Original Communications.

WHAT IS CHANGE OF TYPE IN DISEASES?

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DR. BARCLAY must not be surprised if his lectures on *Medical Errors* "excite", as our French brethren say, "susceptibilities". If he had contented himself with pointing out the illogical therapeutical doings of the Arabians, or of the Greeks or Romans of old, or even of our dead and buried great ones of the last generation, he would probably have not been troubled with objectors. But to prove to a modern living doctor that some favourite method of cure of his—in defence of which he is ready to stake his reputation and all his convictions—is a perfect delusion, naturally renders that doctor atrabilious. It has very much, in fact, the effect of treading on a man's favourite—that is, most exquisitely tender—corn. It is, indeed, at all times, a serious thing to be shown up as an illogical dealer with facts by so high an authority as Dr. Barclay, and in a work, too, especially devoted to the treatment of the "fallacies of the faculty"; and persons naturally become very thin-skinned when, in addition, they are castigated before that high court, the College of Physicians. Happy are such persons, therefore, if they can find a screw or two loose in the armour of the logician himself.

I should not, however, myself have ventured to call attention to a passage in Dr. Barclay's *Medical Errors*, wherein I am indirectly called to account, if I did not think that Dr. Barclay's error—for so I must be bold enough to call it—was far from being peculiar to himself. I refer to the interpretation which he gives of the meaning of the words "change of type" in disease. The words are very common ones, it is true—words of late years almost in daily use in our conversations about diseases. But do we really know each what the other means when we are using them? Have we, many of us, really any distinct idea at all of the actual value of the terms? I have at times asked friends offhand what they mean when they speak of this "change of type"; and have been often surprised to find how vague is their notion of its import. Moreover, when I find in a work devoted to the enunciation of "medical errors", what seems to me a manifestly erroneous definition of the term, I think I may be excused if I attempt to give to it something of its actual value; or, at all events, if I ask Dr. Barclay, when he uses it in future, to define his terms. The question is not a mere barren tale of words; for the actual practical doings of doctors are closely mixed up with this "change of type".

Dr. Barclay's error will be found in the following passage of his *Medical Errors* (p. 81).

"I need not, however, examine a question which has been so ably discussed* on a recent occasion, when we were taught that there is no change of

type in disease, though cholera was unknown in Europe forty years ago, and though plague, once so constant a visitant in this city, has, for the present, entirely ceased to spread beyond the regions of the Levant, where it seems to have its constant habitat."

My friend Dr. Barclay, in this passage, whilst nominally flattering my "able discussion" of the subject of bleeding, actually convicts me of apparently a very barefaced absurdity in discussion. I think his logic should have suggested to him that, when the *reductio ad absurdum* was so manifest in the conclusion, it was probable that he and I differed because we attached a different sense to the terms we used. Indeed, if my friend had taken the trouble (which I must now ask him to do) to read, in the lectures which he criticises, the definition which I have there given of "change of type of disease", he never could have written the words of his above given.

Dr. Barclay has thus, in his *Medical Errors*, himself committed a great error. He attempts to convict me of an absurdity in argument, by improperly using the words "change of type", not in my sense, but in a sense which he himself has given them, and which never has been given them by any departed, and, I may venture to say, never will be again given them by any living, doctor. He employs the term erroneously; and then gives me a quietus—a logical settler—as the correct conclusion of his false assumption.

Now, according to Dr. Barclay, whenever a new disease appears, and whenever an old one disappears, a "change of type in disease" has taken place. Thus, for example, when syphilis, or when cholera, or when yellow fever, or when small-pox, first appeared, disease changed its type. In fact, whenever Pandora has opened her box and let a new disease loose on the earth, or has transported a disease from one quarter of it to another, diseases have changed their type in the district where the event has happened.

More than this, Dr. Barclay says, if plague no longer ravages London, disease has changed its type. If small-pox, therefore, were to be annihilated by vaccination, diseases would have changed their type. If typhoid and typhus, or if ague, under good sanitary arrangements, disappear, diseases have changed their type. According to Dr. Barclay, in fact, *change of type of disease is represented to us by the appearance or the disappearance of disease in a given district*. Surely, he might just as reasonably have argued that vegetables changed their type when the potato was introduced into England; or that quadrupeds changed theirs when wolves disappeared!

Dr. Barclay says cholera has found its way into, and the plague has found its way out of, England: therefore diseases have changed their type! But how, in what way, has disease changed its type? Is cholera not still ever cholera morbus? Is plague not demonstrated to us still by the same tokens and signs which have ever been its fatal diagnostic marks? If a contagious disease be transported from the East to the West, and still ever remain the same identical disease—ever characterised by the most characteristic of symptoms in the West as in the East—where is a change of type to be found? If London be so purified by sanitary arrangements, that the plague can no longer there find a satisfactory pabulum and breeding-ground, how has disease changed its type? Really, I must ask Dr. Barclay if there be any one of the many false deductions, which he has so well shown up in his excellent book, more potentially false than the fallacy involved in this assumption?

At all events, be Dr. Barclay's definition true or

* "Blood-letting in Disease." Gulstonian Lectures. By W. O. Markham, M.D., F.R.C.P. (BRITISH MEDICAL JOURNAL, April 1864, et seq.)

false, still must be stand convicted of that other fallacy in argument—viz., of using terms in a totally different sense from that which was given them by the writer whom he is criticising; and then, from the necessarily false deduction so arrived at, of accusing the said writer of a stupid blunder.

I will here add the definition which, in the lectures criticised by Dr. Barclay, I have given of "change of type" in disease; and will leave the reader to judge whether his or my definition of "change of type" is most near to its probable sense. I say probable sense, because, for my own part, I have never yet been able to find the smallest shadow of satisfactory proof that any change in the type of disease has ever occurred.

"I know not to whom is due the credit of first suggesting the term of change of type in diseases, nor when it first appeared in medical literature; nor do I know what was the precise idea attached to it by its inventor; but by the term is meant, as I understand it, not any imaginative alteration in the essential nature of diseases themselves, but some change in the condition of the body which is the subject of diseases. Inflammations, I suppose it would be argued, are the same now, in so far as their characters, anatomical and dynamical, are concerned, as they ever were since diseases fell on man; but the body in which they manifest themselves is somehow changed. The general diathesis of humanity has undergone some gradual transformation, so that the manifestations of the reactions of diseases upon mankind are different now from what they were in former days. Moreover, this change, some supporters of the theory tell us, is no partial one; the whole civilised human family has come under the novel phasis. Not only here, but at the antipodes, men will no longer bear the bleedings to which they were once beneficially subjected. And I believe that even veterinary surgeons have found, or have thought to find, the same to be true of the constitution of the animals subjected to their care.

"Besides this, it is not to be imagined that now, for the first time in the history of nosology, such peculiar modifications have occurred in man's nature. The course of diseases amongst mankind, authority assures us, has ever, at different epochs, been marked by variability and shadows of change. To use the words of the authority referred to: 'There are waves of time, through which the sthenic and asthenic characters of disease prevail in succession, and we are at present living amid one of its adynamic phases.' 'I share in the belief' (he adds) 'which has grown out of the experience of many thoughtful and observant men, that, in this country at least, the human constitution has for several years been suffering a gradual change; that almost all inflammatory disorders assume now-a-days a more adynamic type, and require less energetic treatment than in the early part of the present century.'

"It must also be remembered, that this supposed change in constitution is something quite distinct from the changes in man's bodily state which result from any of the well defined influences of occupation or climate to which he may be accidentally subjected. This peculiar change is, in fact, the resultant of an influence—an unknown influence—totally distinct from those ordinary influences, whose good or evil operations on the body we can note and appreciate; and, as I understand it, it has fallen alike upon all—upon the ruddy rustic, the corpulent alderman, the thin, sallow, anxious-faced man of business, and the pallid artisan; affecting each of them, and more and less, according to the varying merits of their constitutions."

NOTES ON

THE ADVANCE OF PHYSIC:

BEING THE ANNUAL ORATION BEFORE THE
HUNTERIAN SOCIETY FOR 1864-5.

By JONATHAN HUTCHINSON, F.R.C.S., Surgeon to the London Hospital; and Assistant-Surgeon to the Royal London Ophthalmic Hospital.

MR. PRESIDENT AND GENTLEMEN,—The return of our anniversary, with its customary address, offers an opportunity for general and somewhat discursive remarks, such as would be out of place at one of our ordinary meetings. I shall, with your permission, though, I fear, in but a very imperfect manner, attempt a few remarks on the great object which our Society has in view—the improvement of medical and surgical science; or, to use the concise terms of Sydenham, the Advance of Physic. In doing this, I shall venture to submit to your consideration certain matters of detail, as well as more general speculations.

Great as have been the triumphs of our profession in the past, and immense as has been the expenditure of human skill, industry, and enthusiasm, in achieving them, we have still to regret the exceeding imperfection of our art, in comparison with what the interests of humanity demand. Those who have looked most closely into the matter will probably be the first to admit, and indeed not only to admit, but to exult in the belief, that we have as yet only laid the very foundation-stones of that temple which our profession will, in the future, be privileged to uprear, "to the glory of God, and the good of man's estate."

Chief amongst the means to which we may look for great aid in the future progress of our art, is the much increased use of the pen and of the printing-press. A superficial glance at the present state of things might indeed lead us to suppose that already there exists a glut rather than a deficiency of books and journals. But it is not so. Good books are the stones with which we build, and they are still our greatest want. A book written with an honest simplicity of purpose, telling in plain language what we have seen and done, is still the greatest boon which any of us can confer on his profession. We must endeavour to compel our minds to regard books as being simply information—it may be opinions, it may be facts—put into type in order to facilitate reference. The voice of an individual can be heard but by few. The reading of manuscript is tedious and laborious; and, however public may be the place of deposit for manuscript essays, they will remain inaccessible to the majority. Even of our own note-books, when they have become voluminous, we can make but little use. When, however, an opinion or a fact is once put into good type, and placed upon a publisher's shelf, it is fairly launched upon the world. It is glorious to reflect how the seed thus sown almost in private and in silence may chance to grow up and fructify where least expected, and possibly to an extent which its sower had never calculated. There are few books which have not some germs of truth, and which do not effect some good; and the public may be very safely left, aided by the labours of critics, to choose the best, and allow that which it finds not usable to sink into disuse. Neither their authors nor the profession need be under any alarm as to superfluous books doing any mischief,—a little extra employment given to the trade, and there the thing ends. The mediocre book drops out of notice, and hurts no one. Many a book, however, which never attains what Mr. Churchill would call success, still serves silently a most useful purpose.