the scapular ridge behind and the third rib in front, I counsel delay, warning the patient against rising up suddenly, and instructing his attendant to call the doctor in case of more numerous breathing or a change of complexion. If the patient be able to take solids, I advise a dry diet, gentle saline purgatives such as Hunyadi water, and syrup of iodide of iron with digitalis. Mercury I withhold, save as an occasional alternative. I do not strap the chest, as I prefer to be able to apply repeated blisters, stopping short of vesication. These quiet effusions are, however, hard to move, and so often increase that one is not sorry to have to operate and thus to shorten the duration of the case. In my inmost heart, I believe it will be found better in the end to tap all cases where more than two pints of fluid are present, as the results of medicine alone in quiet effusions are very tedious and unsatisfactory. An operation upon the chest is, however, as yet too unfamiliar and too dreadful to the public to permit us to turn to it hastily, and in these cases there is the not inconsiderable risk of so setting up an empyema, a risk nearly absent in mere fibrinous effusions on the one hand, and in mere dropsies on the other. It can scarcely be doubted, however, that tapping of the pleura, as it becomes better known and the procedure more perfect, will be applied to those smaller effusions which persist in spite of a short course of nursing and medicine.

In now confining myself to the larger effusions, let me again repeat, formally and unmistakably, that physicians must admit that the medicinal treatment of the larger quiet effusions is, on the whole, a failure, and where it succeeds runs the risk of injury to the lung, of empyema, and even of sudden death. Not only so, but pleuritic effusions in the right cavity, by pressing upon the vena cava and twisting it upon the heart, are not uncommonly attended by dropsy in the legs and elsewhere. On the other hand, my own experience of operation in large serous effusion is very favourable; and, if I confine myself to simple cases and early operation, my results have been excellent, and have converted a serious malady into a moderate indisposition. Over and over again, by this procedure is fluid removed in bulk from the chest by one operation needing no repetition, and rapid recovery is obtained.

In opposition to some writers, I find that the chances against reaccumulation are in cases of early operation very moderate and even small; and, unless pus be formed, a third operation is in my experience quite rare. Add to this, that an illness of three months is reduced to an illness of three weeks, and the merits of early operation are even more convincing. The longer, however, operation is deferred, the less confidently can the best results be hoped for, the more danger of formation of clots and of empyema, and the more the danger of injury to lung and constitution.

The aspirator, which is valuable in highly fibrinous effusion, is even undesirable in serous effusion. It is better to allow the lung to expand at its own pace, and not to draw off more fluid than the lung can at that time replace. Even a partial relief of this kind generally leads to absorption of the remnant, and does not lead to severe cough and albuminous expectoration. Nor do I like instruments with angles in them, which are liable to become clogged. A fine trocar and cannula, the latter attached to a long flexible tube, through the wall of which the trocar should be passed on the distal side of the shoulder, is the best instrument. The tube closes upon the trocar as it is withdrawn, and no air can pass beside or after it, if carefully managed and the trocar be two-edged. A bayonet-pointed trocar wounds the tube too much. The instrument should be well carbolised before insertion, the tube filled with carbolised water, and the end immersed in a basin of carbolised water. By raising or lowering the basin, the syphon action may be increased or diminished at will. It is as well to keep a spray in motion about the puncture until all be over and the orifice closed with antiseptic dressing.

Now, of this simple operation our Yorkshire experience is so large that I may permit myself to marvel at the fear or hesitation which it excites, even in the medical breast, and, moreover, to doubt the reality of those untoward consequences which are said at times to follow it. That, if the operation be long deferred, its success is less sure, needs no reiteration; that a person in whom syncope is imminent may not always avert that syncope by operation, especially if the fluid be aspirated rapidly, is possible; that a tendency to clot, or the establishment of clot, in the central blood-vessels, is always to be feared in long standing cases; that a patient honeycombed by disease may die coincidentally with or even consequently upon the smallest operation is certain, but who is to be deterred by these events from taking the course of operation in a promising case? In a paper like the present, we cannot discuss rare exceptions; we can only lay down general rules.

I will now pass on to Class IV—empyema. With empyema, operation of some kind is inevitable, and as, encysted empyemata apart, a pus containing pleura means a full pleura, and as again we have decided that all full pleuræ are to be tapped promptly, there can be no

difficulty in the matter of diagnosis. The presence of oedema in the wall of the thorax, however, will generally tell when the contents are purulent. That an encysted empyema may dry up is possible; but, if it do, it leaves caseous matter behind which may become a source of general poisoning—tuberculous or other—or it may remain latent for years and finally cause death, as in the case of a patient who died lately under my observation. In his case, the necropsy showed that an encysted empyema of ten years' standing was the cause of death by perforation of lung, etc., although apparent complete recovery had taken place at the time of the original illness. If I have one conviction in medicine more urgent than another, it is this: if pus or other septic material be present in the body, we must not rest until it is removed. I, therefore, dislike and reprobate all temporising with an empyema. Out with it, and provide against the chance of reaccumulation. We are advised by some persons to draw off an empyema by repeated aspirations.* I have seen two successful cases, so-called, of this practice. One spat pus within a month of his recovery, and the other died of hectic. Twice I have seen pus spat up while the systematic aspirations were carried out. I would not trust any reputed recovery under this plan till the patient had been watched for years. My two objections, and these complete ones, to repeated aspiration are: 1. Aspiration does not prevent the formation of a pulmonary fistula; 2. It does not prevent absorption, but rather favours it. By the pressure of a full cavity, absorption is often prevented and fever absent; draw off some of the pus, you relieve pressure, and absorption begins. I put before you charts illustrative of this; from them, you will see that by complete drainage alone fever is averted, and by the presence of fever after operation for empyema I detect at once a defect in the operation or a defect in the nursing. By a free opening at the lowest point of the cavity and as far back as possible, the pus must be run out, and complete drainage secured. The whole must be done under the antiseptic method, and antiseptic dressing continued. I have rarely found injections of any value, and should only resort to them in case of very fetid retained material, and should then use them of the mildest and simplest kind. But this plan, it is said, means a three months' illness, and perhaps death by exhaustion. Be it so, and be it remembered that empyema taking its own course is a three years' illness, and death probably at the end of that. Nor can any sleight of hand make a huge internal abscess anything but a terrible infliction. I can only say that the miserable broken down creatures who seek shelter in a hospital are generally cured completely in twelve or fifteen weeks; and that in private practice I have never yet lost a reasonably favourable case. As the cavity contracts to small dimensions, the drainage-tube must be shortened. If a pulmonary fistula have formed before the patient comes under treatment, a counter-opening must be made and the chest drained, as in other cases.

Class v. Pleural dropsies will not detain us long. These being often dependent upon disease elsewhere, and, therefore, often double, puncture should be used only in case of urgency. Fortunately, in these cases operation is of the simplest kind. There is no fear whatever of pus-formation, and the water may be allowed to run through an unguarded trocar, as in the case of ascites. At the same time, if circumstances permit, it is well to form an antiseptic atmosphere around the opening.

ON PLEURISY OF THE APEX.†

By I. BURNEY YEO, M.D., F.R.C.P.,

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I WISH to call attention to the clinical aspects and to the treatment of a class of cases which, if they have not been altogether overlooked, have at any rate received but scant attention at the hands of physicians, and find no place, that I am aware of, in our medical literature. I allude to cases of pleuritis attacking the apex of one or other lung, and attended with characteristic symptomatic phenomena. I need not say that I am making no reference whatever to the exceedingly common, nay almost constant, circumstance of the coexistence of affections of the pleura with physical consolidation of the upper part of the lung. It is by no means an unusual circumstance to find, in autopsies of persons dying of other than lung-disease, firm adhesions between the layers of pleura covering the apices of the lung, without the existence of any consolidation of those parts. Such persons must

* I mean here aspirations as the chest refills. On the other hand, the more recent proposal to aspirate every other day, or at very short intervals, is, in my opinion, well deserving of careful trial.

† Read in the Section of Medicine at the Annual Meeting of the British Medical Association in Manchester, August 1877.

have had, during life, attacks of adhesive pleuritis, affecting the apex of one or other lung. I believe that the real nature of such attacks has frequently, during life, been overlooked, and the symptoms attending them set down to other than their true cause. I shall avoid repetition if, in the first place, I briefly relate the particulars of four illustrative cases, and then add such general observations as the subject may seem to me to call for.

CASE I.—A. W., a fresh healthy-looking girl, aged 17, came as an out-patient to the Brompton Hospital, complaining of cough, which she had suffered from for four months, and pain in the left side. She also stated that she had been losing flesh, and that she had not menstruated for four months. The cough was harsh, dry, and "hacking"; a cough which I should describe as shallow, incomplete, and objectless; not ending in expectoration, and seeming to come from the throat, almost, as the patient said herself, like a bark. There was no complaint of dyspnoea, or of nocturnal perspirations. Tongue clean; pulse 80; temperature normal. On the first examination, no physical signs whatever connected with the chest could be discovered. The breath-sounds and the percussion-resonance were good under both clavicles, and elsewhere over both lungs. It was just the kind of cough, occurring at this patient's age and accompanied with amenorrhœa, which we are apt to term "hysterical". Under the influence of an iron tonic, the catamenia returned at the next period. The cough, however, did not disappear; it continued to be very troublesome, and, from its disagreeable harsh character, it was very annoying to her friends. I examined her chest very carefully a second time with the same results as on the first occasion, except that at one spot, viz., over the left supraspinous fossa, there was a loud creaking friction-sound. This was recognised by one of my colleagues, and by two other medical men who were present. There was good resonance on percussion over this spot, and the breathing was perfectly natural, equal and clear under both collar-bones, where also the resonance was normal. The temperature, again taken, was normal, and the pulse normal. The tongue was clean. She was ordered counter-irritation, in the shape of a small blister over the left supraspinous fossa, to be moved from one spot to another over the posterior apex, and morphia and ipecacuanha lozenges for the cough. A week afterwards, the friction-sound had disappeared, but she was still suffering from cough. On examination after another fortnight, the creaking friction-sound in the left supraspinous fossa had returned, and the cough was again very troublesome. I again ordered counter-irritation in the same form, and a fortnight afterwards the friction-sound and the cough had disappeared, and the patient said she felt quite well.

CASE II.—E. L., female, aged 19, came to the Brompton Hospital, complaining of cough and pain in the centre of the chest, from which she had been suffering for eight weeks. Her cough, she said, was dry, harsh, and "hacking", and used to "hurt her chest". She occasionally expectorated a little mucus, which was sometimes streaked with blood. She had always been a little short of breath. She had no emaciation, no night-sweats, and her appetite was good. Her aspect was that of a fairly healthy well nourished young woman. Pulse and temperature normal; tongue clean. On examination, her chest was found to be slightly bulged generally, with diminished respiratory movement; somewhat hyperresonant; expiration a little prolonged; the signs, in short, of slight emphysema. No mucous or *crepitant râles* could anywhere be discovered, or any local diminution of resonance. Over the supraspinous fossa, however, on the right side, a distinct creaking leathery friction-sound could be heard at the end of inspiration. We also noticed reduplication of the first and accentuation of the second cardiac sound. Here again the peculiar harsh, dry, shallow, and incomplete jarring cough attracted my attention. She was ordered an alkaline mixture, containing iodide of potassium, and counter-irritation in the form of strong iodine paint on the right supraspinous fossa. She continued under treatment for about two months, at the end of which time she described herself as "quite well". The friction-sound had disappeared for some weeks. This patient also was at that age and of that healthy appearance in which the occurrence of a cough of the kind I have described, without the discovery of any physical signs, is apt to be looked upon as "hysterical". I have selected these two from several others as fairly typical cases, and I need not occupy your time by multiplying examples.

CASE III.—The next case is one of a somewhat different type. A. B., a young married lady, of highly nervous and hysterical organisation, came first under my observation complaining of great depression of spirits, loss of memory, and sleeplessness; bowels alternately constipated and relaxed; vomiting; entire loss of appetite; and all the phenomena of nervous dyspepsia. She was much devoted to literary pursuits, especially to medical studies. She had suffered much from asthma, so much so that she could not live at her home in the country,

but in London she enjoyed freedom from these attacks. While she was recovering, as she did rapidly, from her dyspepsia and nervousness, she was somewhat suddenly attacked with cough and slight feverishness, and some sweating at night; but she did not complain much of dyspnoea, nor had the attack any resemblance to her ordinary attacks of spasmodic asthma. The pulse was a little quickened, but the temperature was normal. A very careful examination of the chest detected no signs of consolidation, or engorgement, or catarrhal inflammation anywhere. In both subclavicular regions, the percussion note and the respiratory sounds were perfectly normal; but over the left supraspinous fossa there was a loud, distinct, leathery creaking friction-sound, loudest at the end of inspiration. I ordered counter-irritation in the form of a blister over the left supraspinous fossa, and a sixth of a grain of acetate of morphia, with extract of benbana, at night for the cough, which was very troublesome at that time. At the end of a week, the cough was gone, and the friction-sound had quite disappeared. This patient informed me that she had suffered from a somewhat similar attack in Paris, for which her physician had some difficulty in accounting, and which had been suspected to indicate the onset of phthisis. I would especially call attention to the strongly nervous and hysterical history of this patient, as exceedingly calculated to mislead, and to induce one to overlook the real nature of the affection, and to set her cough down to "hysteria".

CASE IV.—The next case differs from either of the preceding. It is one of chronic cough, with a tendency to frequent attacks of spasmodic asthma, which are usually associated with a more or less severe bronchial catarrh; and frequently at the onset of these attacks, and lingering after the spasmodic paroxysms have passed away, or at other times only detected after the loud wheezing *râles* have disappeared, we find the signs of a pleuritic affection of the right apex. X. Y., a lady, whom I first saw in the winter of 1874, had suffered much from uterine disease. She was the victim also of atonic dyspepsia. She had had a cough for seven years, and had been subject to asthmatic attacks for twelve months. It was on account of severe distressing cough and dyspnoea that she first consulted me. There was then a loud wheezing *râle* to be heard all over the chest, with laborious inspiration and prolonged expiration. These sounds, however, were much louder on the right than on the left side. There was no circumscribed dullness about either apex, and the resonance was good generally over both lungs. After the symptoms of asthma and bronchial catarrh had almost disappeared under treatment, there was still left a harsh, dry, shallow cough, which was very distressing, and disturbed this patient's rest at night very greatly; and now, on careful examination of the chest, a faint pleuritic creak was heard in the upper third of the dorso-scapular region, *i. e.*, between the spine and the inner boundary of the supraspinous fossa. Counter-irritation in the form of small flying blisters, applied over the apex of the lung, both anteriorly and posteriorly, gave much relief. This patient, however, continues subject as formerly to attacks of bronchial catarrh and asthma, always more pronounced on the right than on the left side, and induced frequently by exposure to cold winds. When these attacks are unusually severe and protracted, one generally finds evidence of a co-existing pleurisy of the right apex, and the only treatment which gives relief is continued counter-irritation. There is now some diminution of inspiratory movement about the upper part of the right side of the chest, due no doubt to adhesions of the pleura to this part of the chest-wall. I have seen other cases of asthma, complicated with pleuritic affections of one or other apex, in which it has seemed to me most probable that the pleuritis was the exciting cause of the asthmatic paroxysms.

In the preceding, and in several other cases of which I have taken notes, there undoubtedly existed a pleuritis of one or other apex, without any consolidation of the lung. I do not wish it to be understood that I think this a common affection. On the contrary, I believe it to be a somewhat rare one; but I am persuaded it is a condition which would be more frequently recognised than it is, were it not for the prevalence of a very faulty manner of examining the chest. I allude to the custom of examining only the upper and anterior part of the chest. Many appear to think that they have sufficiently explored the lungs when they have carefully examined the subclavicular regions, and listened, through the clothes, to both bases. You will certainly not discover a pleuritis of the apex by such a mode of examination, since the friction-sounds, in such cases, are almost invariably limited to the posterior aspect, viz., to the supraspinous fossa or to the upper third of the dorso-scapular region. It is in these situations that you must seek for the physical signs of this affection, and it is usually unilateral. The characteristic symptom in these cases is the cough: in a person in apparently good health (generally a young woman), with no marked fever, with no or with slight emaciation, with no dyspnoea, with no mucous or crepitant *râles* anywhere to be heard, with no

expectoration, you have a persistent, harsh, dry, shallow, incomplete cough; generally jarring and shaking the patient a good deal, so as to produce often painful fatigue of the expiratory muscles and much injection of the face. What is especially noteworthy about the cough is its shallow, incomplete character. It is suddenly cut short without effecting its object, if, as is generally the case, the object of a cough be expectoration. I have never seen a case of this kind in a male, a circumstance which may possibly be accounted for by the fact that the male sex never wear low dresses. It occasionally accompanies or is the cause of asthmatic paroxysms, and, when this is the case, the treatment of the asthma must be combined with the special treatment necessary for the pleuritis; and that special treatment is continued and repeated counter-irritation, either in the form of a flying blister—a small blister, about the size of half-a-crown, moved about from one spot to another over the supraspinous fossa and the upper third of the dorso-scapular region—or in the form of the strong linimentum iodi. I think I have also seen benefit derived, in some of these cases, from small doses of iodide of potassium. But the ordinary remedies for the relief of cough are not of much avail, but they should not be withheld, as they may moderate the violence of the paroxysms, and so relieve the jarring of the chest somewhat. It is a disease which is very prone to recur.

I have noted cases of this kind now for some years, and, as I have never seen attention called to them, I have thought it might be useful to direct the attention of this Association to the subject; believing that, as they become better known, we shall hear less of "hysterical" and "stomach" coughs, and that "pleurisy of the apex" will be recognised as a distinct form of pleuritis, with a characteristic clinical aspect.

REPORTS

OF

MEDICAL AND SURGICAL PRACTICE IN THE HOSPITALS AND ASYLUMS OF GREAT BRITAIN.

NATIONAL HOSPITAL FOR THE PARALYSED AND THE EPILEPTIC.

DR. BUZZARD'S WARDS.

Hemiplegia with Hemianæsthesia.—A woman, aged 45 and of very nervous temperament, was admitted with left hemiplegia, which had set in suddenly two years previously, with loss of consciousness and complete paralysis, which lasted six months. The hemiplegia is not now complete; she can walk and, to some extent, use her left hand. At the time of the onset, she is said to have been blind; she is now affected with hemiopia towards the left side, *i.e.*, the side paralysed. When examined, the left arm was found anæsthetic to warmth, but, curiously enough, it appeared to be hyperæsthetic to cold. Thus, when cold air was blown upon the two arms, it was felt by the patient as very cold on the left, while warmth was less readily felt on the left than on the right arm. The muscular sense was tested by the use of small balls similar in every respect except their weight; these were successively placed in the hand of the patient; but she was quite unable to appreciate the differences with the left hand, although there was strength enough to hold the ball. The woman was also unable to distinguish a shilling from a half-crown, and in the dark was unable to tell where her arm lay. Three sovereigns were fastened in line to a strip of plaster, and thus held in place around the left wrist without the patient knowing what was being applied; they were left there in position for a quarter of an hour. The use of metallo-therapeutics appeared to produce no change whatever in the condition of sensation. Application of the continuous current with seventy cells produced no change in the power of sensation, but with seventy-five cells the patient suddenly became acutely sensitive to the current. On another occasion, the use of a strong faradic current soon produced an increased sensibility in the arm for a short time. Leclanché's battery is in constant use in this hospital, and gives great satisfaction.

Spinal Myelitis sequent to Typhoid Fever.—A man complained of great difficulty in walking, and a heavy feeling about his legs; but there were no dyæsthetic phenomena beyond a feeling of girding around the abdomen; this was evidence against the idea of locomotor ataxy. Both legs were weak and somewhat wasted. He complained much of difficulty in holding his urine. A year ago, the man was attacked with typhoid fever, and, a fortnight from the onset of the illness, he felt his legs grow cold and stiff; but there were none of the "darting

pains" so commonly associated with the onset of ataxia. This appeared to be a case of spinal myelitis sequent to an acute specific disease. Dr. Buzzard considered it probable that such a condition was due to a primary vascular change rather than to a parenchymatous lesion. The condition is a grave one, but it seems not improbable that improvement may occur.

Phenomena accompanying Epilepsy.—While seeing several epileptic patients, Dr. Buzzard offered some clinical remarks on phenomena accompanying epilepsy. Epileptics often complain of "startings" at night, especially just at the time of falling asleep; they start up and feel as if they must shrug or shiver. A large number of cases of epilepsy appear to arise from fright and falls or blows upon the head. A boy thirteen years of age was frightened a year ago by a snake; a month after the fright, he had a strong epileptic fit. He is now a confirmed epileptic; his manner is sullen and dogged; he refuses to take his medicine "because he does not like it"; he has on several occasions threatened his sister's life by brandishing a knife; he presents a physiognomy indicative of mental aberration, and will have to be removed to an asylum. There is no family history of neurosis, and the mental disease appears to have been produced by fright. Among other physical signs of epilepsy may be observed a condition of the tongue covered more or less with foam-like saliva, due to the constant nervous movement of the tongue in the mouth whipping up the saliva. Dr. Buzzard urges the importance of educating neurotic and epileptic children to the full extent of their intellectual capacity, at the same time giving plenty of nutritious food and attending to general hygiene. In some cases, where epilepsy is associated with uterine disturbance, the empirical administration of extract of ergot with bromide of potassium appears to have been beneficial. A lady, the subject of epilepsy, now under Dr. Buzzard's care, is liable to an extreme degree of "reduction" after the fits. After one attack, she walked across the room, unlocked a drawer, took out a watch, set it a quarter of an hour forward, and then locked it up again, all the time being in a completely automatic condition, and afterwards entirely ignorant as to what she had done. On another occasion, she was seized with a fit while pasting photographs into an album, and tore out several pictures she had just pasted in. Another poor woman has on several occasions after her fits, of which she has no warning, attempted to throw herself and her children from the window. The importance of recognising such a condition of reduction to an automatic condition is self-evident.

DR. GOWERS'S WARDS.

Facial Spasm, with Inhibition of the Sixth Nerve.—A portion of the facial nerve arises, it is well known, from the same nucleus as gives origin to the fibres of the sixth nerve, a nucleus situated beneath the most prominent part of the eminentia teres. This anatomical fact is difficult to collate with physiological action; it is not easy to trace any association in the normal functions of the facial and sixth nerves. It is rare also for any morbid phenomena to indicate this connection. A patient now attending the hospital for facial spasm exhibits an interesting illustration of this anatomical connection between the two nerves. The spasm is intermittent, clonic, and affects all the muscles of one side of the face very much as though the nerve were being stimulated by an interrupted voltaic current. In the intervals of the spasm, the eyes are moved equally and well. During the spasm, if the eyes are directed towards the side of the face affected, the eye on that side loses its parallelism with the other and moves a little inwards. When the patient is looking towards the unaffected side, a similar loss of parallelism is not noticed. During the spasm, the eye on the affected side cannot be moved further outwards; but, as soon as the twitching is over, the eye is moved freely and without any irregularity. The defect is evidently due to a deficiency in the action of the external rectus; that is, to an inhibition of the sixth nerve during the over-action of the facial nerve.

Transient Hemipia in Cerebral Disease.—A patient came under observation with left hemiplegia of some weeks' duration, and was found to be affected with left-sided hemiopia. Such a condition as a permanent change in the field of vision, with hemiplegia, is comparatively rare; but Dr. Gowers believes that a transient hemiopia is exceedingly common with acute cerebral lesions. He has found that, in the early period of hemiplegia, during the stage of conjugate deviation of the head and eyes, the existence of hemiopia may generally be demonstrated; there is a partial loss of sight in the half of each field of vision which corresponds to the paralysed side, *i.e.*, diminished sensitiveness of the half of each retina corresponding to the cerebral lesion. This defect passes off with or soon after the disappearance of the conjugate deviation of the eyes. During this stage, the patients are not usually in a state in which the hemiopia can be ascertained in the usual manner; but it may be demonstrated thus:—If one eye be closed and