ANEURYSM OF THE ABDOMINAL AORTA.

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The following notes may be of interest, owing to the difficulties in diagnosing the case.

Private W. J., 2nd Border Regiment, was admitted to hospital at Sheffield, on October 5th, 1908, complaining of general weakness, inability to eat solid food, and shooting pains all over the trunk, specially severe at night, but not worse after food. His medical history sheet showed an entry for syphilis some years previously, and he was in hospital at York for thirty-four days during June and July, 1908, when the diagnosis of inflammation of stomach was made. He stated he had suffered from dyspepsia on and off for several years in South Africa, and also when he returned with his regiment; a year ago he had a severe and prolonged attack whilst on furlough. His relatives informed me that he had always been a great "sprint" runner, that he won the regimental "sprint" race at Strensall in 1908 but that directly afterwards he was laid up with the illness for which he was admitted into the Military Hospital, York.

His own view was that he had never been really well since.

On admission his temperature was normal, the only symptoms were anorexia with occasional attacks of nausea and retching, obstinate constipation, relieved by calomel and attacks of lancinating pains in chest, shoulders, arms, and back. His case was diagnosed as "indigestion," he was placed on milk diet and treated with stomachic sedatives, and also with mercury and iodide of potash. By November 10th he had much improved, the pains were gone, he was able to eat chicken diet, and had gained 10 lb. in weight.

He was transferred for change of air to Scarborough on November 20th. On arrival he was most anxious to be allowed to "attend" and not remain in hospital, as he said he felt quite well. He was thin and pale, and looked anemic; but possibly I might have granted his request only I found he had come without a greatcoat, and I told him he had better wait till this arrived. There were no objective symptoms. He had a good appetite—smoked a great deal—and said he had no pain. On November 23rd he walked (with others) to church, more than a mile away, and enjoyed the walk. He continued quite well until the morning of November 26th, when he had an attack of nausea and retching with a return of the pains in the chest. He said it was similar to previous attacks and he attributed it to constipation. This was relieved with calomel and he was placed on milk diet. On November 28th and 29th he was up most of the day, sitting before the fire. He was better than he had been, but his appetite was poor and he still complained of pains in the chest—particularly under the right breast and between the shoulders. Temperature was normal; pulse regular, 72. Between 3 and 4 a.m.
on November 30th, the night-orderly who was with him heard him move and groan or cough in his sleep; he did not speak, but drew up his legs, and passed into a condition of syncope from which he never rallied.

A post-mortem examination was made thirty-two hours after death. The heart and lungs were healthy, but absolutely drained of blood and considerably below the normal weights. The thoracic aorta presented several patches of atheroma about the arch, but there was no dilatation and no aneurysm. The oesophagus was carefully examined for stricture or obstruction, but none existed.

The abdomen was full of blood, the flanks, hypogastric regions and pelvis contained immense blood-clots, the source of which was not at first apparent. The stomach was seen to be in a condition of hour-glass contraction, and both the anterior and posterior walls, especially along the middle of the greater curvature, were greatly thickened and indurated. There was no ulceration of the mucous membrane and no constriction of either the cœliac or pyloric orifices. The intestines were healthy and were removed en masse, together with the pancreas. Above and behind the pancreas, and firmly adherent to it by a large amount of adventitious tissue in the region of the cœliac axis there was an aortic aneurysm, the size of an egg, which was slightly torn in removing the pancreas. A catheter passed into the upper end of the thoracic aorta came out in the aneurysm. It had grown forwards and to the left, pressing on the pancreas, and possibly the thickening of the walls of the stomach was due to its pulsation. The splenic artery could not be found and appeared to have been obliterated: the spleen was the smallest I have ever seen, weighing only 2½ ounces against the normal weight of 6 to 7 ounces. There was practically no erosion of the vertebrae. The aneurysm had ruptured into the peritoneal cavity, which contained all the blood of the body. Except for small patches of atheroma the rest of the aorta was healthy.

Abdominal aneurysm was not diagnosed during life. The question of aneurysm was considered, but it was with reference to thoracic aneurysm, and of this there were no definite symptoms. The patient localised the pain of which he complained almost entirely to the thoracic region, and though at the time of his attack of vomiting the epigastrium had been carefully examined, while he was lying on his back, there was no tenderness and no pulsation was apparent. It is possible that the thickening of the stomach walls and flatus in the intestines might tend to obscure pulsation, but in some recorded cases none has been present, either because the sac was hard and thickened, or because the aorta had been compressed on the proximal side by the growth of the aneurysm itself. As to whether the aneurysm had been leaking for some days, or ruptured suddenly—and if so, what was the exciting cause—I am uncertain. Possibly the former was the case, the leakage being started by the retching and the final rupture by a fit of coughing or some respiratory spasm, but there was no clinical evidence of this.