

10th Euro Global Summit and Expo on

Vaccines & Vaccination

June 16-18, 2016 Rome, Italy

Prevalence of tuberculin negativity after BCG vaccination in the under five Saudi children and the need for revaccination

Fahad Saleh Al-Tayyeb

King Abdulaziz Medical City, KSA

This cross sectional epidemiologic study was designed and conducted with the primary objective of calculating the prevalence rate of a negative Mantoux reaction (less than 5 mm) following primary BCG vaccination at birth. Other objectives include determining the correlation between the Mantoux reaction sizes with some epidemiologic variables. Of these are age, gender, family history of tuberculosis, presence/absence of BCG scar and its diameter when present. The methods included a questionnaire; recording of the child temperature, weight and height and verification of the presence or absence of the BCG scar and measuring its largest transverse diameter if present. Mantoux technique was employed using 2 tUs of Purified Protein Derivative (PPD) RT 23 in Tween 80. The population studied was healthy Saudi children aged less than 5 years attending well baby clinic and/or for the purpose of immunization in two Primary Health Care centers in Dammam. The sample size was all children that meet the criteria from among children that attended these two centers over a period of 2 months. In the event, 523 children satisfied the criteria of admissibility to this study out of 672. Reading of the Mantoux reaction results was carried out by the investigator where the largest diameter across the forearm was recorded. The results of this study showed that the number of the males (267, 51.1%) was and that of females (256, 48.9%). The age range was 3 to 59 months with a mean of 27.7 months for the males and 27.5 for the females. 53.5% of the children were from the middle class, 41.3% from low and the remaining 5.2% belong to the upper socio-economic classes. BCG scar was present in 496 (94.8%) of the children. The results also showed that 29.8% of the studied children have a negative Mantoux reaction. As per logistic regression analysis result the sensitivity to the PPD induced by the BCG vaccine waned off with the increase of the children's age, Low socioeconomic class and the absence of the BCG scar were significantly associated with a negative Mantoux reaction and with the increase of the BCG scar diameter sensitivity to the PPD increased. Based on this study, BCG revaccination at the age of 36 but not later than 59 months for the children of the city of Dammam is highly recommended. This policy does not exist at present in the KSA.

Biography

Fahad Saleh Al-Tayyeb has completed his Fellowship in Family and Community Medicine, King Faisal University, KSA in 1993. He has obtained his Honorary Research Fellowship in Medical Education Faculty of Medicine, University of Liverpool, UK (2006). He is an Assistant Professor, Consultant Family & Community Medicine and Associate Deputy Executive Director, Executive Director, Clinical Affairs, Family Medicine at Primary Health Care, Ministry of National Guard Health Affairs, Jeddah, KSA. He is a Member of WONCA since 1999. He has 6 research publications and 1 book to his credit.

TayyebFS@ngha.med.sa

Notes: