Last, of the nine additional cases diagnosed with HRCT scans, seven had clinical symptoms suggestive of a diagnosis of active TB and a positive γ interferon test result. The three culture-proven cases were all in this group. Even with a negative chest radiograph, it is debatable whether these patients would have been diagnosed and treated as latent infections in an outbreak investigation without the additional HRCT scan. Only two cases were asymptomatic patients with a positive γ interferon test. In neither of these was active TB proven, leading to the possibility that these may represent false-positive test results.

In conclusion, the previously documented higher accuracy of HRCT scans compared with chest radiographs in the detection of active pulmonary TB is again noted in this study. However, as a result of study design and the methodologic flaws described previously, the aim of the study to elucidate the role of HRCT scanning in outbreak investigation is not met. The conclusion that HRCT scans may differentiate active TB from latent TB infection in outbreak investigation is insufficiently supported by the data. As the authors mention in their discussion, the impact of additional HRCT scanning in TB outbreak investigation can only be assessed by randomized controlled trials with the incidence of active TB in each group of patients as the end point. In view of the high cost of CT scanning, particularly in a screening environment, such trials should include assessment of cost effectiveness. Risks associated with increased exposure to radiation will also have to be taken into account. At present, there is insufficient evidence to justify the inclusion of HRCT scanning in TB outbreak investigation.

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REiERENCES

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Safety of Ipratropium Bromide

To the Editor:

I read the article by Ogale et al titled “Cardiovascular Events Associated With Ipratropium Bromide in COPD” in the recent issue of CHEST (January 2010). In the study, 93% of the cohorts who were exposed to anticholinergics were also using a short-acting β₂ agonist. I think this may be the reason for the increased cardiovascular events in these patients. Metaanalysis done by Salpeter et al concluded that β₂-agonist use in patients with obstructive airway disease increases the risk for adverse cardiovascular events.

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Response

To the Editor:

As Dr Singh notes, short-acting β₂-agonists (SABAs) have been associated with an increased risk of cardiovascular events (CVEs) in observational studies, as well as in a metaanalysis of clinical trials. He suggests the increased risk of CVEs associated with ipratropium bromide in our study could be attributed to SABAs because the two drugs are commonly used concomitantly. In our analysis, we adjusted for the standardized number of inhaled SABA canisters and any use of oral or nebulized β₂-agonists and long-acting β₂-agonists during the past year. After adjustment for SABA use, we observed an increased risk of CVEs (hazard ratio [HR] for four or fewer and more than four 30-day equivalents: 1.40 [95% CI, 1.30-1.51] and 1.23 [95% CI, 1.13-1.36], respectively) associated with ipratropium exposure within the past 6 months. To further address the issue raised by Dr Singh, we reanalyzed the dataset, excluding patients receiving ipratropium bromide and SABA concurrently. This analysis confirmed our prior conclusion that there is an increased risk of CVE with ipratropium exposure within the past 6 months (HR, 1.32; 95% CI, 1.07-1.64), independent of SABA use.

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