of acute phthisis, which I have referred to at the beginning of the lecture. The respirations were rapid, 40 to 52 in the minute, and the prostration was extreme. It was not till more than three weeks after her admission that the patient showed decided signs of

improvement. From that date she steadily improved, and on April 17th she was sent to the Woolton Convalescent Hospital. I have not time to go into the details of her case, nor of one or two other similar cases which have been under my care. It must suffice to-day to say that in this case, and in the others, the treatment adopted was similar to that which was used in the case of A. S., namely—nourishment given freely, stimulants, and quinine. I hope to refer to the subject again in a future lecture.

PRESENTATION.—Mr. Charles A. Bradley, Medical Officer to the Druid's Society, Macclesfield, has been presented with the emblem of the Order, and the following illuminated address, in an ebony and gold frame. "The Order of Druids. To Charles A. Bradley, M.R.C.S., of England, signed on behalf of the society by P.D.G.M. Charles Dawson, Great Britain Lodge; P.D.G.M. Thomas Foden, Acorn and Union Lodge; P.N.G.A. James Birchenough, Imperial Lodge; D.D.G.M. William Davies, Hand and Friendship Lodge; P.N.G.A. George Adamson, Pride of Macclesfield Lodge; D.C.S. Frederick N. Barnshaw." The emblem is mounted in a similar manner, and signed by the officials of the lodge to which Mr. Bradley belongs.

AGARICIN.—Agaricin is obtained from the *Agaricus albus*, but is not a true alkaloid. It is fairly soluble in alcohol, very slightly in water, and not at all in ether; its chemical composition is somewhat uncertain, but it is not identical with muscarine. It has been used in the treatment of the night-sweats of phthisis, for which purpose, as it is insoluble, or nearly so, in water, it must be given (preferably by the mouth) either as a powder, or dissolved in a mixture of alcohol and glycerine. One-tenth of a grain is an average dose, and, as its action is slow, it should be given some hours beforehand.

UNIVERSITY OF BRUSSELS.—At the recent May examination, the following gentlemen, having satisfied the examiners, had the degree of Doctor of Medicine conferred upon them: John T. Davies, L.R.C.P.Ed., and L.M. and M.R.C.S.E., of Denbigh Infirmary; Donald A. Fraser, M.R.C.S.E. and L.S.A., of Weston-super-Mare; and Wm. Henry Walter, L.R.C.P.Ed. and L.M., M.R.C.S.E. and L.S.A., of South Petherton.