Reviewer's report

Title: Non-Hispanic Whites have higher risk for pulmonary impairment from pulmonary tuberculosis.

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Reviewer: Tom Schaberg

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The manuscript investigated "post TB impairment" in 320 TB-pts by measuring pulmonary function at least 20 weeks standard antituberculous treatment. They authors found post TB impairment significantly increased in non hispanic White pts.

Surprisingly the most common type of post TB impairment was a restrictive pattern of impairment in all groups of pts. This is difficult to interpret, because no data are given about the extent of lung involvement by the TB-pts. A restriction in pulmonary function measured only by spirometry could be caused by lung destruction due to pulmonary TB or by hyperinflation eg a high residual volume (RV) and/or a high intrathoracic gas volume (ITGV). RV and ITGV could not be measured by spirometry. For this a bodyplethysmographic pulmonary function test is necessary. Since smoking was significantly more common in Whites (81%) compared to 43-52% in the control groups) one can speculate that the restriction pattern in Whites is caused by hyperinflation rather than by lung destruction due to TB. Another interpretation of the restrictive pattern might be lung destruction by TB. If this is the case, the data could be interpret in the way that Whites have more advanced forms of pulmonary TB. In summary, I can not go along with the authors conclusion, because no data are given about the extent of lung destruction (x-ray) and about hyperinflation. Although the statistic investigation foulde the main finding not related to the smoking history, it seems not explained why a much longer smoking history in the Whites (32,6 pack years compared to 4.6-8.1 in the controll groups) does not have an impact on pulmonary funtion.

Level of interest: An article of insufficient interest to warrant publication in a scientific/medical journal

Quality of written English: Acceptable

Statistical review: No, the manuscript does not need to be seen by a statistician.

Declaration of competing interests:

'I declare that I have no competing interests'