

BAILEY (P.)

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VALVULAR DISEASE OF THE HEART IN TABES.¹

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FOR many years an alteration in the heart's action in tabes has been mentioned by neurologists. It was not till 1879, however, that valvular lesions not depending on a rheumatic cause were supposed to coincide with any degree of frequency with the degeneration of the posterior columns of the cord. In this year, Vulpian, in his "Diseases of the Nervous System," calls to notice the frequent association of aortic insufficiency and tabes. Also in a clinic held at the Charité in Paris he states that Charcot has often insisted on the frequent association of these two lesions. In the same year Drs. Berger and Rosenbach² reported seven cases of tabes complicated with aortic insufficiency. While five of these cases were women and two men, the authors draw no conclusion as to the common exciting cause, simply stating that insufficiency of the aortic valves is the only valvular lesion in tabes which has come to their observation.

Grasset³ described twenty-four cases of ataxia with diverse cardiac lesions. He believed that the valvular lesion was directly consequent upon the posterior sclerosis.

Jaubert⁴ collected from literature and some cases of his own thirty-seven cases of cardiac lesion coincident with locomotor ataxia. Of these cases, twenty presented valvular lesions. In three, there was dilatation of the aorta; in two, fatty heart and myocarditis. The remaining twelve cases did not come to autopsy, and their clinical symptoms are not given with sufficient de-

¹ Read before the Neurological Section, N. Y. Acad. Med., March 8, 1895.

² *Berl. Klin. Wochensh.*, 1879, No. 27, p. 402.

³ *Montpellier Medical*, 1885.

⁴ *Thèse de Paris*, 1881.



tail to be accepted as instances of valvular disease. Also with the new light which has been thrown in recent years on peripheral neuritis, it is not certain that all of his twenty-five cases would be diagnosticated to-day as tabes. Balacakis⁵ examined fifty-six cases, in which he found three instances of valvular disease.

Angel⁶ has reported still another variation. Of twelve cases of tabes, especially examined, in seven there were no murmurs at any time, in three there was a diastolic murmur only after prolonged exertion; and in two, a murmur persisted after some hours of repose; in none of the twelve was there any murmur after a night's rest in bed.

The observations and opinions of later observers differ materially from these quoted above, a fact not without precedent in medical history.

Groedel⁷ examined 153 cases, in one of which he found mitral stenosis, two of aortic insufficiency and one of mitral insufficiency consecutive to rheumatism. At a meeting of the Berlin Medical Society, held October 29, 1888, Leyden expressed the opinion that the coincidence of valvular disease with tabes was purely accidental. Gutman said that in a 100 cases of tabes he had seen but three instances of valvular disease; while Oppenheim thought that when the two conditions existed in common they were both dependent on the same cause (syphilis).

At present the prevalent opinion in Germany is that the simultaneous occurrence of these two conditions is purely accidental.

Gowers⁸ in England asserts that valvular disease of the heart, especially aortic regurgitation, is the most common of all the complications of tabes. He believes that the cardiac lesion is of syphilitic origin. No less an authority than Marie⁹ states that in every four or five cases of tabes sufficiently advanced, there will be at least one more or less marked case of cardiac change.

Believing that an analysis of a certain number of cases chosen at random would give surer results as to the coincidence of these two affections ~~by selecting the individual~~, than by instances of cardiac change from an

⁵ *Thèse de Paris*, 1883.

⁶ *Berl. Klin. Woch.*, 1880.

⁷ *Deutscher Med. Woch.*, 1888, xiv.

⁸ *Diseases of Nervous System*.

⁹ *Leçons sur les maux de la moelle épinière*.

indefinite number of cases of tabes, I have examined a number of cases as they have presented themselves at the neurological department of the Vanderbilt Clinic, all the cases at the Hospital for Incurables, and have collected from literature the reports of several autopsies. The cases examined at the Clinic were all in the earlier stages and still able to walk. Altogether eleven were thus examined. In none was any murmur present. In three the heart dullness extended to the nipple line. In all, the heart was somewhat rapid, although in only two cases was it over ninety-five. The rapidity of the heart's action may be partly explained by the excitement and fatigue necessarily attendant on a public examination.

The ten cases examined at the Hospital for Incurables were all, with one exception, men past middle life, and all in the later stages of the disease. Most all of these patients are unable to walk, so marked has the ataxia become, and they present all the distressing symptoms and complications of advanced tabes, such as Charcot's joint, opticatrophy, cranial nerve paralysis, bladder paralysis, etc. In several of these there is some cardiac hypertrophy, and also several present some slight acceleration of the pulse. The only case which gives the slightest indication of valvular disease is one who is least characteristic of disease of the posterior columns. He is a man 33 years of age, who gives both a syphilitic and alcoholic history; his pupils, while unequal, respond to light; gait slightly ataxic, and loss of knee-jerk. He also has some pains in the legs. He presents well-marked symptoms of aortic insufficiency, with a loud diastolic murmur, hypertrophied heart and a quick pulse.

The autopsies which I have looked over have been referred to by Möbius in his various reviews of tabes in Schmidt's Jahrbuch. The autopsies have been made by such men as Oppenheim, Siemerling, Westphal and Déjérine. They comprise seventeen cases in all, in each of which microscopical examination of the spinal cord had confirmed the anti-mortem diagnosis. The vascular system in all of these was normal with the following exceptions. In four there was atheroma of the aorta, while the valves remained intact. In one the valves at the left side of the heart were atheromatous with dilatation and hypertrophy of the heart; and in one there was slight thickening of aortic valves at the

line of closure with myocarditis. These observations of my own with the autopsy reports have led me to believe that while organic cardiac changes occur in a small proportion of cases, their occurrence is not more common in tabs than in any other disease of a senile character. The cardiac changes which have been reported have almost ^{let}exceptionally had the characteristics of atheromatous degeneration. In very few cases has it been limited to the valves alone, and it seems to have been a matter of chance whether or not atheroma of the aortic extended to the endocardium, and if such extension did occur whether it appeared on the aortic valves alone or whether the ~~initial~~ mitral were involved as well.

