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*Eliminating TB Among
Indigenous and
Marginalized Populations*

PROGRAM



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THE INTERPRETATION OF LARGE TUBERCULIN SKIN TEST REACTIONS

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BACKGROUND: A positive tuberculin skin test (TST) indicates probable TB infection or disease. Strongly positive TST are often interpreted as implying poor prognosis or greater probability of TB disease. The objective was to determine the significance of large TST reactions.

METHODS: A prospective case-control study was done in a Peruvian shantytown with a nested cohort study. TST skin tests were administered to 354 untreated pulmonary TB patients who were HIV-negative and 647 healthy controls.

RESULTS: Positive TST were more frequent in TB patients than controls (76% vs 46%, OR of TB disease 3.7, $p < 0.001$). Weakly positive TST were twice as frequent in TB patients as controls (56% vs 27%, OR of TB disease 2.0, $p < 0.001$) but strongly positive TST were equally frequent (19%) in patients and in controls. TB disease was half as likely if the TST was strongly positive than if it was weakly positive (OR of TB disease 0.49, $p < 0.001$). Prognosis was not associated with TST results ($p > 0.2$). Strongly positive TST were significantly more likely in patients with higher body mass index ($p = 0.02$).

CONCLUSIONS: Weakly positive TST were more strongly associated with TB disease than strongly positive TST and TST size was not associated with prognosis.