
tubersulin test in chronic and recurrent chest diseases in infants and preschool children

Adel Aly osman Ziko

RECOMMENDATION The present study was conducted on 40 infants and children of the preschool age, who suffered a chronic or recurrent chest troubles. Most of them were regular visitors of Pediatric Chest Clinic of the children's hospital, Ain-shams University. This work aimed to find out the significance and validity of tuberculin test, as a diagnostic tool in chronic and recurrent chest conditions including tuberculosis in preschool age and infancy. These (40) cases were classified into three groups. The first is that of tuberculous patients which included (12) cases. The second one is that of asthmatic patients which included (23) cases. The third group included (5) cases who are non tuberculous non asthmatic cases. A control group of (15) normal children were included of the same age and socioeconomic class with no history of chronic or recurrent chest troubles. A full history was taken from each of the subjects of the study. Each one was submitted to a thorough clinical examination. The 40 cases were subjected to a set of laboratory tests (hemoglobin percentage, total leukocyte count and sedimentation rate). In addition to plain x-ray of the chest in posteroanterior and lateral views. All the (40) cases and the (15) control subjects were tested by tuberculin. The tuberculin used in the study is that P.P.D. of new and valid batches. Intradermal injection of 0.1 ml of 1:1000 was performed to each subject in the study. The record of induration was taken after 48 - 72 hours of the injection. Positive reactions were those only with induration exceeding 9 mm in diameter, and negative reactions if induration was less than 10 mm. The tuberculous group of patients showed tuberculin positivity of (50%). This group also gave a history of BCG vaccination in (33.3%) only. The history of household contact was also (33.3%) only. The non tuberculous group i.e. the second, the third and control group, showed tuberculin reactivity in (16.7%) only. The history of household contact was only (6.9%). The history of BCG vaccination was positive in (66.7%) (i.e. 10/15). The validity of tuberculin test as a diagnostic measure for tuberculosis in that study was assessed by the sensitivity and specificity. The sensitivity was only (50%), While the specificity was (83.3%). Thus it is obviously observed from this study that tuberculin test is not a good positive test in the diagnosis of tuberculosis, but it is a good negative test. Also this study showed that from the whole cases included (55) the history of BCG vaccination was only in (29) cases i.e. (52.7%) of these (29) vaccinated ones only (7) showed reactivity to tuberculin, i.e. (24.1%). It is worthy to mention that the majority of cases with history of vaccination lacked the presence of the scar of

BOG. From this study the following recommendations should be of value, 1. A revision of the used technique and conditions of BCG vaccination in different places as Maternal and child Health Center, health5'ffloe" rural units etc ••, should be considered. 1592. A revision of measures of BCG application to the infants as an obligatory vaccine and its timing should be remodeled. to be more strict and rapidly administered Soon after birth instead of waiting the 40 days. 3. The practitioner should pay his attention to any household tuberculous cases instead of giving all attention to a tuberculous mother only. 4. the diagnosis of tuberculosis in children is initiated by USPEON as a halfway for the final diagnosis. 5. The Use of P.II.n of 5 m is more rewarding than one or two TO for diagnosis of tuberculosis. 6. A rewarding screening of tuberculosis in the pediatric age group should involve a wider group of illness than those related to chronic or recurrent chest troubles. 7. A low sensitivity or reactivity to tuberculin test is expected to occur in the infant and the preschool age group in a society like ours where malnutrition and frequent acute illness prevail.