

Neonatal BCG Vaccination And Scar Success

A study published in December issue of the Journal(1) found no difference in the immune response in newborns who received BCG as compared to older infants and recommended BCG vaccination in newborns. This study does not mention whether all children had a BCG scar following vaccination. The problem of children who have received BCG but do not have a scar remains unsolved. The usual practice is to do a tuberculin test in these children and if negative to reimmunise them. , However some studies(2) have reported presence of immune response even in tuberculin negative children. The incidence of scar failure after BCG vaccination is quite high in different studies(3). We examined 505 children, who were immunized in our Under-Five Clinic, for the presence of BCG scar. A scar was seen in 474 children (93.9%). Out of 474 children 217 received BCG in the neonatal and 288 in the post-neonatal period. Scar failure rate was 9.2% in the first group and 4.2% in second group. This difference was statistically significant (Chi square test, $p < 0.05$). Similar results were found by Fine, *et al.*(4).

Different reasons like weak vaccine,

lost potency and wrong technique are considered responsible for scar failure. In our study precautions were taken to preserve the potency of the vaccine and a trained vaccinator was used. Our findings indicate the need for studies to assess immune response in neonates who fail to develop a scar following BCG vaccination. Clear guidelines must be available under the UTP programme on reimmunization with BCG in infants with no vaccine scars.

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REFERENCES

1. Vijayalakshmi V, Sunil K, Lakshmikiran A, Surekha H, Murthy KJR. Optimum age of a child for BCG vaccination. *Indian Pediatr* 1994, 31: 1497-1501.
2. Spierer Z, Asaf E, Zaputh V, Bogair N, Schwartz J, Mendes M. Persistence of *in vitro* lymphocyte response to tuberculin in skin test negative children immunized with BCG in infancy. *Acta Paediatr Scand* 1977,66: 569.
3. Grindulus H, Baynham MIB, Scott PH, Thompson RA, Wharton BA. Tuberculin response two years after BCG vaccination at birth. *Arch Dis Child* 1984, 59:614-619.
4. Fine PEM, Ponniglus M, Maine N. The distribution and implication of BCG scar in North Malawi. *Bull WHO* 1989, 67: 35-42.