



Through the use of a SOMATOM Emotion 6 from Siemens Healthcare, an international research team discovered atherosclerosis in 3500 year old Egyptian mummies.

## Study Finds Atherosclerosis in 3,500 Year old Egyptian Mummies

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A team of cardiologists led by Drs. Gregory S. Thomas of the University of California, Irvine and Adel H. Allam of Al Azhar University, Cairo, found that atherosclerosis is not only a disease of modern man, but was present in humans as far back as 1,530 BC. The team of cardiologists working closely with a team of Egyptologists undertook the most comprehensive CT study of vascular disease in Egyptian mummies to date by scanning 22 mummies over a four-day period in the Cairo Museum of Antiquities. The study was co-sponsored by Siemens Healthcare and aimed to investigate whether atherosclerosis, the precursor of heart disease, is an affliction of modern man or whether this disease existed thousands of years ago.

The imaging for this project was undertaken on a SOMATOM Emotion 6-slice configuration that was donated to the Museum as part of an earlier study in conjunction with National Geographic to image the famous mummified remains of King Tutankhamun.

The researchers were able to locate and identify vascular tissue in 16 out of the 22 mummies imaged in this study. Of these 16, 9 had visible signs of arterial calcification, considered to be pathognomonic of atherosclerosis, from which the researchers were able to conclude that atherosclerosis is not a disease exclusive to modern humans. Findings of calcification were made in men and women who lived between 1570 BC and 364 AD. The social status of most patients included in

the study was shown to be of an elevated nature, which may have contributed to the process of disease due to lifestyle issues. The main aim of this project was to identify the presence or absence of atherosclerosis in an ancient patient population, however, the study also offered prominent Egyptologists the opportunity to view the mummified remains of these patients in a way that was not damaging to these ancient artifacts, the protection of which is central to the thinking of all members of this research study.

The results of this project were published in the November 18, 2009 edition of the JAMA and also presented at the November AHA Meeting in Orlando, Florida, USA.