TREATING CEREBRAL PALSY

Dominion Problem Surveyed by U.S. Authority

THE talk which we reprint on this page was recorded by DR. EARL CARLSON, leading American authority on cerebral palsy, at the conclusion of a three-weeks' visit which he paid to New Zealand at the invitation of the Government and under the auspices of the New Zealand Crippled Children Society. Dr. Carlson's task was to make a survey of the problem of cerebral palsy in the Dominion and during his visit he not only lectured to specialists, social workers, and parents, but conducted demonstration clinics in the four main centres. His talk, which was broadcast by the main National stations on April 4, explains the special problems of the cerebral palsied and the treatment needed to meet them.

THERE are 500 cases of cerebral palsy registered with the New Zealand Crippled Children Society, but this figure does not give a true or complete picture of the position. I would suggest that there are possibly 1,500 cases of cerebral palsy of all age-groups in New Zealand.

The cerebral palsied person is one who has no voluntary control of his muscular movements. The disturbance may be either mild or severe. Because of his inability to control his muscular movements he is often considered as mentally deficient; in reality he may be mentally bright. Such afflictions can be described if we picture the mind as a telephone switchboard. The message is flashed and though understood by the muscular and nervous system the command cannot be carried out because of a breakdown somewhere along the line. He has the machinery but can't deliver. Training must be directed to the undamaged controls to perform functions compensatory to those lost or absent. Deprived of early training, the cerebral palsied is delayed in speech, locomotion and the performance of skilled acts in general.

Not True Paralysis

Almost any conceivable type of motor disfunction or combination of motor disabilities may be encountered in cerebral palsy. In one person the damage to the brain may give rise to a stiffness of movement. The hand, in attempting to grasp an object, may remain fixed in that position and is relaxed with difficulty. Certain groups of muscles become stronger than the opposing ones, causing the legs to become crossed on each other in attempts to walk, and producing a scissors gait. This disturbance is known as spastic paralysis. In another person there may be a loss of sense of position. The movements are jerky and the gait is staggering like that of a drunken man. Such condition is referred to as ataxia. A third type of disorder is athetosis, which is a squirming movement often accompanied by facial grimaces.

A CHILD suffering from cerebral palsy being exercised in muscle control and speech at the Sydney Spastic Centre

These disturbances are really not a true paralysis in the ordinary sense of the word—as meaning loss of motion. Instead, there is an exaggerated motion. The counterpart of this is seen in the normal person acquiring a skilled act. Until such a person becomes adept he will work with exaggerated tension and as a result the performance appears to him more difficult than it really is. The beginner at the piano, for example, has difficulty in placing the right finger on the right key. With practice he learns to inhibit the unnecessary motions and is eventually able to play a well practised piece without much conscious effort. Similarly, the cerebral palsied who does not learn to walk, talk and use his hands spontaneously as the normal child does, can often be taught these acts in much the same manner as the normal person acquires a skilled act.

If the normal can learn to play golf, a violin, or to walk a tight rope, why can't the cerebral palsied person learn to walk, talk, feed and dress himself? The basic principle underlying the training of the normal as well as the cerebral palsied is learning.

Competition Helps

In teaching the normal to play the piano or violin, or to swim, interest in these activities is necessary. In training the cerebral palsied to walk, talk and use the hands, interest in these activities is not readily motivated unless there is a spirit of competition. Training is, therefore, more effective when the child is placed in a special school where he can compete and gain a feeling of personal worth than when he is treated and tutored in an environment where there is nothing to stimulate competition.

When a cerebral palsied child is placed in a school and becomes occupied, we often see an improvement in muscular control without special emphasis being placed on muscle training itself. This is exemplified particularly in children with athetosis. A mother will relate that her child is unable to feed himself at breakfast, but finds little or no difficulty with the evening meal. His ability to concentrate in the morning is limited and this is reflected in purposeless muscular activity which grows less as the child gets into the routine of the day's play or work. Parents who delay academic training until the child acquires better control of his hands or speech are surprised at the rapid improvement in muscle control which follows when the child is finally allowed to go to school.

Emotions Need Control Too

The therapeutic effects of education are even more striking, when the emotional life of the cerebral palsied is taken into consideration. The muscular disturbances of the cerebral palsied are, in fact, so intimately tied up with the emotional processes that it is as difficult to conceive of an athetoid movement

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