culating blood, nor, indeed, to spread their influence at all beyond the tissues in which they have taken up their residence.* They are associated in every instance with local, not with general, processes—with processes which spread by continuity of tissue, not with general infection of the whole organism. What the nature of that relation is, I still think, as I thought when I last had occasion to speak on this subject, must remain open. The view which commends itself to my mind as by far the most probable, is that, whatever may be the original nature of the primary disease in association with which they present themselves, the organisms are specifically the same; that they reciprocally are modified by, and modify the soil in which they find themselves, and, by virtue of this interaction, take as important a part in the secondary processes to which they belong as pus-corpuscles take in the process of inflammation. Whether they are in any respect entitled to be regarded as specific contagium particles, whether they possess the power either of conveying the contagium from a diseased part of the organism to a healthy, or from one diseased body to another, we are still bound, I repeat, to regard as an open question.

CLINICAL LECTURE ON PHLEBITIS.

By WILLIAM S. SAVORY, F.R.S.,
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THE phenomena of phlebitis—its symptoms—are comparatively simple, and for the most part sufficiently clear. The disease often starts with pain—or, perhaps, more accurately speaking, aching—and acute tenderness in the course of the affected vein, which in the majority of instances, I think, at the outset presents to the touch evidence of being plugged. At other times, beyond perhaps an aching of the leg or other part, the only local evidence of the mischief is oedema. But this is usually, I think, very significant. The oedema of this affection is firmer, and apparently more generally diffused throughout the limb, than when it is due to simple obstruction or failure of the circulation. The affected limb, or part of it, is enlarged and thickened, but often with comparatively little alteration of shape, the skin pale and tense, and, when the part is grasped, the texture feels uniform and solid. One misses the characteristic pitting, upon moderate pressure, of ordinary oedema. The whole condition of the limb seems one rather of the state in which it is often left after an attack of phlegmonous erysipelas. And it seems to me important to distinguish between these two classes of cases: those which commence with local pain and tenderness, and those which are marked only by oedema; for, in the former case, the superficial veins only are at fault; in the latter, the deeper veins.

Take this case. Ernest C., aged 26, a barman, of dark complexion, well built, although inclined to be fat, and strong, was admitted into the hospital in the following condition. The right foot, leg, and thigh are much enlarged by firm oedema. The right thigh in the middle measures $23\frac{1}{2}$ inches, the left $20\frac{1}{4}$ inches. The skin is very tense and somewhat injected, and above the right ankle in the lower half of the leg it is eczematous. This part, he says, was the seat of an ulcer two years ago. In the upper part of Scarpa's triangle, in the position of the femoral vein, a hard and tender cord can be felt on deep pressure. There is also slight tenderness over the iliac fossa. The epigastric veins are conspicuous. He told us that, nearly two years ago, after a long boat-race, he noticed that the veins of the right thigh were prominent. Three or four months later, he found one day, after hard work, that the right ankle was swollen, but on the following morning this had subsided. From that time, however, the foot and ankle were often enlarged, and the swelling gradually extended upwards, so that for the last year the leg, knee, and lower part of the thigh were markedly larger than on the left side. His health was not affected until just previously to his admission, when he began to suffer pain along the course of the femoral vessels, and then the whole of the right limb became much swollen and very tense. He admitted that he had drunk freely of beer, and had syphilis six years ago. For some days after his admission, the pain disturbed his rest. His temperature rose from 101.8 deg. to 103.6 deg. The swelling of the thigh increased until it measured at the middle 25 inches. On the fourth day after admission, he had four attacks of epistaxis and one was copious. His temperature fell, and the next day it was normal. During the following week, the swelling

of the thigh subsided, until, at the expiration of a fortnight from his admission, there was very little difference in the size of the two limbs. But, for a week or two longer, a hard cord could be distinctly traced through Scarpa's triangle. He was kept in bed with the limb still. Strong lead lotion was applied at first, and afterwards a flannel bandage.

I may, perhaps, be allowed to publish the following note, which I made when I worked in the out-patient room of the hospital. I have seen, within the last twelve or fifteen months, eight or ten cases of this description. A person previously in tolerably good health, or at all events having no definite cause of complaint, is rather suddenly seized, without any obvious reason, with diffused pain in the calf of the leg. The pain, which is usually severe, is soon followed by a sense of extreme tension and by swelling, which, for a few hours or a day or two, gradually increases. When the leg is examined, the whole of it below the knee to the ankle is considerably swollen, tense, and very tender about the calf. In some cases, the induration is very marked. The surface will hardly yield to firm pressure. There is no elasticity, but a sense of hardness, as if something had been effused into the cellular tissue which had set and rendered the whole solid. By-and-bye, or in some cases from the first, the hardness is more circumscribed, and limited to the calf. There is never at first, and often not throughout, any discoloration of the surface. It is usually pale, tense, and somewhat shining. In favourable cases, the whole will gradually, almost imperceptibly, subside, and the limb resume its natural condition. In others, a sense of fluctuation gradually arises in the thickened and indurated calf, and this is followed by a blush on the surface. An incision, in these circumstances, will let out a considerable quantity of well-formed, but usually more or less blood-stained, pus.

With all this, a careful examination will in most cases fail to discover any morbid or unnatural condition of the veins of the limb. The femoral and superficial veins will appear natural. In some cases, however, the femoral vein is obviously thickened and tender, and can be traced as a cord through a portion of the thigh. There is usually little or no constitutional disturbance. Where the opportunity has been given, of course, the patients have been kept at rest; but, in more than one instance, they have continued to attend at the out-patient room, even walking to and fro, yet all has gone on well—in these cases it has happened without suppuration—and the limb has been restored.

Now, what is the pathology of these cases? Looking at their history and the features they present, I regard the veins as the primary seat of mischief. That the femoral vein itself is involved in some of the cases, is a matter of certainty. And those cases in which all the veins in reach of the senses appear normal, so closely resemble the others in which the veins are obviously at fault, that it is impossible not to refer them to one and the same pathological cause. If any opportunity of dissection were afforded me, I should expect in these last cases to discover something wrong in the deepest veins. I will not venture at present, on such slender evidence, to speculate further on the pathology of these most interesting cases. It is difficult to explain all the changes that ensue by simple venous obstruction, even though that were general; and, assuming this to exist, I could only guess at the cause of it. The cases are striking ones, and form a distinct class. That their pathology involves some change in the veins, I strongly believe. Beyond this, I dare not go.

Again, when the veins affected can be traced, the extension or course of the disease may be observed in two forms. There may be a simple extension, either gradual or rapid, of the pain, tenderness, solidification, and distension in the course of the affected veins; or these local signs may exhibit a striking want of uniformity. They may shift from vessel to vessel, or from one portion of a vessel to another, and in this way wander irregularly over the surface of the limb; subsiding in one part and starting afresh in another; fluctuating from week to week, or even perhaps from day to day, but withal obstinately inclined to linger, and to disappoint us of expected convalescence. Paget says of gouty phlebitis: "In such cases, the phlebitis may have no intrinsic characters by which to distinguish it; yet, not rarely, it has peculiar marks, especially in its symmetry, apparent metastases, and frequent recurrences." (*St. Bartholomew's Hospital Reports*, vol. ii, page 83.)

Here is an instance. E. C., about 50, was a stout, heavy muscular man, abstemious, very active, and in apparently good health. He had suffered, however, two or three times from "rheumatism in the knees and legs", once rather severely, for which he sought relief from the mud-baths of Marienbad, which "always cured" him. In both legs, below the knees, the veins were somewhat varicose. He came complaining of pain in one leg, and there was an oval dusky patch, brawny to the touch, as large as the palm on the inside in the middle third. The tortuous internal saphena vein was very tender, somewhat thickened, and here and there apparently solid; but, in the midst of the thickened tissues, it could hardly be defined. This continued to trouble

* In this and the preceding statements relating to small-pox, I have followed Dr. Weigert, who was good enough to show me his preparations when I was in Breslau last October.

† Concluded from page 149 of last number.

him for two or three months. The surrounding disturbance in the skin and cellular tissue, with rest, speedily subsided; but the vein, the outline of which became sharper, remained painful, tender, and solid; the mischief fluctuating in severity and extent, sometimes extending in one direction while it subsided in another. He declared throughout that his general health was excellent, and he would complain of nothing beyond what he called the nuisance in his leg, and I could not discover anything further amiss with him.

Here is a very slight case. A spare active man, of fairly moderate habits, whose health had always been excellent, with the exception of rare and transient pains which he called rheumatism, discovered one morning in his bath that a spot on the inner aspect of the thigh, just above the condyle, was tender. Here I found a portion of the internal saphena vein, for two or three inches, plugged. He was astonished to hear that there was anything amiss there, was sure that it was not due to injury, and could hardly be brought to believe that the matter merited any attention. No amount of cross-examination could elicit evidence of anything further wrong. The mischief never extended, and the pain and slight swelling and tenderness slowly subsided with rest. His health has remained good, and he has never since been troubled in that or in any other way.

I have often been surprised in noting with how little constitutional disturbance this affection, even when severe and extensive, is accompanied. Nothing may be observed beyond a trifling and transient rise of temperature, and often even this is absent. There are exceptions, of course, and sometimes grave ones; but, as a rule, in these cases the patients neither show the signs nor complain of illness, and oftentimes one of our chief difficulties is to ensure rest. Persons cannot understand the importance we attach to what frequently seems to them a trivial affair; and become impatient of confinement. Of course, as in the rheumatic or gouty form of the affection there may be special indications of constitutional mischief. But even when we may be disposed to suspect strongly that a particular cause of this kind is at the root of the evil, it is sometimes difficult to elicit anything like clear evidence of it; and we must be, and perhaps too often are, content to believe without a reason.

Take the following instance. George B., aged 37, a fair, lean, ill-nourished man, a leather-cutter, was admitted on April 26th, 1877. He had suffered since the beginning of the year from pain in the left foot and leg, with some swelling. In February, he was laid up in bed for some weeks, and at this time his right foot and leg became similarly affected. This was supposed to be rheumatism. But at length the pain passed upwards to the inner side of the right thigh. He slowly recovered. The left leg became painless and natural, but some swelling of the right ankle remained. He went back to his work, and then the mischief in the right limb soon returned. Now there is oedema of the right foot, leg, and lower part of the thigh, and the distended skin is somewhat reddened. In Scarpa's triangle, the femoral vein is hard and distended, and near Poupart's ligament tender. There is no obvious distension of the superficial veins. Temperature 98.6 deg.; pulse normal. He told us that, in the previous August, he had a similar affection of the left internal saphena, but otherwise he had always enjoyed good health. His father died of consumption. Two sisters are living and healthy. There was no family history of gout or rheumatism. For more than a month he lay quiet in bed. The limb was slightly raised, and after awhile a flannel roller was applied. The signs of local mischief gradually disappeared, and his health was not disturbed. At the end of that time, no unnatural fulness could be discovered in Scarpa's triangle.

A rather stout man, with muscular limbs, very abstemious, the veins of whose legs had been for years somewhat varicose but without trouble, and who considered that he had always enjoyed excellent health, complained one evening of pain over the surface of the right tibia. Upon examination, a small tortuous vein there was found to be exquisitely tender, but soft and otherwise apparently not unnatural. The pain, however, continued and rather extended, and soon the vein became full and prominent, but not sensibly hardened. This lasted some days, when the mischief gradually crept over some of the veins of the inner side of the calf. These gradually became distended, and apparently filled with soft clot. Then the pain and tenderness on the vein first attacked slowly subsided; but presently a cluster of veins on the outer side of the calf fell into mischief, following a similar course. And so for weeks the trouble wandered about the saphena veins and their branches in the leg; but never appearing above the knee, except in one doubtful spot to the inner side of the saphena opening. As the fulness and tenderness passed away, the portion of vein was left apparently plugged, and each fresh accession of mischief was attended by no effects beyond those of the part involved. There was no oedema, no pain, when the limb was at rest and not touched, and his health

throughout was apparently so good that he only suffered from the enforced rest. He acknowledged, however, the comfort of keeping the limb quite quiet, with the foot somewhat raised.

Now, when this affection is established, what may be its course and result? This question opens the most interesting part of our inquiry.

The great majority of these cases terminate in recovery, and the recovery is usually at length complete. All evidence of any clot or plug in the vein is gradually lost, the vessel becomes natural to sight and touch, and all signs of any obstruction to the circulation through it disappear. What becomes of the thrombus? It is said to be absorbed. Where, and by what means? That we hardly know. What change does it undergo previous to disappearance? If much time elapse, it shrinks and contracts, and probably degenerates after the fashion to be noted presently.

Often, however, the vein remains permanently thickened. It is unnaturally rigid, and can be traced in this state for some distance along the limb. In most of these cases, there is probably only a partial restoration of the current through it. The clot in the interior does not wholly disappear, but very slowly shrinks and condenses into a structure more or less distinctly fibrous, which either forms a layer of variable thickness lining the whole of the surface, or it contracts into an irregular cord, which lies in contact with only a portion of the wall, the rest being free. Our museums contain many specimens of this kind: Veins with their walls either natural or rigid and thickened, with fragments of clot in the interior, variously shaped and arranged; of course obstructing the canal; many of these, by their structure and other characters and history, being clearly very old. A corrugation and apparent thickening of the vein-wall, due to contraction of a clot attached within, must not be confounded with the condensation and rigidity of the vein-wall, which is due to inflammation. In the former case, the vessel can be restored to its natural state by injection. Callender (*System of Surgery*, 1870, vol. iii, page 366-7) has clearly pointed out this. Moreover, these old clots sometimes acquire a very intimate connection with the vein-wall. Some of them may be stripped off or easily detached, and the surface of the vessel beneath may present little or no change. It may appear less polished, and the endothelium may have disappeared; but at other times the union is so firm that the clot cannot be separated without laceration, either of its texture or of the vein; and in certain rare specimens the two structures appear to be directly continuous. Organisation of the clot is an expression very often employed. What does this mean? When used in any definite sense whatever, very different ideas are by different pathologists attached to it. If it mean that the clot has acquired a fibrous structure and is permanent, then very many clots become organised; but if it mean that the clot has become continuous with the wall of the vein and possesses intrinsic blood-vessels, then organisation of the clot is beyond doubt a very rare event; and if the fact of its occurrence be disputed, it is not easy to produce satisfactory evidence of it. So far, therefore, as the effect upon the vein and its circulation is concerned, we find in these clots all degrees of duration and of obstruction. So, too, in the effect produced upon the limb. There may be no perceptible oedema throughout, or the whole limb may be converted into a huge unshapely appendage. When the oedema is considerable, or, indeed, oftentimes even when comparatively slight—as we should expect from its solidity—it only very slowly disappears. It may endure for very many months, hindering exercise, and otherwise producing much inconvenience, and making convalescence a very tedious process. Nay, sometimes the limb never after recovers its natural size or shape, for the tissues remain permanently infiltrated and hard. I say infiltrated, but frequently the cellular tissue seems to have overgrown; and with this actual increase of substance, there is much condensation. It is not only the subcutaneous tissue which may be thus affected. The change may have passed throughout the whole limb; to the connective tissue along the track of the great vessels, and between the muscles, and even into the substance of the muscles themselves. Sir James Paget tells us that even the muscle-tissue itself—the contractile substance—is hypertrophied; and that, in this way, the limb may become actually stronger than before.

A varicose state of the surrounding veins is not often seen, in consequence of thrombosis. They are far more frequently dilated, tortuous, and overgrown, from obstruction due to other causes, as from the pressure of a tumour. This may be because the larger veins are hardly ever permanently obstructed by thrombosis.

You will readily understand that there is the widest range in the extent to which the veins may be plugged. The whole mischief may lie within an inch, or it may extend throughout large tracts of the venous system, spreading in all directions from the vessel first affected, but especially towards the heart. Starting, for example, in one of the saphena veins, it may pass on into the femoral, iliac, and vena cava;

and no one needs to be told with what interest and anxiety its onward course is watched. It may prove fatal in this way, but I do not think it often does. When the largest veins are reached, the case is indeed grave enough, the peril obvious; but even then, without accidents, patients will escape. I think I am justified in saying that we regard these cases, even of very extensive plugging, more hopefully as we become more familiar with them. And the accidents of phlebitis, of which I have yet to speak, are, I think, comparatively less frequent than they were formerly supposed to be.

But, the clot once formed, may change in another way. It may undergo degeneration. And the study of this degeneration of clots in blood-vessels and its consequences cannot, I venture to say, be surpassed in interest and value by that of any other subject within the range of pathology or surgery. Even the history of our present knowledge of the process is singularly attractive, and I am sorry that there is no excuse for introducing it here. I have already said of the term suppurative phlebitis that, in the sense in which it was formerly used, the phrase no longer prevails. For Gulliver, first of all, and afterwards Virchow, showed that, what was formerly regarded as pus, is the liquefied product of the degenerated blood-clot. This, for obvious reasons, usually begins and is found most advanced in the centre; and while the crust of the clot still retains its integrity, an appearance is presented as of an abscess circumscribed by a wall of lymph, and thus the "pus" is shut off from the general circulation. Here is the old "circumscribed suppurative phlebitis". But at length the whole substance of the clot may liquefy, and the "pus" may then spread along the course of the vessel and become diffused in the blood. The old "diffused suppurative phlebitis". Now substitute "puriform" for "purulent", "pus-like" for "true pus", and, although the old pathology must be revised—the former explanation of the cause and course of the changes being no longer tenable—the description of the phenomena in this stage of the affection will still hold good.

But now proceeding, we come to a yet larger question. What is the consequence of this diffusion of liquefied clot into the blood? Virchow, when he overturned the idea of diffuse suppurative phlebitis as the cause of pyæmia, insisted nevertheless that the cause of pyæmia is the escape of the products of degenerated clot into the circulation; that still, therefore, pyæmia springs out of these changes, consequent on mischief in the veins. Now, when blood-clot breaks down, and its fragments or *debris* mingle with the blood, that infarction of distant vessels results there can be no doubt. And it can be easily understood how this embolism will vary in its characters and effects. If the detached fragment be large and coherent, a large artery, such as one of the chief branches of the pulmonary, may be plugged, and instant death may be and often has been thus produced. If the clot have so softened as to become puriform before its diffusion, then results capillary embolism in the lungs or elsewhere; and not immediate death, but severe disturbance, provoking very grave consecutive mischief, but still, at first, local; and leading to changes in the parts affected—to inflammation and suppuration, or perhaps gangrene—to which different observers have applied different terms. But with all this, not necessarily, or even commonly, I think, pyæmia. That pyæmia may thus arise, I do not deny. The changes just sketched may be set down as one of its causes; but I submit that there is not evidence enough to show that there exists any special or peculiar relation between the mischief in the veins and pyæmia as cause and effect. The error of this view has, I believe, arisen from concluding that because both affections, phlebitis and pyæmia, are apt to lead to capillary embolism and its consequences, therefore, when there is evidence of secondary mischief, pyæmia must exist. But some one will say: What, after all, is pyæmia more than this? The embola due to scattered blood-clot are local affairs—local at first, at all events; there is no evidence at this time of septic action on the blood; and if it should supervene, the general mischief follows on the local. But, in pyæmia, or septicæmia, or blood-poisoning proper, from the moment that the poison mingles with the blood, there is striking evidence of profound disturbance of the whole system, of which the local mischief in various parts is only the outcome; and I venture to think that the exalted temperature, rigors, and sweats are due to something more than infarction of a few capillaries. But now I must resist the temptation of further discussing this engrossing subject, and be content with referring those who care to pursue it to some of the earlier volumes of our *Hospital Reports*, where I have endeavoured to set forth some of the evidence from which this view is taken. Thrombosis and phlebitis, then, may be associated with pyæmia, yet pyæmia is often seen when these cannot be discovered. When these several states coexist, they may be, and in such circumstances usually are, the effects of a common cause—of a process which, acting locally, coagulates the blood in the vessels, and leads to inflammation of their walls; and, acting generally, gives rise to septicæmia.

I can well remember, years ago, when the doctrine of Virchow was dominant, with what anxiety these cases of phlebitis and thrombosis were watched; how from hour to hour pyæmia, with all its terrible phenomena, was expected to supervene. But now this is, for the most part, changed. We watch anxiously for signs of embolism, and we do all we can, by enforcing rigid rest, to guard against its occurrence; but we do not anticipate pyæmia. Still, although even the occurrence of embolism in any of its forms is exceptional, I would earnestly advise you always to act as if it were imminent in every case. Fortunately for his peace of mind, the patient does not see this sword of Damocles; but you must never forget that it hangs over him. Let me give you one or two examples of its fall.

A man aged 40, who had always enjoyed robust health, had been confined some weeks to his room and couch with thrombosis of the femoral vein. One evening, after his servant had assisted him into bed, he asked his master if he could do anything more for him before he left him for the night. "No, thank you", was the answer; and, giving the affected thigh a slap with his open hand, he added "I shall be able to help myself now." Before the man could leave the room, he heard the sound as of someone choking, and, looking round, he saw his master fall back and suddenly die. There was no examination, but the cause of death was obvious.

In the catalogue of our museum, two preparations in Series 13 are thus described.

"No. 132. A clot, which was removed from the pulmonary artery of a woman aged 33, who died suddenly from syncope nineteen days after delivery of her third child, having apparently progressed favourably up to that date.

"The clot measures three inches in length, and about one in diameter. One extremity, that which was towards the heart, is smooth and conical; the opposite is hollow, with ragged edges, leading into a cavity which occupies the greater portion of the interior, and is partially filled with grumous rust-coloured fibrine. It appears as if the clot had been gradually softening and disintegrating from the interior. The exterior is of a deep orange colour. Its structure presents no trace of lamination."

"No. 153. Another and smaller clot, *in situ*, from the opposite lung in the same case. It measures two inches and three-quarters in length and half-an-inch in diameter. Its extremity is rough and conical. It completely fills one of the primary pulmonary trunks, being continued into three branches by forked extremities. Of these, two, like the main clot, are firm and solid; the third is soft and pulpy."

These preparations alone might form the subject of a long discourse. Observe the evidence of disintegration of the embola and the suggestions of secondary embola consequent on this in the more minute branches further on.

Thomas E., aged 32, a dustman, was admitted into the hospital in the autumn of last year with simple fracture of both bones of the left leg in the middle third. He did well, and went to Highgate in September. But in November he was readmitted with periostitis of the left tibia about the seat of injury, and effusion into the left knee-joint. In a week, the effusion had almost disappeared and all the tenderness from the tibia, but some thickening remained there. He was allowed to get up. But, in the course of three or four days, he complained of pain in the left inguinal region and in the course of the genito-crural nerve. There was also retraction of the testicle. Then, upon further examination, a firm cord could be traced through Scarpa's triangle, and there was evidently thrombosis of the left femoral and lower part, at least, of the external iliac vein. This was rapidly followed by considerable oedema of the whole leg. The temperature rose to 101 deg. His rest was much disturbed. In the course of the week, an erythematous rash appeared on the chest, neck, and arms, and he complained of pain between the shoulders. The temperature then was from 99.5 deg. to 100.6 deg. The swelling of the left leg gradually subsided, but he complained of pain in the other leg and in the lower part of the abdomen. So matters went on for another week, when he complained of frequent chills, and there was marked tenderness over the femoral vessels. But the temperature was normal. Then, for a month or more, he gradually improved. He complained less, and the local tenderness and oedema of the limb slowly passed away. One day, three months after his second admission, he was allowed to sit up to have a warm bath. The day following, he was rather suddenly seized with great oppression of breathing, and he repeatedly spat small quantities of bright blood. The sputa were very offensive, and he complained of much pain between the shoulders. Temperature 100 deg. In this state, he was seen by Dr. Andrew, who found about the region of the left scapula diminished respiratory murmur and crepitation. The diagnosis was pulmonary embolism. For three or four days, these symptoms persisted; he continued to cough and to spit

blood. But gradually the sputa lost their odour and changed to blood-stained mucus; the temperature became normal; and in about a fortnight all the signs of this mischief passed away; and there remained only some slight swelling of the left leg and thigh, with scarcely any perceptible thickening in the course of the femoral vessels. In another fortnight, there was little to be observed beyond weakness and considerable depression; and, at his own wish, he left the hospital.

Pyæmia, then, as a consequence of phlebitis, is so exceptional that we hardly think of it as among the dangers to which our patient is exposed. The possible or probable occurrence of embolism is a source of far more immediate anxiety, but even this accident is comparatively rare. The majority of cases of thrombosis and phlebitis escape without it. The consequences of this affection are usually from first to last local—that is to say, limited to the vein or veins affected, and to the limb in which it occurs. Any direct evidence of disintegration of the clot within the vein is, for the most part, wanting. As a rule, all we are able to trace is the very gradual disappearance of the signs of thrombosis. The vessel, which at first is tender, distended, and solid, gradually becomes less sensitive to the touch, then reduced in size, but withal firmer and more cord-like; then, week by week, this solid passive cord becomes less and less distinct. The cases are very exceptional in which it remains completely and permanently plugged. No doubt, far more frequently the whole of the clot at length disappears; but, perhaps, in the majority of cases, a portion of the clot remains, either as a thin or thick layer lining the interior, or in the form of fragments shrunk to one side and adherent to the walls. For all practical purposes, then, recovery is complete; and, therefore, in these cases, the prognosis, as a rule, is favourable. I have, however, already mentioned that, where there has been any considerable œdema of the limb, this condition is very apt to linger, and the leg may thus remain cumbersome and troublesome for very many months; and I have already mentioned, too, that, in the gouty form of the affection, there is an especial liability to relapse, and consequently oftentimes much disappointment in the progress of the cure.

Almost the whole of the treatment of phlebitis is described in one word—rest; rest in the horizontal posture, or with the limb affected somewhat raised. When the liability to this affection is great, the most trivial causes seem to determine the formation or extension of clot. It is often started by extra exercise—an unusually long walk or slight overexertion. Even very moderate pressure on a vein, as from one leg resting on the other, will sometimes start it. And, after it has begun, the chances are that the mischief will spread to some extent, do what you will. But absolute rest is the best safeguard. For it is not only of chief efficacy in controlling the extension of the disease, but no other means are known which can be reckoned of any material value in lessening the chance of any of those accidents which wait upon phlebitis. Drugs may be employed when there are any special indications for them. When, for example, there is any evidence of gout or rheumatism, much good may come of physic, or when there are signs of other forms of constitutional disturbance, such as pyrexia. In all circumstances, measures of general hygiene should be carefully attended to. The patient should lie at rest in air as pure as possible; and, in view of the tediousness of these cases, it is often well to have him soon carried to some place where this condition can be best fulfilled. We know how phlebitis is apt to complicate the convalescence of fevers, and cases can be mentioned in which thrombosis or an attack of phlebitis has followed exposure to emanations from foul drains, in such a way as to suggest that some poison mingling with the blood, instead of continuing to disturb the whole mass, has coagulated a portion of it, and has thus been separated from the rest.

Neither can very much be done in thrombosis or phlebitis by local measures. The application of leeches in the course of the vessel has gone out of fashion. The relief they give is but temporary, and sometimes the irritation of their bites will prove mischievous. When the pain is very severe, it can be controlled by the local or general use of opium or morphia, or of something else. Otherwise, I think the most grateful application is, in the early period, a very strong lotion of acetate of lead; one part of the liquor plumbi to seven or eleven or nineteen of water. But, perhaps, the application of cloths wetted in simple water is nearly as good. Bandages at first are not advisable. They heat the limb, and otherwise increase the discomfort. But, when all signs of active mischief have subsided, when little or no tenderness remains, and the œdema is the chief trouble left, then bandages properly applied are undoubtedly very useful. Still later on, shampooing and baths of various kinds may be tried; but these should only be thought of when all risk of disturbing clots has long passed by. The baths of Aix les Bains, or Wiedbad, or the mud-baths of Marienbad may be suggested, and evidence is not wanting of brilliant cures effected by their means.

But, given a case of phlebitis, and it is not difficult to describe in general terms the prospect. At the best, it is likely to last long and prove tedious. It is not without risk to life; but a fatal issue, even from its several causes conjointly, is comparatively rare; and as time goes on, these risks diminish. But, if the patient would reduce these several risks to their lowest value, and otherwise accept conditions most favourable to his recovery, he must make up his mind to lie still for a long time.

AN ADDRESS ON THE HISTORY AND OBJECTS OF THE BRITISH MEDICAL ASSOCIATION.

Delivered at the First Annual Meeting of the Dublin Branch of the Association.

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In occupying this chair for the few moments which remain of my term of office, my first duty is to offer you my sincere thanks for the honour conferred upon me by electing me as the first President of the Dublin Branch of the British Medical Association, and to tender the thanks of the members of the Branch to the distinguished visitors who have honoured us by their presence on this occasion.

Following the example of some of the distinguished men who have held a similar position to mine elsewhere, I shall throw a glance backwards upon the origin, objects, and progress, of the parent Association, and, to a very limited extent, I shall refer to the science it aims to advance. Such an address, while necessarily brief and fragmentary, must be of a twofold character—retrospective and suggestive. The materials I shall chiefly glean in the records of the Association, and more especially of the decade which has elapsed since its annual meeting in this city.

Having been for some years a member of the original Provincial Medical and Surgical Association, I may, perhaps, be permitted to make a few remarks on the precursor of that which is now the most numerous and powerful body existing in the profession.

I would remark, then, that much of the great success which has been achieved was due to two causes—the time and the mode of its inauguration. The time was one of wonderful intellectual activity and scientific progress. It was said by an eloquent writer of the period: “The reason of man is now more fully employed than at any former period; a vast store of mental power, a vast mass of mind, is everywhere at work; what formerly was vainly attempted by the labour of a few is now easily accomplished by the exertions of the many.” A glance at the names and works of the great physicians and surgeons of the time will amply prove the truth of this with regard to our science, so that we may say that the original promoters of the Association took advantage of that “tide in the affairs of men which, taken at the flood, leads on to fortune”. But it is due to the memory of its principal founder, Sir Charles Hastings, to state that much of its success was due to the judgment and clearness of view with which he drew up its rules and defined its objects, calculated, as these were, to advance the interests of the profession and the public, and to elevate the status, and illustrate the talents and acquirements of the provincial practitioner. This latter object was most effectually subserved by the masterly retrospective addresses of such men as Prichard of Bristol, Crosse of Norwich, Scott of Liverpool, Symonds of Clifton, Bardley and Black of Manchester. Even now, no one could peruse these learned essays without improvement, nor without that feeling of admiration which prompted the late Sir William Ferguson to say in his presidential address: “Few physicians or surgeons of the present day would venture upon such extensive ground; but, doubtless, there were giants in those days, for they did their work well.”

All who are familiar with the annual addresses delivered during the last decade will admit that, if necessarily less comprehensive in their scope than those I have alluded to, they are marked by an equally enlightened and philosophic spirit, and justify the wise anticipation of the founder of the Association, that this retrospective view of medicine alone will stamp a considerable value on its proceedings, because nothing can be more proper than that, at stated periods, reports should be made of the advancement of a progressive science.

The career of the Association has been a continued and increasing