AN UNUSUAL TYPE OF ANEURYSM OF THE AORTA.

By Major R. Priest,
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L/Cpl. S., aged 41, with twenty-four years’ continuous service, was admitted to the Queen Alexandra Military Hospital in February, 1929, and said that he had been on active service with his unit in France throughout the Great War and that, with the exception of a superficial wound of the cheek and “just a touch of gas” in April, 1915, he had been perfectly fit and well until January, 1927, when one evening just after a meal he rose from the table and went over to get his coat from a row of pegs. Having done this, he remembers sitting down in a chair but remembers no more until he found himself in hospital. The notes in the medical history sheet show that on admission he was pulseless and there was marked dyspnoea. This was followed by much vomiting and diarrhoea necessitating subcutaneous salines and strychnine. After a period of thirty-eight days in hospital he went back to duty, and with the exception of some shortness of breath has been well. On February 20 of this year, on rejoining his unit from leave he was medically examined and was admitted to hospital for observation. He says he has had no venereal disease and that he has been temperate. He was a carman prior to enlistment, he married in 1913 and his wife had one miscarriage at three months, and one child died of “influenza” aged 3 months, two remaining children being alive and well. He has had absolutely no pain and was quite unaware that anything was amiss. On examination it was noted that his complexion was ruddy but not cyanosed, systolic carotid pulsation was present in neck, both hands showing some clubbing of fingers. On inspection of the chest a very distinct pulsation could be seen to the right of the sternum over an area commencing from the third costo-sternal junction outwards to within 1½ inches from the right nipple and then inwards to the sixth costo-sternal union. The cardiac impulse could not be seen or definitely palpated in the normal position when lying down, but could be seen and felt in the fifth space well internal to the nipple when the man leant forward. On percussion an area similar to the above could be clearly delineated, while the left border of the heart was difficult to determine. On palpation the pulsation was definitely expansile in character, the expansion being systolic in time, but neither thrill nor diastolic shock was noted. On auscultation at the apex, the normal sounds were replaced by a soft systolic and a long, soft diastolic bruit. The pulmonary second
sound could be heard in the usual position, but the aortic second sound at the aortic area was replaced by a soft diastolic regurgitant murmur, heard well all the way down the borders of the sternum. Over the pulsating area a soft systolic and a long diastolic bruit were heard. The diastolic murmur could be heard also over the left chest at the back. The heart's action was quite regular at the rate of 80 beats per minute. The radial pulses were equal, small and collapsing in type, and capillary pulsation was seen in the lips. There was no dysphagia, no alteration in the voice, no cough, and no history of haemoptysis. No tracheal tugging obtained. Blood-pressure 135/75 in each arm. At the time of admission the right pupil was slightly larger than the left, but after resting in bed the pupils became equal and remained so. Lungs appeared healthy, liver edge palpable, spleen not felt, no free fluid noted in abdominal cavity and no oedema of feet. The toes showed some indefinite clubbing. The central nervous system was unaffected and there was no pyrexia. At this juncture and with this clinical picture before us, it was interesting to consider the differential diagnosis. At first, from inspection and palpation the possibility of transposition of the heart arose, but this was rendered unlikely by the
facts that the liver was normally placed and that the pulsation was expansile and did not present the normal systolic impulse of a transposed, but otherwise normal heart. Also the discovery of the cardiac impulse in the fifth left interspace when the patient leant forward helped to dispel the idea of transposition. As one of the more common pulsating swellings which reach the chest wall is due to an aneurysm of the thoracic aorta, this possibility was considered next. If the physical signs were produced by such a condition, then obviously the aneurysm belonged to that type which is broadly classified as "an aneurysm with physical signs but producing no symptoms." Again, if it is an aneurysm of the aorta, the situation of the pulsation is unusually low, assuming the lesion to be at the level of the actual aortic root. If it is an aneurysm of the aortic arch itself large enough to cause such a large area of pulsation, there is no increased aortic second sound and no diastolic shock, as would be expected, but on the other hand, if the bulging is situated at the sinus of Valsalva, the physical signs would fall into line, viz., systolic expansile pulsation, absence of the aortic second sound and the occurrence of a long, soft diastolic bruit over the swelling, over the aortic area and conducted in the usual manner down the left border of the sternum. In favour of this, too, are the collapsing pulse, the obvious pulsation of the carotids in the neck, and perhaps the capillary pulsation in the lips. Other possibilities were considered in turn, such as a tumour, cyst or abscess exhibiting transmitted pulsation from the heart. If either of these were likely, it would be difficult to explain the signs of aortic regurgitation, unless both conditions were present simultaneously. An enlarged and hypertrophied left auricle might conceivably give pulsation, but not a true systolic expansile pulsation, and there was nothing in the history or in the physical signs to suggest mitral disease. After considering other more rare and remote conditions, the most likely diagnosis reached was aneurysm of the aortic root involving the region of the aortic valves, the aneurysm being intrapericardial in situation and had been formed in a direction downwards and forwards and to the right. The special examinations showed a normal blood-count and a normal urine. The blood W.R., however, was "strong positive." The X-ray of the thorax confirmed the clinical findings and added more to our knowledge, because the film showed the outline of the upper part of left border of heart and the widened aortic arch with some dislocation of the arch to the left. Under the screen the swelling expanded synchronously with the aorta and with ventricular systole. The size of the swelling was half that of a tennis ball. He was seen in consultation by Dr. T. F. Cotton, M.D., Consultant Cardiologist to the Queen Alexandra Military Hospital, who agreed with the above diagnosis of intrapericardial aneurysm of the aortic root. Dr. Cotton very kindly examined the patient with the electrocardiograph and wrote to say that the electrocardiogram was normal and showed no right or left ventricular preponderance.

In conclusion, I should like to express my thanks to Dr. Cotton for
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seeing the case and for kindly carrying out the electrocardiographic examination.

The radiographic picture is reproduced to show the unusual features referred to above.

BILATERAL OVARIAN DERMOID CYSTS WITH LEFT OVARIAN MULTILOCULAR CYSTOMA.

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The clinical description of this case is compiled from the notes of Major H. H. Blake, R.A.M.C., and of Major A. S. Fry, I.M.S., who was called in consultation and performed the subsequent operation. It is reported with the consent of the officers commanding the hospitals concerned.

A Eurasian woman, aged 30, married to a British soldier, was admitted at 7 in the morning on February 16 to a British family hospital in India. She had been married for eight years, but had never been pregnant. Menstruation was regular, and she suffered from habitual constipation. As a child she had kala-azar, and six years previous to the date of admission had been in hospital for a fortnight with a "cold in the bladder."

About a week before admission she had an attack of pain on the right side of the abdomen accompanied by rigidity and vomiting. This was relieved by the application of hot-water bottles to the abdomen. The pain was felt all over the right side of the abdomen with its maximum intensity low down in the right iliac region. It gradually disappeared, and she felt well until the day before admission, when the pain recurred during the night and was accompanied by two bouts of vomiting.

She was a woman of fair general development who did not look very ill. The temperature was normal. The pulse was 82 per minute, regular, and of good volume. The abdomen was flaccid, slightly distended, especially on the left side, and moved freely on respiration. Palpation disclosed a large tumour the size of a foetal head on the left side of the abdomen, dull on percussion, and unconnected with spleen or kidney. There was an area of tenderness low down in the right iliac region. Menstruation commenced on February 18.

On March 1 examination of the abdomen revealed a large central swelling extending rather more to the right than to the left side, and reaching to three fingers' breadth above the umbilicus. The contour of the swelling descended gradually to the epigastrium and steeply to the pubes. Below, the tumour appeared to be anchored within the pelvis by a pedicle passing down in the suprapubic region. It could, however, be pushed up almost to the xiphisternal notch, and was freely mobile from side to side. It felt smooth, tense, and elastic, and there was no tenderness