Abdominal aneurysm in Zambia

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Statement of the problem: AAA continues to be a global health problem with an epidemiological incidence increasing from 4.2 to 11 per year (Sampson UK, 2014). In patients with complications. Mortality can be as high as 80% (Al-Balah A et al, 2020). However, due to the implementation of various screening programs and increased understanding of the disease process of AAA, complications and associated mortalities have reduced. (Ali MU et al., 2018). Unfortunately, these statistics apply more to the developed countries as little information regarding prevalence and screening recommendations exist in developing countries. This is with the exception of countries like South Africa, Kenya and Nigeria where information regarding the subject can easily be accessed on various academic platforms. (Ezenwugo et al, 2020; Sule et al; Ogengo JA et al., 2010; Kitchen ND 1989, Decker GA et al. 1977). Locally, at the University Teaching Hospital, lack of screening protocols and limited autopsies performed to determine the cause of death have not aided in determining mortalities that might have been caused by complications of AAA. Therefore, by conducting a study of this nature we wanted to determine the prevalence of AAA and its associated risk factors and extrapolate these findings to clinical practice. Such information would be a useful tool for screening programs and planning of surgical management.

Methodology & Theoretical Orientation: The study was a cross-sectional study, conducted in the department of radiology at the Adult Hospital, University Teaching Hospitals, Lusaka, Zambia from June 2019 to April 2021. In the study we included all stable patients above the age of 18 years presenting to the radiology department for abdominal U/S investigation and consenting to take part in the study where recruited. Patients with severe systemic disease, with a score of ASA III and above, known patients with AAA and non-consenting patients were excluded.

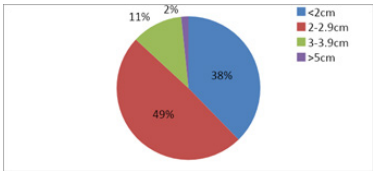

Fig. 1, Outer diameter of abdominal aorta in participants in our study

Findings: Our study showed the prevalence of AAA in patients undergoing non-AAA associated abdominal U/S to be around 12%. This value is closer to the upper limit of the global range of 11%. This is in keeping with the observation that life in the so-called "developing" countries is shifting towards a more western type of culture.

Conclusion & Significance: Our study found the prevalence of an incidental AAA in patients undergoing non-AAA related abdominal U/S at the radiology department of the University Teaching Hospitals to be around 12%. This value is just 1% higher than the global upper limit of 11%, which might suggest a similar prevalence. Conversely, the difference might also suggest the presence of other risk factors in our participants, other than the conventional risk factors associated with sedentary lifestyle seen in western populations. It also showed a strong association between the male gender and the increased risk of developing AAA as males were found to be 2 times more at risk than females.

Biography

Mulenega Katongo is a final year MMed general surgery registrar at UNZA Lusaka and ESSO/EYSAC national representative for Zambia. His primary interest is surgical oncology with emphasis on colorectal and breast surgery. Small part of his oncologic surgery training during the residency he did at the Oncology Institute in Ljubljana, Slovenia. He is currently doing research on the prevalence of AAA in Zambia as a partial fulfilment of the award of Master of Medicine (general surgery) and actively searching for a fellowship in oncologic surgery.

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