

SUMMARY

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Measles is one of the widely spread diseases affecting children and early adolescents. In the developing countries complications of measles contribute to many deaths especially during the first year of life.

The trials to introduce a safe and effective means of induction of active immunity against measles had started as early as 1749. Since then a series of scientific researchs have lead to the introduction of the safe and effective live further attenuated measles-virus vaccine widely used nowadays.

Since the development of live measles vaccines, the problem of passively acquired maternal antibodies which may interfere with multiplication of vaccine virus, and hence alter the immune response have been a matter of concern. It was proved that these passive antibodies against measles virus can be detected in infants 11-month-old using HI test. Consequently attack rates in children vaccinated under one year were significantly higher than in those vaccinated over 1 year of age. Many serologic studies supporting this hypothesis have been done. Other laboratory and epidemiologic studies have suggested that a higher

seroconversion rate and mean antibody titer was obtained among infants vaccinated at ≥ 15 months of age compared with those vaccinated at 12-14 months of age.

Our work confirms the results of most of previous studies using the more sensitive and specific ELISA technique. The present study have shown a seroconversion rate of 84.2% among vaccinees who received the vaccine at < 12 months compared to 100% seroconversion among children vaccinated at ≥ 15 months of age. The mean antibody titer was significantly higher in the later group than in the former one ($P < 0.001$).

The fact that in the developing countries measles remains to be an important public health problem during the second half of the first year of life have made it wise to recommend mass vaccination of all susceptible infants as early as 9 months of age in the shortest possible period of time. Those who had received the vaccine at less than 12 months of age during the initial mass campaign can be successfully revaccinated in the next year campaign by the time they reach 15 months of age or more. Using this strategy one may expect to have a rapid break in the chain of transmission and in the future complete eradication of measles may be achievable.