Aneurysms in the arteries of the upper extremity in a Kenyan population

Abstract:

BACKGROUND: Aneurysms in the arteries of the upper extremity are rare but important in predicting aortic aneurysms and their potential to thromboembolize and cause limb loss. Their localization, age, and gender distribution vary between countries depending on ethnic background and cause. These data are valuable in the management of aneurysms, but are largely lacking from the Kenyan population. OBJECTIVE: This study aimed at examining the pattern of these aneurysms in a Kenyan population. STUDY DESIGN: Retrospective. SETTING: Kenyatta National Hospital, Kenya. PATIENTS AND METHODS: Hospital records of aneurysms in upper limb arteries over 10 years from January 1998 to December 2007 were examined. Ethical approval was given by the Kenyatta National Hospital Ethics and Research Committee. Site, age, gender, and risk factors were recorded. Unconfirmed diagnoses were excluded. Results were analyzed using SPSS 11.50 and presented using tables. RESULTS: Aneurysms of the upper extremity arteries comprise 34 (35.4%) out of 96 peripheral aneurysms. Of these, brachial artery was the most common site (35.3%), followed by brachiocephalic (11, 32.4%), subclavian (9, 26.5%), radial (1, 2.9%), and anterior interosseous (1, 2.9%). Trauma was the commonest predisposing factor (41.2%), followed by atherosclerosis and related comorbidities (32.4%), infection (11.8%), and autoimmune disease (8.8%). The mean age was 39.5 years (range: 13-79) with a variable gender distribution. CONCLUSION: Aneurysms of the upper extremity arteries are not uncommon in the Kenyan population. They occur more commonly in individuals aged 50 years and less, and although most of them are traumatic, atherosclerosis constitutes a significant proportion. Prudent management of risk factors is recommended