

different. That which alone can give to a particular fact in the treatment of disease the stamp of genuine value, is the wide and uncontradicted assertion of its truth by competent observers.

A true experience in medicine, I would define as the result which is arrived at through the observation of numerous fitting observers; who, after due investigation, arrive each at a like conclusion—the conclusion not being contradicted by the observation of other equally capable observers. Whenever serious discordance of opinion exists concerning the influence of a remedy over disease, wisdom would lead us to infer that its actual influence in such case has yet to be demonstrated.

The pathology, then, of modern days, however little it may have helped us to a knowledge of the nature of the essential and original provoker of diseases, has been of immense service in directing us rightly and logically to their treatment. It does not tell us how or why tubercle is deposited in the organs of the body; but it does teach us how to ward off and provide for the local injuries inflicted on the organs by its presence. When we would learn how to counteract the depositing of the tubercle, then we must turn to the lessons of experimental therapeutics. And it is from the results of experience alone that we can, in any case, arrive at a knowledge of the treatment of disease, so long as pathology is unable to disclose to us its nature. I need not here refer to the extraordinary changes which have passed into the treatment of diseases in consequence of the recognition of these sort of facts. No class of diseases illustrates this fact more remarkably than the diseases which I am about to speak of here.

We no longer look upon endocarditis, or pericarditis, simply as local, so-called, idiopathic inflammations; for we now know them to be the expression of some general disordered condition of the body; and we recognise the fact that the successful treatment of these diseases implies the application of a remedy which shall, so to say, neutralise the agent which produces the disordered condition. We do not now regard the local inflammation as the sole element to be provided against in treatment; and consequently have discovered that those prime agents, bleeding and mercury, which were once thought to be intensely efficacious in cardiac inflammations, are actually baneful when used as then recommended.

The physical diagnosis of diseases is founded on pathological anatomy. It, in fact, premises a knowledge of the pathological states of the different parts of the body, such as they are displayed to us by the anatomist. In the case of the heart, our knowledge of its diseased conditions, so far as they are explained to us by physical diagnosis, is derived—from alterations in the natural character of its sounds; from the presence of sounds, which are heard over the heart coincidentally with its movements, and where none such exist in health; from alterations in the natural extent of the precordial dulness, as ascertained by percussion; and from changed conditions—changes in extent, position, and force—of the healthy impulse of the heart. It is unnecessary to dwell upon the advantages which medicine has gained through the discovery of the diagnosis of internal diseases. The study has naturally become an essential part of the physician's education. But it has been thought, and with reason, that the study may be too minutely prosecuted; and that, relying thereon, the practitioner sometimes pretends to a greater accuracy in diagnosis than the nature of the subject admits of. And, also, that through over estimation of the value of the physical signs, he is apt to fall into the error, when applying his remedies, of unduly subordinating the general symptoms to the local signs. In practice, indeed, we may safely put aside all fine drawn discriminations in the physical diagnosis of cardiac diseases; and may rest well assured that great skill in the practice of the art is not requisite in order that the observer may be enabled to arrive at a sufficient knowledge of the affection of the heart. That degree of acute observation, which pretends so nicely to discriminate, during life, all the minute differences of diseased structure, the exact position and relations of them, such as pathology discovers them after death, is certainly not necessary to guide the practitioner to their treatment. Few people, indeed, possess those physical qualities—that nicety of tact, that fine sense of hearing—which are necessary to serve the observer in such minute differences as the subject may offer. I have seen enough of stethoscopy to satisfy me that over refining in its practice is oftener fraught with mischief than with good for the patient; and apt to lead the observer into erroneous conclusions and practices.

Experience has satisfied me that when the auscultatory signs, in any given case, are such as not to present, to any ordinarily

skilled person, clear and distinct indications of deviations from health, they are worth nothing as indications for treatment. It surely, indeed, would be wiser to abandon the stethoscope altogether, than to submit to the conclusion that only one man in a thousand is able to use it effectually.

I have thus endeavoured to state, shortly, the uses of a knowledge of pathology to the physician; and how intimately connected with the treatment and diagnosis of diseases is a correct knowledge of their pathology. I shall, in the next paper, proceed to detail the pathological anatomy of pericarditis.

EXCERPTS FROM DAILY PRACTICE.

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UNDER the above head I intend, from time to time, to forward to the BRITISH MEDICAL JOURNAL such cases, occurring under my own observation, as may seem to merit a record in the literature of medicine. I do not assume to compete, in this record, with the histories of hospital practice already conducted in the JOURNAL. But, as Rush very properly remarked in his eulogy on Cullen, "There are mites in science as well as in charity, and the ultimate results of each are often alike important and beneficial." This quotation is a sufficient apology for me, if apology be needed.

The following case, which caused me much anxiety at the time of its occurrence, I give on the present occasion, as being of considerable interest in the passing time.

I.—CASE OF SEVERE VOMITING AND DYSENTERIC DIARRHOEA, IN THE EARLY MONTHS OF PREGNANCY: ABORTION, FOLLOWED BY RECOVERY.

Mrs. C., aged 42, the wife of a respectable tradesman in this town, became for the first time pregnant in the end of May 1857. Immediately after conception she was attacked with the vomiting of pregnancy, which continued with unceasing violence until the time I was first consulted, August 15th. She had already received various medicines, such as magnesia, carbonate of soda, and Gregory's powder; but without any effect in arresting the vomiting; and she was considerably reduced, partly from the vomiting, and partly from the inability to retain food. A few days before I was consulted the symptoms were aggravated by the supervention of diarrhoea.

When I saw her I found the following symptoms: she was suffering from extreme thirst, emaciation, and exhaustion, and was confined entirely to bed. The vomiting was intolerable. Whatever was taken was returned, sometimes with bilious fluid and mucus, while in the intervals between food there was a persistent loathing and nausea. The vomited matters gave an acid reaction with litmus. She was purged seven or eight times each day, and the matters ejected by the bowels contained no true feculent matter, but mucus, tinged with blood. Accompanying this there was painful tenesmus. The tongue was creamy in the centre, with red tip and edge; the pulse small, quick, and feeble. The whole symptoms, in fine, indicated an acute dysenteric attack, coupled with the vomiting.

Detecting the pregnancy, and believing that all the phenomena of disease had their origin in sympathetic irritation commencing in the uterus, I prescribed, first, an effervescent mixture, with an excess of alkali, to each dose of which were added three minims of the diluted hydrocyanic acid of the *London Pharmacopoeia*. This gave no relief. After trying this for a day or so, I prescribed a mixture containing, in each dose, the trisnitrate of bismuth, five grains; diluted hydrocyanic acid, three minims; and five minims of the solution of hydrochlorate of morphia, in water. This mixture, continued every four hours for four days, produced no alleviation in the symptoms. I therefore moved a point in practice, paying more decided attention to the dysenteric symptoms, which had become more urgent. By this time not only was mucus, tinged with blood, still excreted by the bowel, but false membrane, resembling diphtheritic exudation, began to be thrown off in considerable quantity. I now prescribed chalk mixture, with ten minim doses of laudanum, three times daily; and a pill night and morning, containing two grains and a half each of Dover's powder and hydrargyrum cum creta. This treatment, with the addition of catechu to the mixture, suppositories of opium, and enemata of starch and laudanum, was continued until the last day of

August, but with no relief. The case now became of serious import, owing to the extreme exhaustion necessarily induced. On the last day of September my anxiety was somewhat relieved by the discovery of symptoms of threatened abortion. These symptoms continued; and, fortunately for the life of the mother, a fetus was thrown off on September 1st. Immediately afterwards, the more urgent symptoms, namely, the vomiting and dysentery, began to subside, but were replaced for a few days by retention of urine, for the relief of which the catheter had to be used at stated intervals.

By slow degrees the patient recovered. She has since been pregnant, and has given birth to a fullgrown child.

REMARKS. It is obvious that in this case the main point of practice lay in a correct diagnosis. Vomiting, in pregnancy, though a common symptom, and one which has been attended by even fatal results, as recorded in the experience of Drs. Montgomery, Marshall Hall, Haighton, Davis, Johnson, Burns, Churchill, Clay, and many other writers, is not often complicated with dysentery. But that it may be thus complicated is certain from the above case: and this complication the older writers on midwifery have recognised and pointed out with much more of precision than our modern authors. Had I not diagnosed in this case the existence of the pregnant condition, I should have been bewildered by the symptoms, their intractable character under every reasonable variety of treatment, and their cause.

The second point to be considered is whether, under the circumstances, I ought to have endeavoured to produce abortion. This question must be discussed candidly.

It is quite clear that the natural process of abortion did, in this case, save the woman's life; and this fact would, *a priori*, be in favour of such operation. I am, however, still undecided whether the operation is justifiable.

In 1852 a discussion took place in the Academy of Sciences, in Paris, regarding the propriety of inducing abortion in cases where the vomiting of pregnancy threatened the life of the mother; and opinions were then very fairly divided on the question. It seems, indeed, that in many cases where abortion is produced, death takes place as if from the shock of the operation, or from continuance of the symptoms; while in cases where abortion occurs naturally, the fatal result is more commonly prevented. It remains, therefore, an open question whether, in cases such as I have described, we ought to run the risk of operation, or whether we should await, even till death, the possibility of a relief of the symptoms by an action of the uterus itself to expel its contents.

The last point to be noticed relates to the medicinal and dietetic measures which should be employed. It is common sense itself that so long as the irritable cause remains, ordinary medicinal remedies can be of no avail. One common remedy, I mean opium, may give temporary relief; but this is given at the risk of producing a preliminary excitement and subsequent exhaustion. When organic obstruction in the heart produces dropsy, what can the best of us do? I need not enforce the parallel. Indeed, I know of no remedy in the whole Pharmacopœia that can be considered effective so long as the uterine irritation remains. A variety of styptic remedies might of course be tried. They would in my opinion either have no effect, or increase the mischief.

Dr. Clay, whose name has but to be mentioned to ensure authoritative respect, suggests that in the vomiting of pregnancy, particularly in the form occurring during the latter months, the patient should be laid in the recumbent position, with the hips raised; that concentrated food should be given in small quantities, at long intervals; and that if the os and cervix uteri were tender to the touch, a few leeches should be applied. This treatment has been attended with remarkable efficacy in some of his cases, and should another case such as I have described happen in my practice, I should unquestionably carry out a treatment at once so rational, simple, and safe.

In my next excerpt I shall give the particulars of a case similar to the above, in which death took place fourteen days after abortion, from the continuance of intractable diarrhœa.

ROYAL SOCIETY. Of fifteen new Fellows of this Society elected on June 9th, the following six are members of the medical profession:—Henry J. Carter, Esq., Surgeon Indian Army, Bombay; William Bird Herapath, M.D., F.R.S.E., Bristol; George Murray Humphry, M.D., Cambridge; John Dennis Macdonald, Esq., Assistant-Surgeon Royal Navy; William Odling, M.B., Kennington Road, London; Thomas Watson, M.D., F.R.C.P., Henrietta Street, Cavendish Square.

THE FORMATION OF CLOTS IN THE VENOUS SYSTEM DURING LIFE.

(A THESIS FOR A MEDICAL ACT IN THE UNIVERSITY OF CAMBRIDGE.)

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I.—FORMATION OF CLOTS IN THE VEINS.

[Continued from page 583.]

THE extension of the clot in the direction of the heart is usually limited by the junction of some large vein which is sufficient to maintain the current in the main trunk. Often the clot does not reach quite so far as this. Thus, when the clot commences at the junction of the iliacs, on one side, it commonly extends about half way up the common iliac; and, in a case of cancer of the uterus, in which the iliacs, on both sides, were obstructed, the clot extended up the vena cava nearly as high as the renal veins. Sometimes the clot reaches further, and terminates in a round or conical end on the *cardiac* side of the point of junction of some large trunk. In the peripheral direction, it is prolonged to a variable extent into the tributary branches, but does not usually reach the small veins: indeed, the latter are very rarely obstructed, either primarily or secondarily, in this affection.

The clot not only fills and chokes up the vessel, so as to prevent the passage of blood through it, but also distends or stretches it; and this distension, together with a certain amount of irritation resulting from the presence of a solid body in its interior, soon produces an effect upon the walls of the vein, the results of which are exhibited chiefly, or almost exclusively, on the *exterior* of the vessel. Thus we soon find that there is inflammation of the investing cellular tissue, causing an effusion of serum, lymph, or pus; whereas, in the *interior*, there is commonly little change beyond a removal of the epithelium from the lining membrane, and more or less intimate adhesion of the clot to it. There may be also an increase of redness at some parts, which is evidently due to staining by the contiguous blood, inasmuch as it is commonly proportionate to the colour of the contained clot, being deepest where the clot is darkest, and less marked, or quite absent, where the clot is composed chiefly of fibrine. I have never seen lymph or pus, or any inflammatory product, formed from the interior of a vein. This proves that the inner coats of veins are by no means easily excited to inflammation, and is quite in accordance with the results of experiments made upon the veins of animals by Lee,* Mackenzie,* and Virchow (*Handbuch der Specielle Pathologie und Therapie*, i, 161). It accords also with the general results of my experience, which by no means indicate a liability to inflammation in the inner coats of veins. I have, in many instances, applied a ligature to the chief vein of a limb after amputation, without any ill result in a single case; and I have never seen any mischief caused by the ligature of a varicose vein or a hæmorrhoidal tumour, though I have employed that method of treatment very often. It is not improbable that where unfavourable symptoms have ensued in cases of this kind, they have been caused, not so much by inflammation of the vein itself, as by suppuration in the surrounding cellular tissue.

When examining a vein which is plugged by a tough and adhering coagulum, one can scarcely be persuaded that the circulation could ever have been re-established through it, if the patient had survived; yet there can be no doubt that this does take place, and that a vessel may, in process of time, resume its functions, and be restored nearly, if not entirely, to its natural condition, after its channel has been completely, or to a considerable extent, blocked up by a clot. The perfect restoration of the limbs in Case i, and in several other instances, assured me of this; and it is in accordance with the great difficulty which I have experienced in effecting the permanent obliteration of varicose veins by temporary ligatures, or by other means which had for their object the formation of

* *Medico-Chirurgical Transactions*, xxxv and xxxvi. Dr. Mackenzie infers, from the results of numerous experiments on the venous system, that the origin of *obstructive* phlebitis is to be sought for in a vitiated state of the blood, that this causes an irritation of the lining membrane of the veins at various points, which, in turn, leads to coagulation of the blood. I do not, however, discover sufficient evidence of this irritation of the lining membrane of the veins, and think there are many reasons against admitting that it is a necessary, or even the ordinary, intermediate link between the vitiated and the coagulated condition of the blood.