CASE
OF
INFLAMMATION
IN THE
MUSCULAR STRUCTURE
OF THE
HEART;

By EDWARD STANLEY, Esq.

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AT the request of my friend Mr. Lawrence, I have been induced to present to the Society the history of the following case of inflammation in the muscular structure of the heart, which occurred in one of the boys at Christ's Hospital. The first part of the narrative belongs to Mr. Field, the apothecary to that institution, who obligingly allowed me the use of his notes for the present occasion.

“ The subject of the case was twelve years of age, and although of a delicate frame, had enjoyed

generally a good state of health. On Saturday the 20th of April he was apparently quite well, having been on that day on a visit to one of his relations, by whom this remark was made. On the next morning he was brought to the infirmary, discovering at that time the usual symptoms of fever, namely great bodily heat, a quick pulse, the tongue white, and much furred. On the next day (Monday) his fever was much increased, but the only pain of which he complained was in the left thigh and knee, which ceased before night; in the afternoon he became delirious with much watchfulness. On Tuesday, the delirium was very considerable, but without any comatose tendency, the pupil of the eye much dilated, but not insensible to light. He complained but little of pain, but when closely pressed upon that subject, he pointed to his forehead. Early in the afternoon of that day, he had a kind of convulsive fit, which soon went off. In the evening all his symptoms became aggravated, and he passed the night almost without sleep. On the following morning he appeared much sunk, his breathing for the first time became difficult. He was then sufficiently sensible to answer any question put to him, but soon afterwards he became insensible, and gradually declined until about two in the afternoon, when he expired." It may be here observed, that at no period of his illness did he complain of pain in any part of the thorax, nor was there any irregularity, either in the action of the heart, or pulsations of the arteries.

Mr. Field proceeds to state that "as the delirium which commenced on Monday afternoon was similar to what frequently occurs in the earlier stages of fever, particularly in young persons, there was no indication, until the following morning, which could lead to the supposition of organic disease. It then became probable from the symptoms, that there was effusion within the head. The medical treatment until that period had been directed to counteract general fever, namely evacnants and antimonials with the warm bath. Leeches were afterwards applied to the temples, a blister to the nape of the neck, and several stools procured by a calomel purgative combined with rhubarb.

It having been considered from the general character of the symptoms that the cause of death was to be sought in the head, this was the part first inspected; but after an attentive examination of the brain, nothing farther could be remarked than that the vessels were generally turgid, not more so, however, than is frequently seen when death has taken place, under circumstances that lead to no suspicion of affection of the head. One circumstance may be here mentioned, that although the boy was but twelve years of age, yet the thickness of the skull very far exceeded what is usual even in an adult. There was no appearance of diploë, the bone being uniformly solid and dense throughout, and hence the skull-cap was exceedingly

weighty. The sutures were likewise almost universally obliterated, there being scarcely the least vestige of them remaining in either table of the skull. From the head, I proceeded to the abdomen; where every thing was healthy; having laid open the thorax, the lungs were also seen to be healthy, but upon opening the pericardium, it was found to contain between four and five ounces of turbid serous fluid, with flakes of coagulable lymph floating in it. The internal surface of the membrane, both where it constituted the exterior bag, and the reflected layer upon the heart, was covered in various situations with a thin layer of lymph exhibiting a reticulated appearance. The size of the heart was natural in relation to the age of the individual. Upon cutting through its parietes, the fibres were exceedingly dark coloured, almost of a black appearance. This evidently depended on the nutrient vessels being loaded with venous blood. The fibres were also very soft and loose in their texture, being easily separable, and with facility compressed between the fingers. Upon looking closely to the cut surface exposed in the section of either ventricle, numerous small collections of dark coloured pus were visible in distinct situations among the muscular fasciculi. Some of these depositions were situated deeply, near to the cavity of the ventricle, while others were more superficial, and had elevated the reflected pericardium from the heart. The muscular fibres of the auricles were

also softened in their texture, and loaded with blood, but without any collections of pus between them. All the cavities of the heart were loaded with coagulated blood. The internal lining, valves, and every other part of the organ exhibited nothing worthy of remark, except the state of general turgescence in the capillary vessels, which had also extended to the lower part of the trachea, bronchia, &c.

After this report of the appearances met with on dissection, there cannot, I should apprehend, be any hesitation in viewing the case as an example of acute inflammation attacking the muscular structure of the heart, constituting genuine carditis. It must be admitted that this is a disease of exceedingly rare occurrence: for in the greater number of cases recorded under this denomination, it would rather appear that the inflammatory action had begun in the pericardium, it being commonly confined altogether to this membrane, and but occasionally extending a little way into the substance of the heart beneath. In those few instances where the heart itself has undergone such changes of structure as have been considered to result from inflammation, it is stated that the organ has sometimes become enlarged, and sometimes small and contracted, and that the muscular fibres have generally been of a pale yellow colour, and much softened in their texture, so as readily to allow the

finger to pass between them*. In the work of Corvisart, there will be found references to cases from Barrerus, Forestus and Fontanus, where distinct abscesses have been met with in different parts of the heart. One such instance lately came under my examination, where a considerable abscess had been formed in the parietes of the left ventricle near to the apex, there being opposite to the situation of the matter, ossification in the lining of the ventricle, with surrounding ulceration. I have not however been able to meet with any case on record, where, as an immediate effect of acute inflammation, suppuration has extended generally throughout the muscular structure of the organ.

The case related in this paper will, I think, be regarded as worthy of record, not merely on account of its rarity, but also on account of its peculiar symptoms. We have here presented to us an instance of inflammation attacking the heart, so violent as to pass immediately into suppuration, and at the same time so destructive as to prove fatal in four days from its commencement, and yet of the symptoms which arose, there was not one which

* In one of the cases of carditis mentioned by Bang in his *Selecta Diarii Nosoc. Reg. Frideric. Hafniensis*, it is stated that the heart was greatly enlarged, especially in its right side. In most of the cases referred to by Corvisart, it is mentioned that the heart was small and contracted. Frequently however no notice is taken of the size of the organ.

appeared directly referable to the affected organ ; on the contrary, from their general tendency, the attention of the practitioners was diverted from the central organ of the circulation, the actual seat of disease, to the centre of the nervous system, where there existed no organic derangement. I feel happy here to remark how strongly this case confirms the truth of the observations made by a highly respected physician, who has noticed the reciprocal influence which the sanguiferous and nervous systems have on each other. Hence, as he observes, "we cannot be surprised that the diseases of distant parts should be confounded with each other, or even that the centre of the one system should sometimes be the supposed seat of a disease, which actually affects the centre of the other *."

* *Pathological Researches*, by J. R. Farre, M.D.