

Delayed Tuberculin Reactivity

[Robertson JM, Burt SD, Demonds KL, Molina PL, Kiefe CI, Ellner J]. *Delayed tuberculin reactivity in persons of Indochinese origin: Implication for preventive therapy. Ann Intern Med 1996,124: 779-784.*

To study a variant delayed reaction to tuberculin testing as a way to enhance screening for tuberculosis among high-risk persons and correlate the delayed reaction with lymphocyte blastogenesis, a cross-sectional study was conducted at two Public Health Department Clinics in North Carolina, USA. One hundred and twenty one adults who had recently emigrated from Vietnam to North Carolina participated. None had received BCG. Mantoux method, skin test results were read at 72 hours and again at 6 days. Variant reactivity was defined as induration of less than 10 mm at 72 hours that, when reassessed at 6 days, had increased in size to 10 mm or greater.

Variant tuberculin reactivity was documented in 26% of participants. It was strongly associated with booster positivity. Sixty-five per cent of persons with variant PPD results had booster positivity compared with 16% of persons with negative PPD results ($p < 0.001$). The lymphocyte blastogenesis response of persons with variant PPD results was between the response of persons with negative PPD results and that of persons with positive PPD results.

Variant reactivity in this high-risk group was a predictor of booster positivity. Together with the blastogenic response pattern, this association strongly suggests that variant reactivity has a high positive predictive value for tuberculous infection. Authors recommend that clinicians should incorporate these findings into their approach for choosing candidates for preventive therapy.

Comments

This study adds to the literature by showing a correlation between delayed skin testing and lymphocyte blastogenesis. An additional strength of the study is the unconfounded nature of the study group, that is, their lack of previous BCG immunization. Although, this study included only adults, the authors have shown that variant reactors are immunologically similar to persons with positive purified protein derivative (PPD) results by using *in vitro* lymphocyte blastogenesis. Hence, the authors recommend that variant reactivity might be used to identify persons with *Mycobacterium tuberculosis* infection as candidates for preventive therapy. However, before these recommendations can be applied to clinical practice one would have to wait for similar studies, preferably from our own country. Another way of looking at these recommendations is to take the 'variants' as another addition to the already existing confusion as to who should be started on prophylaxis and who should be treated as a case.