I proceed with my case. R. Thomas had for twenty-seven nights been perfectly continent; when, but for M. Trousseau's cautious account of his experience, I might have thought my patient cured. On the nights, however, of the 14th and 15th instant (nights 28 and 29), he wetted his bed as badly as ever, without any known departure from the other rules laid down. Here, then, we have a case in a boy twelve years old—old enough to see the importance of being rid of such an ailment, and hence likely to strive against so much of it as resulted from mere habit, relapsing, *while under treatment*, after twenty-seven days *cure* (?); and yet the correspondent of this JOURNAL reports his case "*quite cured three weeks after admission*". Perhaps, on some of the earlier days following this period, the boy did wet his bed.

This method of reporting cases seems to me likely to injure the cause, which I am sure the reporter of that case of cure has as much at heart as I have; and nothing is further from my wish than, whilst protecting the cause of legitimate medicine from injury, to inflict a wound upon his feelings. I do believe that belladonna is useful in nocturnal incontinence of urine; but I question its curing that complaint, when inveterate, in three weeks.

Original Communications.

ON SOME OF THE VARIETIES AND COMPLICATIONS OF PNEUMONIA.

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[*Read before the Queen's College Medico-Chirurgical Society, Birmingham.*]

I DO not know of any disease which requires greater vigilance to detect in its first onset, than pneumonia in some of its varied forms and complications. Experience teaches us that we have to contend with cases not marked with those prominent symptoms which are characteristic, and oftentimes scarcely with those minor ones, which, in the ordinary course of the disease, we pass over unnoticed and uncared for. How often, after some painful and trying fever, which has already nearly deprived a family of one of its members, and has so far yielded to treatment, that we have just congratulated the friends of our patient on his emergence from danger, does a single symptom, hot skin, a quick pulse, or a hurried respiration, tell us but too surely of the accession of a pneumonia, which will be yet more dangerous than the disease already run, and will probably destroy the patient's life at the time we felt most confident of success. Contingencies of this kind must have happened to all of us; and the subject bearing upon them will, I trust, be interesting and useful.

I have chosen cases to illustrate the difficulty of diagnosing pneumonia, when coexisting with diseases which obscure or modify its physical character; the difficulty of determining the period at which intercurrent pneumonia commences; the extent to which the lung-tissue may be involved; and the occasional fallibility of the ordinary evidences of pneumonic disease.

In childhood, pneumonia is one of the most destructive diseases, and is often obscured or exists to a greater extent than we are aware, from the impossibility of making a minute examination of the chest, owing to the restlessness of the patient, and to the fear a child evinces at the presence of a stranger. The peculiar character of the sputa is also lost to us, inasmuch as children always swallow whatever is brought into the pharynx; and in infantile life inflammatory fever, quick pulse, hurried breathing, and frequent cough, are indicative of other diseases.

A child, two years of age, was some time since brought under my notice, having the symptoms of remittent fever, with frequent purgings of slimy mucus, and apparent pain over the bowels, for the child lay on its mother's lap, with its knees drawn up, and before each purging stool became restless, moaned, and then cried, and a short time after the evacuation sank into the same quiet state. The previous history afforded no clue to disease of any other organ than the bowels; there was no cough, and the breathing was not more hurried than is frequently seen as the result of bowel irritation. When the child died, inflammation was found to have existed in both lungs; the liver was much congested, and the bowel affection was no doubt the sequel of the pneumonia, the symptoms of which, at its commencement, had been so slightly marked as to have escaped the observation of the mother.

A simple catarrh, gradually extending itself over the mucous surfaces, and through the ramifications of the bronchi, sometimes involves the lung-tissue; this extension of disease is more frequently seen in young children, and produces those isolated consolidations which we designate as lobular pneumonia. Occasionally this form of disease occurs as an epidemic, and often it is the immediate cause of death in measles, scarlatina, hooping-cough, small-pox, and such like diseases. Bronchitis, with the congestion and fever which in infancy always attend it, is with great difficulty distinguished from pneumonia; and though it is not of very much importance as far as it may influence our treatment, yet it is a mattter of very great moment in aiding us to form a prognosis; for, with pneumonia, from the frequently intractable nature of the disease, and from the collapse which so quickly follows, we should give a very guarded opinion.

The extension of inflammation from the bronchial mucous membrane to the lung is common in influenza, and is particularly fatal to old people, indeed, to the extremes of age; and when pneumonia supervenes on bronchitis of some standing, the diagnosis is not only rendered difficult, but next to impossible, every symptom characteristic of pneumonia being obscured or modified.

An old man, aged 65, who had for some years laboured under a chronic bronchitis, with habitually hurried breathing, and frequent violent attacks of coughing, during which loud gurglings of mucous were always audible, had, after exposure to cold, all his symptoms increased, and in that state came under my notice. The skin was hot, the pulse full, the expectorated mucus clear and glairy, of the same character as the sputa before the accession of the acute attack, but of greater quantity; mucous râles were heard over the whole chest; the sounds elicited by percussion were equal on both sides. The man's condition, unaltered by treatment, gradually got worse; and with increased urgency of all his symptoms, he at last became asphyxiated and died. The characteristic symptoms were here so far subdued by the old disease, that it was but reasonable to conclude that the case was one of acute bronchitis, and that the man died from an abundant secretion of mucus, which he was unable to expectorate. The dypsnœa might have resulted from obstruction of the bronchial tubes, and the expectoration was catarrhal throughout; yet the examination of the body after death showed extensive coexistence of pneumonia. There was hepatisation of the back part of the right, and the base of the left lung; the bronchial tubes were reddened, swollen, and filled with mucus. If in the commencement of the acute attack I had depleted and used counterirritation, with carefully watched doses of mercury, I think it not unlikely that his life perhaps might have been saved. Of what value, then, were the ordinary symptoms? The rusty coloured sputa, certainly one of the most characteristic, was absent; the minute crepitation, if ever it did exist, was drowned by the musical râles of all intensities and grades, and everywhere predominant; the dulness over the chest was uniform, and did not differ perceptibly over the corresponding portions of lung, which were not inflamed; the congested state of both lungs completely annihilated the value of the important evidences usually adduced by auscultation, but there was one symptom which prevailed thoughout, and which, as being subsidiary, I was not sufficiently alive to, viz., the peculiar hot, stinging state of skin. I have since met with this peculiar heat repeatedly; and I believe that when, from any disease coexisting, the pathognomonic signs of pneumonia are lost, this will be found generally an unerring guide. Certainly it exists to a greater extent in pneumonia than in any other disease I have ever witnessed; and though the "hot skin" is mentioned by writers as amongst the symptoms, I do not recollect any description which conveys to the mind the sensation produced. The expression "hot skin" does not adequately designate it. It imparts to the hand a pricking and painful impression; and though not easily to be described, it is so uncommon, that when once felt is again readily recognised.

A tax collector, who for many years has had a chronic cough, and frequently acute attacks of bronchitis, from the exposure necessitated by his employment, was under my care in the spring of 1855. At the time of my first visit he had been ill for three days with, as he termed it, a bad cold. His face was flushed, there was the stinging heat of skin, and a pulse full and quick. His breathing was accelerated and laborious, and violent paroxysms of coughing occurred every ten or twelve minutes, with expectorations of thick, glairy, and frothy

mucous. As this was my first attendance on him, I inquired the history of his past life, and of the present illness. His wife assured me that he frequently had similar attacks, and that after three or four days he would have a copious perspiration, and be able to resume his occupation in the course of a week; that his present illness came on suddenly in the evening, after having walked in the rain half the day from house to house, collecting. I was not, however, so well satisfied of this ready return to health, but thought it better to confine him to his bed, and use such means as would make the hoped for change less doubtful. From external examination I found nothing but what would bear out the wife's history; but the state of skin was to me indicative of pneumonia. I bled him, administered a sharp purgative, combined with antimony, and on the following day, finding his symptoms alleviated, and his bowels well acted upon, I gave him consecutive small doses of mercury and salines. For four or five days he continued in the same state, the sputa being abundant and catarrhal; after which he complained of soreness in the gums. His breathing then became less laborious, the skin moist, the cough of shorter duration, and the expectoration was bloody; and now for the first time I could hear, at the termination of the inspiration, the small crepitation of pneumonia.

This case was especially interesting to me, as the most prominent symptom was the peculiar state of skin. His condition did not excite any anxiety in his family, for they believed it to be nothing more than a repetition of an acute bronchitis, which they had been accustomed to witness. The sequel, however, proved the contrary; and it was only when the disease resolved that the more prominent physical signs were exhibited. Since his recovery he has again been under my notice from an attack of acute bronchitis; the burning state of skin did not then exist, but the other symptoms were as urgent as when he had pneumonia. Rest, confinement to a warm apartment, and the ordinary antiphlogistic treatment soon restored him.

The supervention of pneumonia on phthisis is of very common occurrence, and has received very contradictory opinions from different writers; some authors affirming that the disease is tractable; and that though it may happen from time to time during the progress of phthisis, it is not necessarily fatal, nor does it materially shorten the duration of life. Other writers, however, are of a different opinion; and there cannot be a doubt but that many cases of acute phthisis run their course very speedily, from the inflammation which, being necessarily of an asthenic character, favours the softening of tubercles already existing, and aids in the development of new ones.

Inflammation occurring at the commencement of phthisis is generally well marked by symptoms, and from its seat is an important help in the early diagnosis of that disease. "The existence of pneumonia", says Louis, "affecting the upper and anterior part of the lung, without a trace of disease posteriorly, is tuberculous;" but when pneumonia attends the close of life, and especially when the disease is limited, it is generally unattended with symptoms.

A young woman, who for some months had slowly wasted, and whose appearance was indicative of tuberculous disease, was visiting her sister for temporary change, and I was requested to see her, and examine her chest for the satisfaction of her friends. The history of her case was, that she had been apprenticed to a dress maker for three years. Eighteen months back she had taken cold at the time of menstruation, and soon afterwards had an attack of hæmoptysis; she had never since that time been free from slight cough, and had occasionally had spitting of blood. Her appetite had failed; she continned to waste, and was anæmic; the breathing was hurried after the slightest exertion, the night perspirations were copious, and in the morning she was faint, with a slow pulse and relaxed skin; but hectic came on in the evening. She expectorated a thick greenish sputa, of a saltish taste, together with a more copious and less viscid bronchial secretion. There was a slight depression under the left clavicle, with diminished vesicular breathing, and very slight gurgling audible at the termination of a forced inspiration, a little dulness on percussion, no loss of tactile vibration, and no pectoriloquy. Somewhat below the first rib, and towards the axilla, the inspirations were interrupted, and whiffing, and the expirations prolonged. The case was evidently one of tubercular deposit, with softening at the apex of the lung. As I was not called to attend the girl, I did not see her again till a fortnight afterwards, when I was summoned in consequence of an acute attack after exposure to cold. I found her in a high state of fever, with difficulty of breathing, and mucous râles over the chest. The expectoration was copious and frothy; there was dulness generally over the whole chest, but no difference on comparison of the two sides. Mucous râles increased, and loud gurglings accompanied each inspiration, as from day to day she lingered. Inability to expectorate succeeded to this distressing state, and she died on the ninth day from the accession of the attack. Two or three excavations existed in the apex of the left lung, and there was a general distribution of tubercles through the remaining healthy portion; there were likewise tubercles, less in number, in the right lung, which was itself inflamed through its whole extent. When it was cut and pressed, a dirty bloody serum oozed from every part, and its structure, though solid, had its tenacity destroyed; the fingers easily penetrated every part, leaving holes which were immediately filled up with the bloody serum, like circumscribed abscesses.

In this case the pneumonic symptoms were very obscure; and repeatedly cases occur to us where auscultation fails to bring out the characteristic symptoms. To all appearance, these are cases of acute bronchitis; the dulness, so uniform and general, shows a state of engorgement; but neither the sputa nor other symptoms justify more than the suspicion of pneumonia. How difficult does it become to ascertain in such cases when the invasion of pneumonia really takes place, how much of the fever attends the acute development of tubercles, and how much of pneumonia. Louis and Andral relate cases where almost the same symptoms, as remarkable for their severity as for the rapidity of the course they run, attend both the development of tubercles without pneumonia, and *vice versâ*.

In the case just related death occurred from the pneumonia, and not from phthisis; but this is not always the case. Pneumonia often hastens the death of consumptive people, by exciting the tuberculous affection, death ensuing while the pneumonia is progressing slowly, and before it has passed the stage of inflammatory engorgement.

Intercurrent pneumonia may occur from time to time in chronic phthisis; and as it is chiefly localised in the excavations, or in the structure immediately around patches of tubercles, or the termination of bronchial tubes, is unattended with the general symptoms. When the accessions are very frequent (and in some cases they do occur almost every week) there is a greater degree of hectic, and patients complain more of the uncomfortable heat than of painful suffering. The inspirations are interrupted from the local consolidations, and tubular whiffing inspirations are here and there audible, and sometimes, when the inflammation has produced a cartilaginous thickening, a bruit can be heard during deep inspiration, from the pressure of these hardened structures on the pulmonary artery.

I next come to notice pneumonia in connection with fevers. In typhus, especially, when the fever is declining, and in that critical period when, in the absence of all excitement, the debilitated frame seems almost exhausted, occasionally secondary fever arises, and announces the invasion of pneumonia; the stupor has not as yet entirely disappeared, the mental powers, alike weakened with the body, are yet clouded and slow to appreciate the commencement of a new disease; the patient expresses no feeling of pain, and his helpless condition prevents a careful examination of the chest; and if we are fortunate enough to be able to auscultate him, and find dulness over the back part of the chest, we immediately ask ourselves, Is not this, or may not this be, simple congestion from gravitation, owing to the laboured circulation from the depressing agency of fever? We look to the accompanying symptoms for corroboration, but find nothing. There is short cough, with rhonchi, but of what nature we are ignorant; the patient being unable to expectorate, and his brain so oppressed that it reveals nothing to render more intelligible our supposition of pneumonia. What is the cause which produces this condition of disease? Is it the sequel of a congestive state resulting from fever? Can the specific poison of fever give rise to local determination and inflammation? or is there any change in the constitution of the blood which will afford an explanation?

I need not quote cases of intercurrent pneumonia in fever, as examples are so common, that it would needlessly occupy time. I will, therefore, briefly draw attention to the immediate and exciting causes. Catarrh is a common accompaniment of typhus, sometimes ushering in the disease, and not unfrequently attending the early progress; it then generally requires little treatment, and if it does not spontaneously disappear, is easily subdued by appropriate remedies; but when the same affection appears as typhus *declines*, and in that exhausted condition to which I have alluded, the danger is great. When the secondary fever runs high, and the cerebral oppression is considerable, the pulmonary capillaries become

congested, and after death occasionally patches of hepatised lung are discovered, while the greater portion of lung tissue is destroyed by œdema. The name "congestive catarrh" has been given to this state. The pneumonia of the eruptive fevers, scarlatina, small-pox, etc., is of this kind, and appears generally to be an extension of disease from the mucous linings of the bronchial tubes: though isolated patches of hepatised lung are found, the general condition is that of congestion and œdema.

It has been a matter of greater dispute whether malaria or the poison of fever can produce pneumonia. From well directed observations, it appears to be satisfactorily settled. Dr. Morehead, in a report on pneumonia, as observed in the Hospital at Bombay, has noticed the occurrence of this disease, complicating intermittent and remittent fevers. He says, "From five to eight grains of quinine, with from one-tenth to one-fourth grain of tartar emetic, given at intervals of two or three hours for five or six doses, will in general suffice to check, and then stop, the febrile recurrences. When this effect on the febrile symptoms has been produced, it will generally be found that improvement in pneumonia will at once commence; and, in a large majority of cases, if the recurrence of the febrile state be prevented for some days, the inflammation will be speedily removed." He adds, "I am not acquainted with anything more striking and satisfactory, in the whole range of rational therapeutics, than the progressive but speedy restoration of an hepatised lung, coexisting with fever of remittent type, when the exacerbations have been controlled by the adequate use of quinine."

To an altered state of blood is to be attributed no small share in the development of pneumonia. That the blood undergoes some important change, both from the effects of the fever poison as well as from the course of the disease, is evident from the careful analyses of chemists—Andral, Simon, and others. We find certain elements gradually wasting, while others are in proportion increasing; and that, as certain products are abundant, so have we a tendency to inflammatory conditions. We know full well the disposition to the accession of pneumonia when fever is declining. Now is it not probable that, in our over zeal to save our patients from sinking, by affording them a highly nutritious and stimulating diet, while the excreting organs are scarcely able to perform their functions, we may increase too suddenly those products which, together with the tendency to congestion from debility, give rise to pneumonia? In almost every case, when this disease has arisen, we find the urine loaded with those deposits which prove to us that the blood is overcharged with nitrogenised matter. Of this I am sure, that since I have been very guarded in the administration of stimulants, and the richer kinds of animal food, I have seen much less of pneumonic complications in fever. Some very admirable remarks on the treatment of fever will be found in a report by Dr. Wilks, in *Guy's Hospital Reports*, vol. i, 1855, and in a review of that report published in Ranking's *Half-Yearly Abstract*, January to June, 1856.

I have hitherto spoken of the absence of symptoms which prevent our readily recognising pneumonia. I should not forget to mention the presence of other diseases, which are attended with symptoms characteristic of inflammation of the lungs; the chief of which are, congestions from old standing disease of the internal organs, heart, liver, kidneys, etc.

An old gentleman, seized with pain in his left side, fever, heat of skin, dyspnœa, and cough, came under my observation. His chest was carefully examined; there was small crepitation over the back part of both lungs, more especially the left, and dulness on percussion, both anteriorly and posteriorly. His cough was troublesome, and he expectorated a quantity of rusty coloured and bloody sputa; indeed, there were apparently very evident signs of pneumonia. Mercury was given in small doses; the gums became affected, counterirritants were applied over the chest and back, perfect rest was enjoined, and the patient was supposed to be progressing favourably. He died suddenly after some slight but unusual exertion, and during the progress of the disease. An examination of the chest was allowed, and to my astonishment, there was not and had not been pneumonia at all. The heart was flabby, and so soft that I could readily poke my fingers through any part of it. The lungs were congested and œdematous, the liver large and fatty, and the kidneys, like all the other organs, much congested. Death no doubt ensued from over exertion, the fatty degenerating heart being unable to cope with the accelerated circulation.

I have seen similar pneumonic symptoms exist when, I believe, the real seat of disease has been the capillary system generally. I have not had many opportunities of witnessing this condition; the prominent symptoms were such as would lead one to suspect heart disease; but the heart's sounds and actions were good; there existed congestions of the internal organs, and a blue congested state of skin. I could only account for the disease by supposing that the obstruction to the circulation, instead of being in the aorta, or about the valves, was eccentric and in the capillaries generally.

CLINICAL OBSERVATIONS ON THE SPECIAL APPLICATION OF LIQUOR PEPSINIÆ IN CERTAIN DISEASES.

By DAVID NELSON, M.D.Edin., formerly Physician to the Queen's Hospital, and Professor of Clinical Medicine, Birmingham.

[*Concluded from page* 133.]

C. DYSPEPSIA, WITH ABDOMINAL TUMOURS, ETC.

CASE I. Miss A. T., from the neighbourhood of Temple, aged about 32, complained of painful indigestion and vomiting, and of constipation alternating with irksome diarrhœa, the latter usually consisting of frequent, teazing, thin stools, in very small quantity, but sometimes relapsing into frequent attempts with only the passage of small scybala. She had taken stomachic mixtures, and aperient medicines; but the latter had usually caused great uneasiness, with very little result in the way of evacuation, and she had become pale, thin, and weak. The heart and lungs were in sound condition, and the menses were regular; but, on examination, a large mass was discovered in the right side of the abdomen. It extended from the right groin to near the edge of the ribs like a Bologna sausage, was doughy to the touch in greater part, but towards the top felt harder and more tender. She said that, for a long time, she had felt a fulness and stiffness there in stooping, and also whilst lying straight out in bed; and further added, on finding me make particular examination, that she had a sister (who has since seen me) whose disease commenced with a swelling in the right side, which gradually extended over the the abdomen, and finally maturated to an abscess, which is now discharging in vast quantities from the groin, and carrying her rapidly to the grave. My conclusion was, that there was some growth, or other cause of pressure in the neighbourhood of the liver; that this caused obstruction to the ascending colon, and that the mass of the present swelling consisted of long retained fæces, all the other symptoms being mere consequences of this state of things. She was ordered mild, softening, but not drastic, purgatives, and also injections, and took the liquor pepsiniæ in combination with soda and hydrocyanic acid. At the next visit she reported that the stomach felt easy, that she had not vomited since she saw me, and that there had been larger and more easy evacuations from the bowels. She could stoop and lie straight with more ease. Under a continuance of the same treatment the elongated mass disappeared, and then a roundish lump became distinctly perceptible under the edge of the liver, slightly tender to the touch. Not viewing it, from the appearance of the patient, as malignant, she continued the treatment, and applied tincture of iodine over the lump. It has now disappeared, so far as manipulation goes; but, though she feels very well, with no return of her old torments, still she is conscious that there is something in that quarter that burns and shoots with a curious pain after any hard exertion. The medicine under discussion could never have removed either the lump or even the fæces, *per se*; still it has proved a valuable subsidiary agent, if not essential.

CASE II. Mrs. B., the wife of a respectable farmer in Worcestershire, aged about 35, first called at my house with a friend, in a nervous and excited state. She complained of indigestion, and what she said had been called chronic dysentery; for which she understood there was no cure. She said she could eat, but it did her more harm than good, giving her pain, constant eructation, and rattling of wind in the bowels, and often she vomited. Her bowels, she said, would be moved five or six times while dressing in the morning, and nothing would come but "slime and corruption," as she worded it. She had been in the habit of having chalk mixture, with laudanum, etc., which quieted the bowels for a time, but the symptoms always returned. The liveliness of her manner and eyes, her good complexion, and quiet pulse, made me doubt the existence of dysentery; but, under the impressions arising from the ac-