Abstract 062

A COMPARISON OF THE QUANTIFERON GOLD- IN TUBE® ASSAY AND THE TUBERCULIN SKIN TEST FOR SCREENING OF HEALTH CARE WORKERS IN MELBOURNE, AUSTRALIA.

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Aims

To evaluate the Quantiferon-gold test by comparing it to the tuberculin skin tests (TST) for screening health-care workers for latent tuberculosis infection.

Methods

Staff within the Southern Health Care Network, Melbourne, Australia were asked to participate by having both the TST and Quantiferon Gold assay.

Previous exposure to Tuberculosis was assessed by means of a detailed questionnaire.

A multivariate logistic regression analysis was used to determine which factors were significantly associated with a positive result.

The increase in likelihood of a positive test for each unit of exposure to certain risk factors was estimated and matched pair logistic regression used to assess the significance of the difference in the associations between the tests.

Results

33% of the 364 health care workers evaluated had a TST result of >10mm compared with only 6% who had a positive Quantiferon-Gold. A positive Quantiferon-Gold result correlated strongly with a history of birth in a High Risk Country (OR 6.15, p=0.002), Years lived overseas (OR1.04 p=.018) and High Risk Occupational Exposure (OR 5.6 p=0.014), where as the TST correlated most strongly with a history of BCG vaccination (OR 9.23 p=0.001).

The Quantiferon-gold test, correlated significantly better with increasing exposure for both number of years lived overseas (odds ratio 1.5, p = 0 .002) and number of risk factors (odds ratio 2.7, p = 0.001) by matched pair logistic regression.

Conclusion

The Quantiferon Gold- In Tube® assay showed a much stronger correlation with known risk factors for exposure to Tuberculosis infection and resulted in far fewer staff requiring follow-up.

The Quantiferon Gold- In Tube® assay should be considered as an alternative for screening health care workers.

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