

weeks is better; however, it is not in the universal programme of immunization because the objective is to catch as many infants as possible, at the earliest because there is a very heavy fall rate; (ii) Vaccines can be given at all ages as per requirement; (iii) Generally the child should be healthy at the time of vaccination; (iv) Separate disposable syringes and needles are required for each prick; (v) Vaccines must be properly preserved maintaining the cold chain; and (vi) While giving more than one vaccine at a time, their efficacy and safety must be known(1).

When two or more than two vaccines are given together there may be antigenic synergy or antigenic competition. If BCG, DPT and OPV are given together, the chances of antigenic competition are least, because BCG induces cell mediated immunity while DPT and OPV induce humoral immunity(3). The antigenic competition has not been found in clinical trial of simultaneous administration of all these three vaccines(4). The aim of immunization is to protect children from infectious, illnesses which are endemic in our country. So all children should be given vaccines against six killer diseases by calling the

parents with child to clinic/hospital minimal number of times. In view of efficacy trials and theoretical aspects, BCG, DPT and OPV can all be given at the same visit.

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Typical Facies in Duchenne Muscular Dystrophy

Duchenne muscular dystrophy is an X-linked recessive disorder. Isolation and cloning of Duchenne gene located

on the middle of short arm of the X-chromosome (Xp 21.2) and the discovery of dystrophin (400 kD protein located at the inner phase of the myofibre cell membranes), the encoded protein that is deficient in Duchenne muscular dystrophy, provides a new and precise

method of molecular genetic diagnosis not only for confirming suspected cases but also for accurate carrier detection and for precise prenatal diagnosis. Further this discovery has provided potential for future opportunity for cure by gene therapy.

The clinical features of this disorder are unique and classical. The features like proximal muscular weakness, typical tip toe walking, waddling gait, calf muscle hypertrophy, Gower's sign, slip sign, have all been very impressive, but the apparently typical facies in Duchenne muscular dystrophy (*Fig. 1*) has received no attention in standard books and monographs(1-3). The typical facial features noted in this syndrome include expressionless face, wide palpebral fissure and less prominent nasolabial fold. These facial features develop later in the course of the disease. There is also commonly an associated wide arch of the mandible and maxilla with separation of teeth, presumably secondary to the macroglossia. This may partly account for the fairly typical facies in Duchenne muscular dystrophy(4). On direct questioning the parents of many of these children admitted that children have stopped laughing and smiling.

We feel that this typical appearance of face with its consequent lack of expression of emotion which is characteristic needs to be emphasized in the description of the disease.

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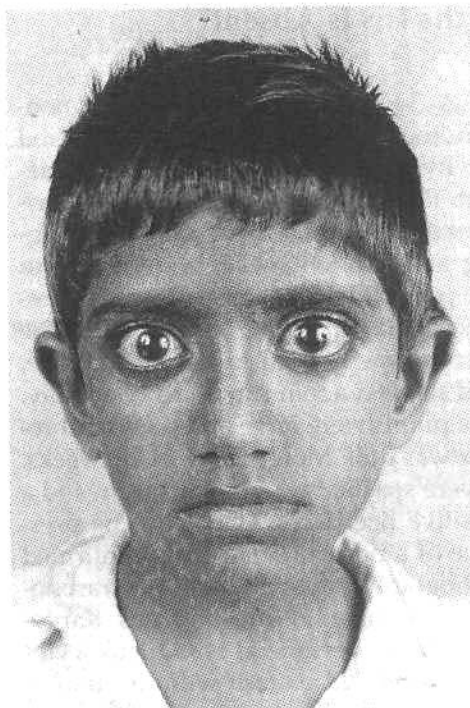


Fig. 1. Typical facies in Duchenne muscular dystrophy.

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