

Learning Principles to Aid Recovery

Every survivor and caregiver is vitally interested in the course of recovery after an aneurysm. Given that no aneurysm survivor is like any other, there is not one answer to the question of how to maximize this process. There are, however, some general guidelines based on neurological and learning principles that can be discussed that may help to maximize the recovery process.

There is no substitute for professional consultation by a neuropsychologist or other trained rehabilitation professional to find out what cognitive functions may be impaired and what the best procedure might be for recovery to take place. Rehabilitation professionals can provide information critical to the process of formulating and executing a treatment plan. Many survivors, however, have no access to such services. The following guidelines can be used to guide the learning process.

Guideline #1 – Learning takes place through a series of small steps. Acquiring a new skill requires a sustained effort and many poor performances must be expected and tolerated. Through repetitive practice, the survivor can improve motor and other skills. With repeated practice sessions, the skill to be learned can become automatic.

Guideline #2 – Learning new skills is not linear, but rather is an “up and down” process. At times it seems that the skill the survivor is trying to learn has gotten worse, and at other times, there seems to be significant progress. Learning is a step-wise process that has peaks, valleys, and plateaus.

Guideline #3 – Learning and performing new skills is more difficult if the survivor is tired, depressed, has low blood sugar, or is ill. Learning sessions are more effective if they occur when the survivor is rested and focused.

Guideline #4 – Learning causes fatigue and the process of learning often leads to frustration. The survivor should be encouraged to sustain the effort and to work on being patient with poor performances as the new skill is learned.

Guideline #5 – Tasks to be learned should be relevant to the survivor’s everyday life. Learning is task-specific and the best progress is made if the survivor practices a real skill that is of vital interest, rather than just an exercise.

Guideline #6 – Learning is harder for persons with frontal lobe or executive impairments. Persons with executive impairments have problems with organizing their behavior. Specifically, in persons with executive cognitive impairments, problems often exist in these areas:

- Forming and organizing intentions and plans
- Remembering the plans and intentions over time
- Monitoring when and how to execute plans

HOW DO I GET BETTER?

Page 2

- Performing an action at the right time
- Remembering the action has been performed

It is important to recognize that a person with executive impairments often has problems with planning and following through on actions. The caregiver who recognizes these problems and helps the survivor make and execute plans is far more effective than the caregiver who fails to understand the problem and is critical of the survivor for not trying harder or “giving up.”

Guideline #7 – Learning a new skill is harder for the survivor with executive impairments because full awareness is not present. The frontal lobe allows us to be aware of our errors so that we can correct them. An individual with poor awareness does not see the need to learn new skills and does not correct the errors. Persons with executive impairment must be actively assisted in the process of learning new skills and cannot come up with new ways to solve problems.

Guideline #8 – The learning process is aided by rewards and reinforcement and is hindered by harsh words and punishment. Encouragement gets better results than criticism or disapproval. Rewarding the survivor for making small gains is far more effective than acting in a disappointed, angry way and is the most effective way to encourage new learning.

Guideline #9 – Feedback aids the process of learning. It is best if the survivor receives frequent feedback throughout the rehabilitation process. Assertive, direct feedback is far more effective than making a vague reference to a behavior hoping that the survivor will “get it” and make changes. Tactful, direct feedback about progress is important for the survivor since there is little awareness of what areas need work. Positive feedback about progress serves as an important source of encouragement and motivation.

Guideline #10 – Interpersonal skills and judgment can be learned. It is not unusual for a survivor to have problems with interpersonal behavior after an aneurysm. The survivor may become more abrupt and harsh. It is not unusual for a survivor to be impulsive, both in speech and word. Depending on the level of impairment, it may be necessary to give the survivor direct feedback about negative personality changes in a kind, supportive way.

These guidelines will provide the caregiver and the survivor with guidance about what constitutes a positive learning environment. These suggestions serve to enhance the rehabilitation process.