Readers' Forum

Baby Born to a Mother with Tuberculosis

Q. *The IAP recommendation(l) for a baby born to a mother with tuberculosis, whose chest X-ray is normal, is that BCG Vaccine should be given at birth and the child should receive* 6 *months drug therapy with INH and Rifampicin (like an asymptomatic Mantoux positive child below 3 years in Group 1). The following points need some clarification: (i) Can the presently available BCG vaccine be used with drug therapy or INH resistant vaccine should be used?; and (ii) Should re-evaluation be done after 6 months therapy with INH and Rifampicin, as was previously recommended after 3 months INH therapy(2,3)?*

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A. The presently available BCG vaccine can be safely and effectively used along with chemotherapy. There is no need for INH resistant vaccine nor it is available. Also there is no need for re-evaluation after six months of therapy as recommended therapy is similar to that for an asymptomatic infected child < 3 years of age.

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REFERENCES

1. Treatment of childhood Tuberculosis: Consensus Statement of IAP Working Group. Indian Pediatr 1997; 34: 1093-1096.
2. Seth V. BCG Vaccine. In: Immunization in Practice, 2nd end. Eds. Mittal SK, Kukreja S. Delhi, CBS Publishers and Distributors, 1991; pp 22-45.
3. Somu N, Subramanyam L. Case scenario. In: Childhood Tuberculosis: A Practical Approach, 2nd edn. Chennai, Siva and Co., 1995; pp 187-207.

Treatment of Childhood Tuberculosis

Q. *We have read with interest the Consensus Statement of IAP Working Group regarding treatment of childhood tuberculosis(l). The recommendation, which we appreciate very much, will be of enormous help to resolve the diversities and confusions prevailing among the clinicians in the treatment childhood tuberculosis. We would, however, like a few clarifications regarding some of the recommendations.*

1. Children below 3 years with history of positive contact and children below 5 years having Grades III or IV malnutrition with history of positive contact have been advocated preventive therapy with INH and Rifampicin for 6 months. Will not some of

the children be deprived of curative therapy if they are not screened for active tuberculosis? Preventive therapy given to these children instead of curative therapy might enhance the number of acquired drug resistant cases in the community which is a matter of great concern now-a-days. The emergence of multiple drug resistant tuberculosis is one of the most challenging problem in recent medical history.

2. Asymptomatic Mantoux positive children below 5 years with Grades III or IV malnutrition are to be treated with preventive therapy. Not infrequently there children are poor reactors to Mantoux test. Is it not justified to perform BCG test in these children who are showing negative Mantoux test? Udani *et al.(2)* showed that BCG test positivity was better in poorly nourished children compared to tuberculin test which is known to be negative in severely malnourished children. Therefore, asymptomatic Mantoux negative but BCG test positive, Grades III or IV malnourished children below 5 years may also be advocated preventive therapy.

3. *Contact:* Any child who lives in a house hold with an adult who is taking or has taken antitubercular therapy (ATT) in the past two years has been considered positive history of contact. The adult receiving ATT for nonpoulmonary form of tuberculosis, *i.e.,* bone, genitourinery tract, abdominal *etc.* are not really infectious to the children. Will not the children having contact with these adults receive preventive ATT unnecessarily? A child being born in a family where an adult completed ATT 2 years before birth of the child may also be exposed to antitubercular drugs without any reasons. Moreover, most of the adults with pulmonary tuberculosis are no longer infectious after two weeks of therapy(3). While prescribing drugs for a prolonged period one should also consider drug resistance, patient's compliance, drug toxicity and economic constraint. Therefore, under the circumstances these factors also will be vital. Considering the above facts should we not expect a better definition of history of positive contact from the IAP working Group to avoid over-medication in so many children?

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REFERENCES

1. Consensus statement of IAP Working Group. Treatment of childhood tuberculosis. Indian Pediatr 1997; 34:1093-1096.
2. Udani PM, Parikh UC, Shah PM, Naik PA. BCG test in tuberculosis. Indian Pediatr 1971; 143-150.
3. Benakappa A, Benakappa N, Benakappa DC. Management of tuberculosis. Indian J Pediatr 1995; 62: 557-563.

Reply

The response to the various issues raised is as below:

1. It is imperative that when preventive therapy is recommended for Group I, the clinician has taken care that such a child does not belong to any other disease group. If active disease is suspected or diagnosed, there is no question of preventive therapy and such a

child should get appropriate therapy with 3 or more drugs.

2. Many experts consider BCG test for diagnosis of active tubercular disease controversial. Hence the Working Group did not elaborate on this point. It is planned to develop consensus statement for standard diagnosis of chidhood tuberculosis and it is likely that this point will be debated then.

3, Though intrafamilial contact with an open case of untreated active pulmonary disease carries high risk of spread of infection, even a stray contact may be enough. It is also likely that an adult with extra-pulmonary disease may harbor silent pulmonary focus, as lung is the primary site of infection in most of the patients and hence such an adult may also be infective. Guidelines are formulated based on epidemiological basis and so the working Group considered a broadly accepted definition of "contact". Standardized guidelines are generally applicable to all, though an individual situation may be assessed on it own merits. Obviously if **a** baby is born well after the contact is treated adequately, such a definition of contact may not be valid.

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BCG Vaccination with Antitubercular Therapy

I would like to seek clarification on the following two points:

1. What additional benefit will accrue by giving BCG along with 6 months chemotherapy to a baby born to a mother with tuberculosis despite a normal chest X-ray?
2. Why BCG is not recommended for other children getting anti-tubercular therapy; especially an asymptomatic Mantoux positive child below 3 years of age?

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Reply

The response to both the issues raised in as below:

1. It has been recommended to give BCG vaccine at birth to a baby born to a mother suffering from tuberculosis, along with chemoprophylaxis for 6 months even if the chest x-ray is normal. This is because such a baby may be infected or not. If not infected, chemoprophylaxis will prevent risk of

natural infection and BCG vaccine will provide immunity. However if infected, drugs will prevent risk of disease and in such case, BCG vaccine will not be harmful, though it may not provide additional benefit. As it is not possible to know whether a baby at birth is infected or not, it is logical and safe to administer BCG vaccine. Mantoux

2. positive children are already infected and hence no benefit will be accrued by BCG vaccine. BCG vaccine is ideally reserved for non-infected individuals in early childhood and therefore given best at birth or as early as possible after birth. However, it may be given to any child whose tuberculin status is not known, simply because it is safe even when not useful to an infected child.

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