AN ADDRESS ON SYPHILIS AS AN IMITATOR.

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It will be evident that, in most of what I have said, I have been speaking, not of mere resemblances, but of imitations brought about on plan. But there are certain events in syphilis to which the term resemblance would be more appropriate. Such is the "syphilitic fit", or attack of apoplexy. This by no means unfrequent occurrence supplies often a very close resemblance to an ordinary senile "stroke". There is a short period of confusion, then insensibility, and then paralysis—it may be, hemiplegia. Sometimes several fits, at shorter or longer intervals, occur. These are to be distinguished, however, from what they resemble, in that they are not caused by similar local changes. There is not rupture of blood-vessel and hæmorrhage, but plugging of a vessel and arrest of circulation. They are more nearly parallel to the rare cases of apoplexy from embolism; but from these, again, they differ in that there is local disease of the vessel, which finally becomes thrombosed, not a sudden impaction of a floating plug; and hence certain minor differences in the development of the fit, which, however, I must not now stop to mention.

Under the term Locomotor Ataxy, we recognise a condition of liability to nervous disorder, one of the most conspicuous symptoms of which is a failure of the power of muscular co-ordination in the lower extremities. It is clear that this symptom is only one part of the malady, for the patient is liable to other and quite distinct forms of paresis. He may become blind, may have ptosis or ocular paralysis, and is liable to severe attacks of disturbance of the abdominal organs. The pathology of the malady is to a certain extent made out, and to some extent is yet obscure. It seems clear that low forms of chronic inflammation, leading to permanent degenerative changes in the posterior columns of the cord, occur; and that these processes, once initiated, tend to spread in certain definite paths. It seems clear that the vasomotor system is often much involved. We do not, however, yet fully understand the bond of connection between the different groups of symptoms; nor do we know the special causes by which they are produced. It seems probable that a variety of causes may in turn or together take shares in causing this curious and very common malady. Now, one of the most remarkable facts in the history of syphilitic simulation is, that all the phenomena of locomotor ataxy may be, and often are, closely imitated. So close is this imitation, that it becomes one of the most difficult tasks in diagnosis with which I am acquainted to distinguish between them. Case after case comes under my observation which with the suggestion that the patient is suffering from a syphilitic taint, and I find that all the symptoms range themselves under the head of ataxy. The small and sluggish pupils, the feeble bladder, torpid bowels, the amaurosis, the ptosis and failure of ocular muscles, the stabbing pains, the defective sensation in the feet and diminished co-ordinative power, the whole group of symptoms, not omitting the abdominal crises, all are there, and yet all are remediable to some extent, if not wholly, by specific treatment. Excepting in the facts as to history, and in the effect of specifics, there is little or nothing upon which to base a differential diagnosis. Whatever may be the parts attacked in non-specific locomotor ataxy, and whatever is the tendency as regards local spreading, it is clear that syphilitic disease may affect the same parts, may spread in the same directions, and may produce precisely similar results. If the question be put, Is there really any non-specific type-form of locomotor ataxy? is it not rather probable that the name is given solely to the results of serpigineous syphilitic changes in the nervous centres? we must, I feel sure, answer it definitely in the negative. It is probable—nay, it is certain—that the disease may begin independently of syphilis; and, notwithstanding the frequency of the latter malady, probably not more than half of those who become the subjects of ataxy have ever had it. It is certain, then, I repeat, that we have side by side two maladies almost exactly alike, one

specific and the other not so. It may be asked further whether, in the cases in which ataxy happens in syphilitic persons, it is not yet probable that the ordinary causes are its real producers, and the syphilis merely an accidental concomitant. To this, again, a decided negative answer must be given as regards, at any rate, a considerable proportion of cases. They are really syphilitic, and are curable only on that hypothesis. On this point, valuable evidence has been produced by M. Fournier of Paris, who has published several of remarkable cures by the iodide of potassium, and who urges that, whenever the patient has had syphilis, this drug should be carefully pushed.

In support of the belief that there is such a thing as a slow serpigineous form of inflammation which spreads insidiously amongst the nuclei of special nerves and in certain tracts of the spinal cord, I get most valuable evidence from the cases which I produced in a paper read a fortnight ago before the Royal Medical and Chirurgical Society. The subject of this paper was a condition which may suitably be known as ophthalmoplegia externa, and of which the chief symptom is double-sided partial paralysis of all the ocular muscles. In the most marked cases, both eyelids droop and the eyeballs are almost motionless in the orbits. This affection (previously described by Gräfe) is due, not to disease of nerve-trunks, but of the nerve-nuclei, as made probable by its symmetry; it is progressive, as are certain forms of locomotor ataxy; and it may involve the optic centres and pass down the spinal cord. I cited, in the paper referred to, eighteen cases, and in about two-thirds of them there could be no reasonable doubt that it was due to syphilis. In the syphilitic cases, it is susceptible of arrest by the iodide, and without that remedy the disease is probably usually aggressive and in the end fatal. In many cases, it is mixed up with the symptoms of locomotor ataxy. Whether we prefer to say that it is a symptom of ataxy, or ataxy a symptom of it, does not matter in the least; the important fact is, that both result from a creeping process of disease leading slowly to degenerative changes in the spinal cord and mesocephalon, and having as their consequence various forms of muscular paralysis.

In near connection with this subject, I may refer to a group of symptoms which I described last year before the Royal Medical and Chirurgical Society, and which I believe to indicate disorganisation of the lentacular ganglion. They are: absolute paralysis of the iris, both as regards dilatation and contraction of the pupil, and paralysis of the ciliary muscle. The patient cannot read without strong spectacles, and his pupil does not act in the least. If these conditions be present without other forms of muscular paralysis, they are, I hold, to be explained only on the hypothesis of disease in this ganglion. Now, some of the cases occur in connection with syphilis, and are caused by it; and others have apparently no such association. In some cases, this ophthalmoplegia interna is probably an early symptom of progressive disease which ends in locomotor ataxy.

A few general remarks may be here introduced as to the features in which syphilitic doubles differ from their prototypes. I have admitted fully respecting several special forms that not unfrequently the similarity is such that diagnosis is possible only by aid of the history and concomitants. This, however, is only exceptional, and, as a rule, minor features of difference are there, and may be made out by careful observation. It may be remarked, in the first place, that the syphilitic forms are seldom quite regular in their course; they are often more rapid in development than their parallels, and often we see mixed up the symptoms of several different forms of disease at the same time. Thus, we may find progressive muscular paralysis with the special symptoms of locomotor ataxy, and what should have been a pure retinitis pigmentosa may be complicated by disseminate choroiditis. In syphilis, the proclivity of all tissues to suffer favours these irregularities of development. The polymorphism of the secondary eruption of syphilis has long been well recognised. Next it may be asserted that a serpigineous tendency or habit is almost constantly more marked in syphilitic inflammations than in others. This is seen alike in the skin and in the connective tissue of the nerve-centres. If the disease be due to syphilis, it will, unless arrested by treatment, tend to spread faster and further than other forms. In the case of external parts, too, the liability to ulcerate, to suppurate, and to become phagedænic must be noted as special features of syphilitic inflammation, and to these we may add the liability to produce scars and to leave pigment-stains. Whenever the evolution of a disease is irregular, and the use of definite nomenclature thus rendered difficult, we may suspect that the malady is syphilitic.

It is time, Mr. President, that I should bring these remarks to a close. In doing so, I can only express the hope that they may have been at any rate suggestive. I have not aimed at proving anything, but have rather endeavoured to give hints as to the way in which I think we ought to work. If the conception of the state of the body left after an attack of syphilis, which I have tried to present to you, be the correct one, it

amounts, I think, pretty nearly to this: that every specialised structure, every tissue, every individual cell, is left with increased and peculiar proclivities to disease. No one can tell where the morbid action will show itself, and we must expect it everywhere. Its special locality and form are probably determined by previously existing proclivities. The symptoms produced and the name which will be given to the disorder will have relation to the structure and function of the organ or tissue which is attacked. Syphilitic maladies must be expected to be as multifarious as are the organs and specialised parts of organs in the body. The little lenticular ganglion of the eye has been shown to be liable to disorganisation, and we know more or less definitely what symptoms would follow its destruction. But if this ganglion, why not the others in connection with the cranial nerves? why not those of the abdomen? why not the little ganglion impar itself, which, though so retiring in its solitude, and so unknown as to its special function, must still have its use, and whose loss, could we rightly recognise it, is no doubt felt in some degree? So of all the tissues in the body. It has well been remarked that the author of the proverb *ex pede Herculem* must have been a stupid fellow, for that he ought to have found a toe, or even a toe-nail, quite sufficient from which to evolve the Hero. So of our subject, it may be asserted that the proposition being granted that syphilis gives permanent proclivity to disease in all tissues, a good anatomist and physiologist might write the history of all its very various forms of malady without any clinical experience whatever. We have, however, in part accumulated such experience; we have seen Hercules' foot, and much more, and the task of inference as to the rest becomes so much the easier. I feel confident that the work before us—the discovery and accurate description of a large number of disorders which are of syphilitic origin—will be much helped if we take as our clue in the general proposition that syphilis is an imitator. It is possible even that some assistance may be gained by work in the opposite direction; and that in some instances, having discovered first the syphilitic type of a special malady, we may find out by investigation the prototype hitherto overlooked.

I must correct what I have just said a little. A knowledge of anatomy and physiology alone would barely suffice to enable its possessor to foresee all that happens in syphilis. There must be some experience also in general pathology as well. Syphilis may claim position as a detector as well as a most skilful simulator. Under its influence, the hitherto latent proclivities of the individual are revealed. When epilepsy occurs from syphilis, it happens probably to a man predisposed to epilepsy; and the same of locomotor ataxy, and the like.

CASES OF ENLARGEMENT OR INFLAMMATION OF THE MEDIASTINAL GLANDS.*

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CASE I.—A little girl just under two-and-a-half years of age came to my out-patient department on January 26th of the present year. Her mother brought her for a cough, and stated that she had had a fit one or two months ago, and another three days ago; the last continued for five hours, and she became very black in the face. On inquiring further about these fits, it became evident that they were not what we should understand by "fits"; for the mother informed me that "five of seven other children had died off between the ages of one and two in *convulsions*, but she had never lost one with *fits*". Directing attention to this, perhaps, amongst hospital patients, not very unusual refinement of language, it was ascertained that the child had, on and off for six months, had occasional attacks of dyspnoea, accompanied by a peculiar wheezing in the chest. She also had a little cough; and, as the dyspnoea came on quite suddenly when she was otherwise well, and she became blue in the face, she was judged by her relations to have whooping-cough. But, quite unlike that disease, the fits, though setting in suddenly, lasted for some time, and were very irregular in their onset. The child was as fine a child as one could wish to see, and I could find no evidence of any disease except some slight crepitation at the apex of the right lung. It came once again, and, as she was doing well, not much attention was paid to her. Three days afterwards, the mother came to say the child was dead. She seemed quite well at 10 P.M. the night before her death, but woke up suddenly in the middle of the night with great dyspnoea. She seemed quite unable to get any breath, pulled at her chest, became very livid, and died, as her mother thought, choked.

The *post mortem* examination was made thirty-two hours afterwards. The body was that of a remarkably large child with golden-brown hair,

in exceedingly plump, good condition. There was no disease except that in the chest and abdomen now to be noted. The lungs were bulky, with some considerable amount of collapse in the lower lobes. There was no trace of tubercle anywhere. The lung-tissue was healthy, except the right middle lobe, which was of a dark livid red colour, quite solid and tough, and with several points of caseation in it, round some of its bronchial tubes. This condition was a chronic pneumonia, apparently consequent upon a caseous inflammation extending along the tubes. The mediastinum contained large caseous glands; and one on the right side had opened into the trachea just above the bifurcation of the bronchi, had plugged the trachea with a mass of caseous matter, and had been the immediate cause of death. (Hunterian Museum of the Royal College of Surgeons, 1,467 B.) The mesenteric glands were large and fleshy, and in one or two spots a caseous change was just commencing by minute points in their substance. The condition of the intestine was interesting in regard to these changes. Peyer's patches were decidedly thickened; and, while thus generally rather swollen-looking, they were dotted over with still larger pearly-looking grains; and the mucous membrane was injected. The whole patch had thus a rugose appearance which was abnormal. The mucous membrane generally over this part of the ileum (near the cæcum) was rugose and thick, and the glands appeared to be in a state of repletion or overgrowth.

CASE II.—Emily R., eight months old, was brought to me in November 1875, for feverishness and a peculiar crowing respiration. The child had had no previous illness, except that, on sleeping, it was very apt to lose its breath, and had to breathe very forcibly to prevent being suffocated. A week ago, it caught a bad cold, and shortly afterwards had a fit, and had had two or three a day since. These were described as loss of breath, followed by a convulsion, particularly liable to come on when placed lying down upon a bed. It had been fed with all sorts of things besides the breast. The bowels were a little relaxed; the motions white and slimy, containing a little blood. Two other children were both healthy, and the father and mother were healthy also. The child was in very good condition, without teeth. The various viscera appeared quite healthy. It was treated with ten-minim doses of castor-oil for about six weeks, and for a time was much better; then it had two fits and died suddenly.

At the *post mortem* examination, the thymus was large, but not unduly so. On the right side of the neck, just where the recurrent laryngeal nerve came off from the vagus, there was a red enlarged gland of the size of a haricot-bean, which was somewhat toughly embedded in the fibrous tissue around it, though there was hardly any thickening of the mediastinal fibrous tissue. The glands lower down about the root of the lung and near the vagus were as large as this, and very notably larger than those of the opposite side; but they were only red and fleshy, not caseous. The middle lobe of the right lung was rather collapsed. All the other viscera were healthy. The mesenteric glands were large, but not beyond the range of normal.

CASE III.—Another case also comes to my memory, which was under the care of Dr. Pavy at Guy's Hospital some years ago, to whose kindness I am indebted for permission to allude to it. It was a boy aged eight, whose illness had commenced only eleven days before his admission with a cough, which quickly increased in severity and became paroxysmal. He was sent in for spasmodic asthma, and the attacks were certainly bad enough for that. He would start up in bed suddenly; his face blue; his eyes staring; all the muscles of respiration in violent action: the picture of an agony so terrible that I shall never forget that poor boy's face. He would have five or six of these attacks during the day, and in the meantime had some continuous distress of breathing, not much; some retraction of the chest-walls during respiration, a stridulous cough, and frequent vomiting. He was a delicate-looking boy; and this, coupled with the history of sudden onset, made me think he must have some enlargement of the mediastinal glands, and possibly a mediastinal abscess. He died within a few days of coma, with a very high temperature.

At the *post mortem* examination, there was recent double acute pleurisy at both bases, and bronchopneumonia. There was no tubercle. The following was the condition of the mediastinum. On the right side, there was one greatly enlarged bronchial gland, caseous and suppurating in its centre. It was adherent to, but did not press upon, the trachea. The pneumogastric nerve on this side was traced down to the gland, where it became so firmly adherent to it and surrounded by dense fibrous tissue, that it was impossible to isolate it even by cutting. On the left side, the pneumogastric was traced the whole way with ease, quite free. The glands on this side were slightly enlarged and fleshy. There was no caseation or suppuration. The other viscera were perfectly healthy. There were no other enlarged or caseous glands, and the brain was healthy. The larynx also was healthy.

* Read at a meeting of the East Surrey District of the South-Eastern Branch, 1877.