

CONTRIBUTION TO THE PATHOLOGY OF  
HEART DISEASES.

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## CASE OF DISEASE OF THE AORTIC VALVES: ITS ETIOLOGY.

THIS case of diseased aortic valves, which was presented to the Pathological Society, is interesting, because it illustrates, as I believe, one of the modes of origin of valvular diseases, not frequently observed. The aortic valves are all incompetent. Two of them are partially destroyed by ulceration; the eroded edges presenting appearances as though the ulceration were still progressing at the time of the patient's death. Two of the valves, again, are fused together at their adjoining angles, and much puckered; a calcareous nodule, the size of a pea, projecting from the upper surface of one of them. The heart is much hypertrophied and dilated on the left side; but the muscular tissue is perfectly healthy. The hypertrophy is manifestly a secondary fact, resulting simply from the diseased condition of the aortic valves. The aorta itself, the lining membrane of the heart, and its mitral and tricuspid valves, are in a perfectly healthy condition.

The original disease of the heart, therefore, appears in this case to have been limited to the aortic valves. What was its nature? During life, I had considered that the aortic disease (indicated by a double bruit over the sternum) resulted from atheromatous degeneration; inasmuch as the patient had never suffered during his life from rheumatism or kidney disease, or from any other disorder with which we occasionally find valvular diseases associated. The *post mortem* examination, however, rendered this explanation unsatisfactory, for the diseased condition of the valves was clearly not of an atheromatous nature. I consequently made a more strict inquiry of the patient's wife, as to his state of health previous to the time when he first presented symptoms of heart disease; and I thereby obtained the following particulars, which appear to throw some light on the origin of the valvular affection.

The patient was 44 years of age at the time of his death. Ten years previously, he had been in the London Hospital for some affection of the elbow-joint, and left with the arm slightly, but permanently, contracted. Four years later, a piece of bone was removed from his jaw in St. George's Hospital. Since that period, he seems to have been generally somewhat ailing, losing his appetite, and becoming thinner. But he was, withal, very active, being an excellent walker and runner, and accustomed to take strong exercise; and would often brag of his good wind. His breath up to this time, therefore, was unaffected.

About eight months before his death, he was suddenly seized, while running quickly on a message, with a violent pain in his left side, and in consequence with difficulty regained his home. The pain, however, gradually left him after he had reposed himself for a time; but from this moment his breathing became affected. It seems, therefore, not unreasonable to date the injury of the heart's valves from this period; inasmuch as hitherto the patient had never experienced anything wrong in his respiratory or circulating organs.

From this date, however, his health gradually became worse; and he sought advice, for the first time, about four months after the accident referred to; and on the occasion, it would appear, of his being seized with violent spasms, resembling angina in severity. About a month later, I saw him for the first time. He was then suffering under confirmed symptoms of heart disease. A double bruit was heard over the sternum, clearly indicating serious injury of the aortic valves. There were also the ordinary signs present of hypertrophy of the heart. He gradually sank; the angina-like attacks, accompanied with rending pain at the epigastrium, becoming more frequent and severe.

Is it not fair to assume from the history here given, and from the nature of the pathological changes of the aortic valves, that the original injury of the valves dates from the moment of the sudden pain which followed the exertion? The injury, in such case, would probably be rupture, partial or complete, of one of the valves, resulting from the inordinate pressure to which the valves were exposed by the increased rapidity of the circulation. The puckering and adhesions and ulcerations of the valves may be supposed to have resulted from the inflammatory action, and from the attempts at reparation, consequent upon the injury. Cases of this kind have been recorded by Dr. Latham and Dr. Peacock. Dr. Watson

remarked: that he had frequently met with instances of disease of the heart where the patients had attributed the first signs of the affection to some violent exercise of the respiratory and circulating organs.

We may perhaps reasonably suppose, that the aortic valves, in a state of perfect health, would hardly suffer rupture, however great might be the distension of the aorta, and consequently the pressure of the blood upon them during the ventricular diastole. And it is possible, that in the present case some congenital or acquired weakness of the valves may have existed; there being manifestly a scrofulous taint of the constitution, indicated by the disease of the elbow-joint and the jaw-bone.

CASE OF PECULIAR AND FATAL HÆMORRHAGE  
FROM THE MUCOUS LINING OF THE  
VAGINA: WITH REMARKS.

By HENRY OBRÉ, Esq.

[Read before the Harveian Society, April 16th, 1857.]

MISS T., an only child, aged 14 years and three months, tall, with fair hair and complexion, of general good health, had not had any severe illness since childhood: she had constantly been under the domestic care of her mother, and was never absent from home, and had had few or no companions of her own age to associate with. In the beginning of June 1852, she was seized with a discharge of blood from the vagina, which continued a few days, and was considered by her mother to be the first catamenial flow (having herself begun to menstruate at the daughter's age). It was, however, unaccompanied by pain. Ten days subsequently two or three spots of blood were observed on the girl's dress, and she resumed her usual good health and spirits. On Saturday, June 27th, the supposed catamenial discharge recurred; and although the loss was profuse, it caused no anxiety to the parents until the morning of Thursday, July 10th, when I was first consulted. I found her in bed with the face and hands pale, and the general aspect of a person who had lost a considerable quantity of blood. She complained of no pain or uneasiness except slight headache. There had been a large amount of bleeding during the night, accompanied with dark clots of blood of varied size. The hæmorrhage had for the last few hours been to such an extent as at times to saturate the sheets which were used to receive the blood; but at my visit, though the attendants stated it to have been much lessened, it was very considerable, requiring a change of applications every half hour. She was much anæmiated; the tongue and lips were blanched; the pulse above 100, weak and compressible. There was no pain on pressure over the uterus or abdomen, which was flat; the mammae were small and undeveloped. The bowels had been relieved immediately before my visit. I considered it at first to be an extreme case of menorrhagia, and prescribed sulphuric acid in the infusion of roses to be administered every hour. Iced acidulated drinks were also ordered.

July 11. She had been very restless during the last twenty-four hours. The bleeding was not so considerable, but still very alarming, and demanded continual changes of linen. Small clots of blood were continually passed from the vagina. The facial pallor was extreme; the tongue soft and trembling; the pulse more frequent and feeble. The stomach had become irritable, and there had been vomiting. The mother and nurse had, by my directions, examined the external parts of generation, and no peculiar appearance was detected by them. I passed my little finger into the vagina, but could not reach the os tincæ. Half a drachm of the tincture of matico was added to each dose of the acid mixture; and napkins soaked in iced water were applied externally to the pubes and the vulva. In the evening, the bleeding not having subsided, I introduced, with some difficulty (the hymen being perfect), my fore finger into the vagina, and distinctly perceived the os uteri to be of a natural size and closed. The uterus felt normal; but I was unable to make a satisfactory examination. The vagina contained some clotted blood, which I did not remove, so that it might promote further coagulation.

July 12th. The bleeding had been very materially diminished. The blood had lost its bright colour, and had become pale and serous. She was much exhausted; the anæmic whiteness of the body was increased; the pulse 130 to 140, feeble and fluttering. There was occasional nausea with vomiting; and she complained of pain in the lumbar region and down the thighs. The intestines were distended with flatus, and