Reviewer’s report

Title: Management of Moderate-Size Aneurysms of the Thoracic Aorta

Version: 1 Date: 16 November 2014

Reviewer: Dimitrios Sokolis

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No evidence-based guidelines are available for the surveillance of patients with moderate-sized (<5 cm) thoracic aortic aneurysms (MTAA), not warranting immediate surgical repair, hence the stated objective of this preliminary investigation. The clinical records of MTAA patients admitted to the Northport Veterans Affairs Medical Center from 2005 to 2013 were reviewed to assess imaging practices and long-term outcomes of those patients. Admitting that additional research is needed, the authors conclude that annual imaging of MTAA not-at-risk patients is not necessary and may lead to excessive radiation exposure. Overall, the objective of this study seems worth pursuing and the conclusions drawn by the authors seem reasonable, but the current reviewer is not well versed in the literature, since his expertise is on aortic aneurysm biomechanics, so that another colleague may have to comment on novelty issues.

Minor Essential Revisions

1. A particular aortic diameter may represent a larger size in an individual with smaller body frame compared to a large individual, so that the aortic diameter may have to be normalized by the body dimensions (i.e. the body-surface area) to more accurately characterize the size of the thoracic aorta. Such an analysis of the natural history of TAA has been conducted by Davies et al., (2006; Annals of Thoracic Surgery 81;169-177). Have the authors considered such an analysis of their data and if yes what were the results?

2. The paper is nicely written but certain typographical errors need to be removed.

Level of interest: An article of importance in its field

Quality of written English: Needs some language corrections before being published

Statistical review: Yes, but I do not feel adequately qualified to assess the statistics.

Declaration of competing interests:

None declared