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Brain Tumour Foundation of Canada is generously supported by individuals, corporations and employee groups. It is through the tireless dedication of donors that help is available for anyone affected by a brain tumour, including patients, survivors and their loved ones.

Ask the Expert Information Sheet

How is Bobath Therapy relevant for Persons with Brain Tumours?

By: Jonathan Russell

Bobath therapy was developed by a physiotherapist named Berta Bobath and her husband Karl starting in the 1940's. The Bobath's recognized the brain's potential for neuroplasticity; the ability of the brain to change. The Bobath concept has continued to develop over time and is based upon present day knowledge of motor control, motor learning, and neuromuscular plasticity, as well as knowledge of biomechanics. Bobath clinicians use movement analysis, skilled facilitation and problem solving to help clients recover their physical abilities and optimize their activity, participation and quality of life.

Facilitation means to make a task or movement possible through hands on guidance, organizing the environment and providing verbal and non-verbal cues. When an individual is unable to generate a movement alone, facilitation creates the conditions for the movement experience to happen. The goal of Bobath therapy is to optimize a person's function by improving their postural control and selective movement with guidance from a clinician. Postural control is a learned skilled movement and involves activation of whole packages of specific muscles in appropriate alignment to achieve a goal. After having a brain tumour, an individual may develop compensatory movement patterns and need guidance to move selectively. Providing support to the client at the right locations and encouraging certain muscles to activate during the movements of sitting up, standing, and walking can sometimes be essential for safe and efficient progress of a person's mobility.

Depending on the location of the brain tumour, the brain's ability to receive, process, and integrate sensory information from the rest of the body can be impaired. One concept that Bobath therapy emphasizes is increasing sensory input from the legs, arms and trunk to the brain. The body is a wonderfully complex system with lots of information from receptors throughout the muscles, joints, skin and tendons telling the brain where the body is in space and what the body segment is doing. If the brain senses the foot is taking weight when the heel is loaded then there is potential for automatic activation of muscles around the hip, abdomen and back to prepare the leg to take the weight of the body. Working on single leg stance is often a component of a client's recovery regardless of the functional level since refining this ability is a key aspect of standing, walking and running.

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