Readers' Forum

Q. *What is the currently recommended management of athetoid cerebral palsy?*

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A. The basic principles of management of athetoid cerebral palsy (CP) are in essence similar to those of spastic CP(1,2). Also, children with athetosis often have associated spasticity. The main aims of management include: *(i)* prevention of abnormal motor patterns and asymmetries; *(ii)* abolishing abnormal reflex reactions; *(iii)* prevention of deformities; and *(iv)* making the child as functionally independent as possible.

The essential disability in athetoid CP is an inability to organize and properly execute intended movements, and also to coordinate automatic movements and maintain a posture(3). Athetoid CP thus if often more difficult to manage because of inability of the child to keep the body part still, and the occurrence of abnormal associated 'overflow' movements in the rest of the body. These problems in fact increase when the child attempts an activity, and markedly interfere with the execution of the activity. Also, children with athetoid CP generally have persistence of primitive reflexes like the asymmetric tonic neck reflex (ATNR) which may be obligatory to the extent that the child is unable to break the reflex and gets 'locked' in that position.

Corrective positioning, stabilization, self-control, abolition of abnormal reflex and motor patterns through physiotherapy and occupational therapy are the cornerstones of management of motor problems in athetoid CP. The use of visual feedback where the child can observe unwanted movements and attempt to control them, is a technique which is beneficial in some cases. Splints may be useful to stabilize a body part to allow functional activities, *e.g.,* stabilization of elbow and wrist when the child is being taught how to write, feed, *etc.* An innovation in this field includes the: development of lycra splints which provide both stability and some degree of flexibility. These have been reportedly quite effective in a pilot trial(4) but further data is needed for making generalized recommendations. Various drugs including anticholinergics, diazepam and levodopa have been tried for motor control in athetoid CP but have not really been successful. The follow up of children with athetoid CP is much the same as in other forms. Short term realistic goals need to be set and periodic reassessment done during each of the follow-up visits to ensure that the child is achieving these goals. Some of the important things include: *(i)* maxim umcontrol of the motor problem and achieving functional mobility; *(ii)* helping the child learn activities of daily living and communication-the latter being a significant problem with athetosis; *(iii)* management of other associated problems including hearing, feeding and behavior; and *(iv)* providing education and vocational training in accordance with the child's potential.

Electronic physical and communication aids with various access devices have revolutionized the rehabilitation of children with severe CP, particularly athetoids(5).

However, these are not easily available in our country.

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REFERENCES

1. Singhi PD. Cerebral palsy-Approach and principles of management. Indian Pediatr 1988; 25:282-287.
2. Levitt S. The cerebral palsies. *In:* Pediatric Developmental Therapy. Ed. Levitt S. Oxford, Blackwell Scientific Publications, 1984; pp 110-126.
3. Aicardi J, Bax M-. Cerebral palsy. *In:* Diseases of the Nervous System in Childhood. In: Clinics in DeveloPmental Medicine- Ed. Aicardi J. New York, Blackwell Scientific Publiations Ltd, 1992; PP 330-374
4. Chauvel PJ, Horsman S, Ballantyne J, Blair E. Lycra splinting and the management of cerebral Palsy- Dev Med ChiId Neuro11993; 35: 456~457-
5. Desch LW. High technology for handicapped children: A pediatricians viewpoint. Pediatrics 1988; *77:* 71-87.