Sarcoma arising from a popliteal artery aneurysm: Historical case report

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Abstract
Single rare case of sarcoma arising from an aortic aneurismal sac was reported in 2006 and 2012. Another case appeared a decade earlier. Therefore, this paper abridged a case reported fully in 1890 on account of its historical interest.

Introduction
It is acknowledged that sarcoma arising in an arterial aneurysm is rare [1-3]. They have been diagnosed after surgery with histologic confirmation. Accordingly, I report the 1890 case abridge from the Transactions of the Pathological Society of London, especially as it was subjected, as in the current practice, to independent microscopic opinion [4].

Case report
A 71-year-old man was admitted to St. Thomas’s Hospital, London, on 4th June, 1888, with popliteal aneurysm in the left leg. The patient complained of a small lump in the ham which pulsated strongly. It increased rapidly to double its size. It was repeatedly examined by many doctors and none doubted that the tumor was caused by an aneurysm. He was ligated successfully. However, three months later, he was suffering severely from pain caused by the increasing swelling in the ham. The decision was “to explore the popliteal tumour with the object of ascertaining whether the local lesion was due to liquefaction of the contents of the aneurysm and inflammation around it, or whether the aneurysm had become complicated by a new growth.” The limb was amputated. The stump healed quickly, and the man left the hospital at the end of a month. He survived until about a year, when he died of recurrence of the malignant disease. The limb was hardened in spirit and underwent extensive careful examination. It was concluded that the case was one of aneurysm which became complicated by a rapid growth of sarcoma. As was the practice of The Pathological Society of London, its 3-man Morbid Growths Committee examined the materials. Their opinion was convincing thus:

There is evidence to show that the aneurysm is of longer standing than the sarcoma, and the changes in the vessel wall are not such as would result merely from infiltration by new growth. The popliteal artery is dilated for a considerable distance, and shows atheromatous changes which are evidently old. The sarcoma, on the other hand, shows no extensive degenerative changes, such as are frequently met within tumours of this nature which have existed for a considerable time.

Discussion
Primary tumors of the aorta are extremely rare and the diagnosis is usually made after surgery or autopsy [1-3]. Incidentally, the medical masters of yester years were at pains to present such rare cases before the London Society. In the extant case [4], it was published because the author could not “find any record of any strictly comparable case or specimen.” Moreover, the report was made because “it may possibly assist in bringing to light some other, similarly obscure and interesting cases.”

With regard to survival after the occurrence of arterial sarcoma, the median rate was reported as 7 months [1]. Therefore, the one year interval in this historical case is noteworthy.

Moreover, illustrative cases had hitherto been confined to the abdominal aorta [1-3]. Rarely, bilateral femoral artery aneurysm mimicked soft tissue sarcoma [5]. The historical case is unique, therefore, on the ground that a peripheral artery was involved.

References