

RES MEDICA

Journal of the Royal Medical Society



History of Angina

Miss A. Leach

Abstract

Ladies and gentlemen, Angina Pectoris was first brought to the notice of the medical profession by William Heberden in 1772, although references to pain in the breast and arm in relation to disease affecting the heart and occurring on exercise are found in ancient Egyptian and Roman literature, and more particularly in the 17th and early 18th centuries. It was not until 1768, however, when Heberden read his paper entitled, "Some Account of the Disorder of the Breast", before the Royal College of Physicians in London, that the condition was given the name of "Angina Pectoris". Heberden's observations were based on a study of twenty cases and by the time he had incorporated the description in his book, "Commentaries on the History and Cure of Diseases", this number had grown to one hundred of which three were women, one was a boy twelve years old, and the rest were men of fifty years of age or over. In one or two of the patients mentioned original pain lasted for some hours; in one case the first attack continuing all night. Some died suddenly but these were more probably cases of myocardial infarction; in fact he mentioned that if the disease goes on to its height, the patients suddenly fall down and perish almost immediately.

Copyright Royal Medical Society. All rights reserved. The copyright is retained by the author and the Royal Medical Society, except where explicitly otherwise stated. Scans have been produced by the Digital Imaging Unit at Edinburgh University Library. Res Medica is supported by the University of Edinburgh's Journal Hosting Service: <http://journals.ed.ac.uk>

ISSN: 2051-7580 (Online) ISSN: 0482-3206 (Print)

Res Medica is published by the Royal Medical Society, 5/5 Bristo Square, Edinburgh, EH8 9AL

Res Medica, April 1967, Special Issue – Lauder Brunton Centenary Symposium on Angina Pectoris: 9-10

doi: [10.2218/resmedica.v5i3-4.478](https://doi.org/10.2218/resmedica.v5i3-4.478)

HISTORY OF ANGINA

Miss A. Leach

Ladies and gentlemen, Angina Pectoris was first brought to the notice of the medical profession by William Heberden in 1772, although references to pain in the breast and arm in relation to disease affecting the heart and occurring on exercise are found in ancient Egyptian and Roman literature, and more particularly in the 17th and early 18th centuries. It was not until 1768, however, when Heberden read his paper entitled, "Some Account of the Disorder of the Breast", before the Royal College of Physicians in London, that the condition was given the name of "Angina Pectoris". Heberden's observations were based on a study of twenty cases and by the time he had incorporated the description in his book, "Commentaries on the History and Cure of Diseases", this number had grown to one hundred of which three were women, one was a boy twelve years old, and the rest were men of fifty years of age or over. In one or two of the patients mentioned original pain lasted for some hours; in one case the first attack continuing all night. Some died suddenly but these were more probably cases of myocardial infarction; in fact he mentioned that if the disease goes on to its height, the patients suddenly fall down and perish almost immediately. Heberden had no clear concept of the true nature of the syndrome; which he suggested may be a strong cramp or an ulcer or possibly both. "What the particular mischief is, is not easy to guess and I have had no opportunity of knowing with certainty; the opinion of its being a convulsion of the part affected will readily present itself to anyone who considers the sudden manner of its coming on and going off, the long intervals of perfect ease and the influence which the passionate affections of the mind have over it. The pulse is sometimes not disturbed by this pain and consequently the heart is not affected by it."

In 1772 Heberden received a letter from Dr. Wall in Worcester concerning a 66 year old patient with angina pectoris on whom he had per-

formed an autopsy and found that the semilunar valve of the aorta was found to be perfectly ossified. Wall wrote, "The preternatural induration of the parts to the circulation to the heart may be the predisponent, if not the efficient cause of the disorder". It is remarkable that the first case of angina pectoris in which any abnormality had been found in the heart was due to calcific aortic stenosis. Edward Jenner was responsible for the first suggestion that there was a probable association of disease of the coronary arteries with angina pectoris. In 1776 he wrote to Heberden describing two hearts which he had examined from patients who had died with a condition. He described the coronary arteries in these words: "a kind of fleshy tube formed within the vessels with a considerable quantity of ossific material dispersed irregularly through it."

John Hunter, the great anatomist and physician who suffered from angina first mentioned the effect of emotions in promoting an original attack, and for many years, declared that his life was in the hands of any rascal who chose to annoy and tease him. Indeed Hunter suddenly collapsed after a dispute with a colleague at St. George's Hospital, and among other things marked atheroma was found at post-mortem.

In 1698 Shirak found that after the coronary arteries of a dog's heart were tied, the heart stopped beating very soon, thus proving that they are essential for normal heart function. In 1809 Allan Burns, a lecturer in anatomy in Glasgow, propounded the theory that myocardial ischaemia was the cause of angina pectoris, he likened the impairment of the heart's function when the coronary arteries are diseased to the inability of a limb to continue vigorous action if a ligature is placed tightly at its base. He predicted the importance of an adequate blood supply for normal cardiac function and concluded that ossified coronary arteries impaired the blood supply to the myocardium. His theory was supported by

Hodgson in 1815 who stressed the importance of a collateral circulation when the major arteries are atherosclerotic. Other theories included that of spasm of the heart put forward by Heberden and also held by Laneck and Cauldron. Lauder Brunton ascribes angina to spasms of the vessels of the hearts, others thought that the condition was due to irritation of the nervous elements of the cardiac plexus. Sir Wm. Osler mentioned the irritable heart of smokers in his book on angina pectoris and suggested that the condition in some is readily relieved by stopping the use of the "weed". The vasomotor hypothesis was put forward by Knoknagal in 1867, who suggested that the symptoms of angina were not due to primary disease of the heart but to secondary factors comprising generalized arterial spasm. In spite of the attention drawn to the condition throughout the 19th century, it is interesting to note that Osler saw only 40 cases in his entire clinical experience; indeed Sir James Mackenzie recorded in 1923 that in his early experience as a general physician and later as a cardiologist, only 380 patients consulted him with regard to angina pectoris. It is only later in this century that angina has been commonly diagnosed, though the condition must have existed from the earliest age, or at least been "coeval with the introduction of luxury and refinement" to quote an earlier member of this Society. Among the descriptions of angina pectoris there was some confusion with myocardial infarction. Coronary thrombosis was first diagnosed during life and confirmed at post-mortem by Hannah in 1876. In 1880, Vigerdt made the first complete accurate description of a myocardial infarction, and in 1912 Herrick elaborated the clinical features of a sudden occlusion of a coronary artery and indicated for the first time that such an event was always fatal. If there was diversity of opinion on the cause of angina pectoris this was equally so concerning treatment. Heberden himself said that he had little or nothing to advance apart from quiet and warmth and spirituous liquors; he noted that opium at bedtime would prevent attacks at night. The first real advance in the treatment of angina pectoris came in 1867 from Thomas Lauder Brunton, with his observation on the action of amyl nitrite and his advocacy for its use for the relief of angina pectoris. In 1879 Wm. Morrell working at Westminster Hospital published a paper in the *Lancet* describing the effects of taking a solution of nitro-

glycerine in alcohol, he stated: "from a consideration of the physiological action of the drug and more especially from the similarity existing between its general action and that of Nitrite of Amyl I concluded that it would probably prove of service in the treatment of angina pectoris and I am happy that this anticipation has been realized." He cited three cases of undoubted angina pectoris who were treated with nitroglycerine with resulting reduction of frequency and severity of attacks.

Time has not permitted me to deal in full with the advances made in this century, but in ending I quote a few words from a dissertation read by A. Lawler before the Royal Medical Society in 1800, which are not inappropriate today: "Angina pectoris has seldom been completely cured yet still we must not despair as in time we may arrive at its true cause and administer effectual remedies."