





## II.

---

### CASE

OF

### ACUTE RHEUMATISM

SUCCEEDED BY

### CHOREA AND AFFECTION OF THE HEART.

*(Read to the Medico-Chirurgical Society of Edinburgh, Nov. 24th, 1852.)*

THE relation subsisting between the two diseases, rheumatism and chorea, has now for some time been recognised by the profession, while from many of its members the subject has received much attention and study. That an amount of obscurity, however, still exists in regard to it is evident from the various explanations which have been advanced to account for the association of the rheumatism with the nervous disorder; and although the subject has engaged, and does still engage, the notice of many fully qualified for its investigation, it will not, I think, be considered that the recording of any accurately observed case is to be looked upon as superfluous or uncalled for. Acting on this belief, I beg to submit to the Society the following case, and the few remarks which succeed it:

J. O—, æt. 10, daughter of a groom, was placed on the roll of the New Town Dispensary on the 7th June last. I saw her that afternoon, in the house of her grandmother, in Jamaica Street. She was a delicate-looking but comely child, of fair complexion. In infancy she had suffered severely from measles

and hooping-cough. Her grandmother, with whom she resided, had for many years been a cripple from rheumatism; and her own father had had two attacks of rheumatic fever. The little patient had been seized two days before my visit with shivering, followed by the occurrence of severe pains in the larger joints of both legs and arms. At the time I saw her, the knees, ankles, and all the smaller joints, were much swollen, red, and very painful. The shoulders, elbows, and joints of hands, were similarly, though to a less extent, affected. There was much fever, quick pulse, and furred tongue. The urine was dense, and the bowels confined. Heart's action violent, but unattended with any morbid sound.

She was ordered a purging dose of calomel with half a grain of opium, and a black draught to be taken the following morning.

June 8th.—The pains and fever much as yesterday. Has slept pretty well. Ordered a pill with one grain of calomel and one fourth of a grain of opium to be taken four times in the twenty-four hours.

It is not my object to dwell on this portion of the case, and I need not, therefore, weary the Society by detailing the daily condition of the patient; let it be sufficient to say, that she passed through a very severe rheumatic fever, being only convalescent on the seventeenth day. She did not, however, so far as I could make out, suffer during that period from any extension of the rheumatic inflammation to the heart or pericardium. There certainly was not on any occasion during these fifteen days any morbid sound to be detected on auscultation, or any increased precordial dulness to be made out on percussion. The mouth had been slightly affected by the mercury, which had immediately thereafter been suspended. Up to the 23rd of June I saw her daily; from that date she was convalescent, and thereafter, up to the end of the first week of July, I saw her frequently; on more than one occasion examining her chest, and always with the same result. On the 20th of July, not having seen her since the 7th, I was requested to visit her, on account of a peculiar shaking and nervousness, to use her mother's words. I found her suffering from confirmed chorea. The mother informed me, that the disease had been creeping on for some days, and that ever since her rheu-

matie fever she had been nervous, and very easily excited and alarmed, which was different from her previous character. She could not attribute the occurrence of the disease to any particular cause, indeed it had come on gradually; but she was quite sensible that it had been augmented by a fright, sustained the day previous to my visit, when a cat had somewhat incautiously attacked a favourite hawk, which was kept in the room in which my patient slept. She had given a loud scream at the time, and during the following night had awoke from sleep with the same. When I saw her, the choreic affection of the lower limbs was so aggravated as to render progression nearly impossible; the arms, especially the left, were similarly affected. The left side of the body was, on the whole, more markedly affected than the right. Articulation also was greatly impaired, and she made most singular grimaces. She had never suffered from any nervous disorder before. The tongue had become furred.

On examination of the heart, I now, for the first time, noticed a deviation from the natural sounds. A distinct blowing murmur took the place of the first, as heard towards the apex of the heart, and this was accompanied by a greatly increased action of the organ.

Ordered a purge of jalap, to be repeated each day for three days.

The purges improved the tongue, but did not apparently influence the nervous disorder. Accordingly I ordered her to take five drops of Fowler's solution twice daily immediately after meals.

The arsenic was continued regularly, without the intermission of a single dose, from the 24th of July up to the 20th of September, when the physiological action of the mineral being induced, as represented by a very white tongue, swollen eyelids, and a somewhat irritable state of the mucous membrane of the stomach and bowels, I ordered its suspension. During that period the nervous affection had perseveringly continued, at times augmented in severity, at others apparently yielding, at one period so severe as to cause the strict confinement of my little patient to the house, at another, permitting her to walk, assisted by her mother, and even to visit me at home.

On the 23rd of September I made the following note of her

condition:—Chorea almost entirely disappeared; walks well and steadily, though she still complains of occasional sinking at the knees; slight twitches of the muscles of the face. The cardiac murmur continues distinct, clearly heard over the whole cardiac region; it is most distinct towards the apex, and is not propagated in the cervical vessels.

November 17th.—Is quite free from all choreic movements; expresses herself as well, except for the beating at the breast. The palpitation is at times inordinate. No decided increase of precordial dulness exists. The murmur continues as before.

*Remarks.*—This case is similar to many others which have been placed on record, and is, with one point of difference, the same as more than one case alluded to by Dr. Kirkes in his most interesting papers<sup>1</sup> on this subject, the only dissimilarity being that the evidence of the affection of the heart, though looked for during the rheumatism, was not detected, but became established about the time of the recurrence of the chorea. I had indeed come to the conclusion, that happily the heart had escaped implication in the disease. The case is interesting from the speedy manner in which the choreic affection succeeded the declension of the rheumatic. There is one question of great interest to which I should wish to draw the attention of the Society, and that is—The association of disease of the heart, unattendant on rheumatism, with the nervous disorder. I think that the evidence of some affection of the heart will be found in many cases of chorea. In Dr. Kirkes' analysis of thirty-six cases, three were of this nature. In some cases the cardiac affection will no doubt be found to be inorganic—functional derangement merely—attended by a murmur with the heart's first sound, heard most distinctly over the upper sternum, propagated in the cervical vessels, and in all probability associated with the so-called venous murmur in the neck. Further, the general appearance and symptoms of such patients point to the probable dependence of both nervous and cardiac affection on a disordered state of the blood, in short, on anæmia.

But apart from these, there is another class of cases, in which the evidence of organic disease of the heart, independent alto-

<sup>1</sup> 'Medical Gazette,' 1850.

gether of rheumatism, is quite as marked as its functional derangement is in the former. I remember to have seen one such well-marked case under the care of Dr. Paterson—now of Tiverton—in the Royal Infirmary, an account of which, with Dr. Paterson's concurrence, I afterward published.<sup>1</sup> The patient, a boy of seven years of age, was admitted into the hospital, suffering from a first, but very severe, attack of chorea. Immediately on his admission a loud musical murmur was detected accompanying the first sound of the heart, heard most distinctly towards its apex. Neither in this boy's history, nor in that of any of the members of his immediate family, which were carefully inquired into, was there any account of rheumatism. Under treatment the chorea speedily subsided, and after a residence of nearly a month he left the hospital, the cardiac murmur remaining as before. Scarcely six weeks thereafter the little boy died suddenly, sitting at his tea table—he dropped down dead. Unfortunately I was unable to obtain an examination of the body, but the manner of the death certainly corroborated the opinion formed from the observation of the symptoms and physical signs of disease during life.

I do not propose to allude to the various theories known to all the members of the Society, which have been advanced to account for the association of rheumatism with chorea.<sup>2</sup> That which has been suggested by Dr. Begbie<sup>3</sup> has received the willing assent of Dr. Watson and of Dr. Kirkes, appears to accord with the views entertained by Dr. Todd, and finds no adverse facts in the numerous observations of M. Séc, whose elaborate memoir on this subject, read to the Academy of Medicine, and published in their 'Transactions,' has left nothing to be added to its historical bearings.

The case I have now related certainly goes to establish the correctness of Dr. Begbie's theory, that the morbid condition of the blood which gives rise to rheumatism also gives rise to chorea. The child had inherited from two generations the rheumatic diathesis, and only became a sufferer from chorea on the declension of a rheumatic attack. Assuredly no other theory which has been advanced so simply or correctly explains the now frequently observed facts of one member of a family being

<sup>1</sup> 'Medical Times,' 1849.

<sup>2</sup> 'Monthly Journal,' 1847.

<sup>3</sup> The father of the writer.—ED.

affected with chorea, another with rheumatism, and perhaps a third being the subject of both affections. But I acknowledge, with Dr. Kirkes, that there still exist several very interesting circumstances, which require more attention and investigation, before the association of these two diseases shall become thoroughly understood.





