



ART THERAPY IN STROKE REHABILITATION: A MODEL OF SHORT-TERM GROUP TREATMENT

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Introduction

In 1991, art therapy (AT) was incorporated in the stroke-rehabilitation program of the Loewenstein Hospital located in Raanana, Israel (Gonen, Ring, Stern, & Soroker, 1992). From the very beginning the staff felt the need to develop a structured model of AT for the subacute stroke patients undergoing intensive rehabilitation. A prerequisite from such a model would be the creation of a form complementary to the conventional treatment modalities already being applied in the rehabilitation program, and a consideration to such constraints as mean hospitalization time and restricted number of qualified AT clinicians versus a large number of patients in need. We also believed that the structured model to be developed should include means for assessing its efficiency with respect to its declared objectives. In this paper we describe the Loewenstein model of AT for stroke patients, and the means developed for evaluating the role of AT as a part of a rehabilitation program.

The Loewenstein Model of Art Therapy in Stroke Rehabilitation

Objectives

The AT program was structured to fulfill the following objectives:

1. To increase the patient's awareness of the changes that occur after brain injury and their implications

in terms of impairments, disabilities and handicaps.

2. To help the establishment of an adequate emotional response to the above consequences of stroke, dealing with mourning, depression and anxiety on one hand, and with motivation for rehabilitation on the other hand.
3. To improve the patient's interpersonal relations, by assisting him/her to pass from a commonly occurring state of extreme introversion, soon after the onset of stroke, to a state of greater interest in the immediate and extended environment.
4. To help recognize new alternatives and opportunities for recreational activity.

Target Population

Adult stroke patients with focal lesions causing variant motor, cognitive, language and emotional deficiencies comprised the target population. Patients would be at least partially independent in activities of daily living, and in a stable clinical and metabolic state, enabling them to leave the ward for short periods of time in order to participate in the AT activity (usually 2 or more weeks following the onset of stroke upon admission to the program).

Setting

Therapy was provided by two qualified AT clinicians to a closed group composed of six to eight hospitalized male and female patients, heterogeneous

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with respect to lesion parameters, impairment type and disability level. There were two sessions per week, 1.5 hours each, for a period of 10 weeks. The program was divided into seven successive phases as explained below.

Therapeutic Modalities

To actualize the set objectives, our model of AT for stroke patients employed the following principles:

1. The use of art language in therapy—by means of pictorial projection and other artistic modes, stroke patients were encouraged to deal with newly changed contents of their inner world and to better communicate on troubling issues with others (many of the basic elements that constitute the essence of art therapy are commonly accessible and may be applied naturally with disabled persons in the rehabilitation milieu). In our model we used mainly the following elements of the language of art: Imagination, which although applied in the context of a structured model of therapy was unconstrained by formal logic, social rules or cultural conventions; symbolic representation and imagery, which constitute a definition or redefinition of known, existing phenomena; metaphors, which enable a dynamic adaptation of symbols and images, whereby patients, can deal with painful or frightening consequences of the stroke that they would normally be inclined to deny or suppress; and finally, guided fantasy was used to raise in patients a sensory-like experience of both the factual, real world of hospital life, paralysis and uncertain future and, simultaneously, the sometimes glorified world of “how I was” and sometimes illusory world of “how I would like to be” (Feldman, 1967; Pickett, 1991).
2. The psychotherapeutic process—within the model of AT for stroke patients, we made use of psychotherapeutic tools, mainly to assist patients in coming to terms verbally with their losses. These tools include introspection, sharing, mirroring, feedback, encouragement of emotional expression, ventilation, sublimation, etc. These modes were used in accordance with our understanding of the covert and overt processes of interpersonal dynamics within a group of recently handicapped individuals. It was thought that an enhancement of insight could be obtained once patients underwent the process of sharing and mirroring.
3. Experiences and exercises—patients’ self-expression was encouraged through active participation in structured exercises involving the experiencing of space, time, materiality, color, shape, condensation and organization of materials and elements.
4. Group interaction—our short-term model (10 weeks) followed a guided dynamic approach. It emerged out of need to develop an effective mode of treatment within given setup constraints (limited hospitalization period, mixed population with respect to impairment type and disability level, many patients in need versus few qualified art therapists) (Bernard & MacKenzie, 1994; Yalom, 1985).
5. Application of AT principles and methods in the treatment program—the emphasis in our model was on the internal process the patient undergoes in the AT group experience. The personal meanings attached to the product were considered to be more interesting and important than its artistic value (Lusebring, 1990; Rubin, 1984). The art objects produced by the patients were usually simple, as determined by the simple materials used and the “exercise” nature of the work. A “here and now” attitude in the treatment session enabled the art work to serve as a kind of “transitional object” and, the session itself as a “transitional space.” Elements such as symbolism, pictorial and verbal metaphor, concretization and imagery were all used with an emphasis on concordance between the somewhat implicit nature of artistic expression and the verbal expression, explicitly indicating the patient’s insight and concern (McNiff, 1992; Roukes, 1982). The patient’s personalized usage of the language of art was expressed in the style, color and material selected by him or her in the different exercises, by the mode of page filling, of combining different materials, repetitive use of certain patterns and finally, by the verbal commentary on made products.

Stages of the Treatment Program

The program was divided to seven phases, each aimed to create the appropriate conditions—in terms of patients’ trust, understanding and motivation—for deepening the therapeutic process in the subsequent phase.

Phase	Sessions	Main process
1	1–3	<i>Getting acquainted</i> with treatment goals and group regulations, the AT medium, the therapists other members of the group. Establishment of trust in patient's capacity to use art materials and to perform exercises.
2	4–8	<i>Introducing art language</i> through simple exercises. Establishing "here and now" attitude among group members; legitimizing the expression of all relevant problems and feelings, including negative emotions; rediscovering preserved assets; igniting patients' drive to express themselves using art materials and enhance communication among group members; and beginning significant group dynamics.
3	9–10	<i>Enlarging and deepening group interaction.</i> The processing of more and more intimate and concealed ("shadowy") perceptions and feelings of patients. Typically, content areas dealt with at this stage were: humiliation and guilt at being ill and dependent in activities of daily living; frustration and anger confronting the inability to control what is done; the experience of poststroke emotional lability, depression, anxiety and physical pain; longing for home; fears about an unclear future; and changing roles in the family. Confronting personal state pre- and postonset of stroke. Starting ordered conceptualization and defining loss.
4	11–15	<i>Structured introspection</i> about topics such as "me with myself," "my pain," "difficulty and suffering versus sources of encouragement and hope for me" and recognizing pleasurable experiences of creation. Structured work on such topics as "encountering the positive and negative in me," "the persona that suits me" and "loneliness and its expression." Then, "me and others," "my ability to give to others," "important persons in my life" and raising insight on "how I see myself and how others see me."
5	16–17	<i>Deepening insight and practical knowledge</i> concerning poststroke impairments, disability and handicap, the preservation of personal assets and the expected ameliorative outcomes of the rehabilitation process. The aim of this phase was to reinforce motivation for the rehabilitation process, providing the patient with an objective point of reference with respect to current limitations and future possibilities. Different exercises dealing with the above topics, such as "what am I today—what was I," "how would I like to be," "what can I be," are offered, to emphasize the personal choice of subject, form, color and material, and the need to take responsibility for both the process and the product.
6	18	<i>Deepening work on self-image.</i> This included the exploration of "me within my world" and "me and my surrounding environment." Examining the dynamics that occurred with respect to self image by relating to past, present and future, and acceptance of the present situation that changed for the worst.
7	19–20	<i>Termination</i> of the program and of group activity. This encompassed work on <i>separation dynamics</i> —the inevitable separation from elements of past-self and acceptance of present-self as a basis for a future-self. Termination of this, and other concurrent programs of therapy (e.g., the usually co-occurring end of the hospitalization period) meant a <i>new beginning</i> , where continuous motivation, effort and commitment would be needed in order to achieve the greatest potential for further improvement and the goals set for a future life.

Assessment Method

Five questionnaires were created by the authors to serve as auxiliary tools in evaluating the effectiveness of the therapeutic intervention. Four of these were intended for use by the patients and the fifth was used by the therapists. The patient questionnaires examined different aspects related to the above objectives of the AT treatment: (a) insight (of the consequences of stroke and as impairments, disabilities and handicaps), (b) emotional state (emphasizing anxiety, de-

pression, emotional lability and motivation), (c) interpersonal relations and (d) attitude towards the AT process. The questionnaires were completed in the second or third session of group activity and again towards the end of the program. Each patient completed the questionnaires independently or with the help of the family or a nurse in the department. The purpose of the questionnaires was not only to accumulate and organize information, but also to help the patients confront different aspects of their condition.

Illustrative Case

A 51-year-old male patient, married and the father of three children, was hospitalized in the Department of Neurologic Rehabilitation of the Loewenstein Hospital soon after the onset of an ischemic subcortical infarction in the right cerebral hemisphere. He had left hemiparesis of moderate severity, affecting mainly the left upper limb. Several years earlier his right lower limb had been amputated below the knee because of a vascular complication of insulin-dependent diabetes mellitus. Diabetes had caused an end-stage renal failure and soon after the onset of stroke he necessitated regular peritoneal dialysis. Due to this combination of impairments, his disability level was significant and the chances for regaining independent ambulation using his prosthesis and for vocational rehabilitation, seemed unfavorable.

In the process of recruiting patients for the group, we thought that he would not be able to participate because of his medical instability and severe disability. He insisted on joining the group and was finally accepted. He did not miss a single meeting throughout the period of group activity and was extremely cooperative and communicative with the other patients and the staff. He was revealed as an attentive person, empathetic and greatly contributed to the group activities. He showed great openness, sharing his feelings with the others and adding an intellectual dimension to the subjects dealt with in the group.

Although he had no previous acquaintance with this kind of activity, he easily approached the art language, showing no hesitation and allowing himself to experiment with the different materials. He drew with flowing and simplistic lines, and generally he sounded and appeared sure and confident in his work. His preference for using markers was in accord with his need to focus and be in control, which characterized his attitude. In his initial art works he used symbols indicating a static, stuck situation. This was in odd with verbal expressions where he spoke of his flowing and active image. In subsequent meetings he began to relate to his current shortcomings, as well as to his preserved capabilities in other areas. Concurrently, he began to use more and more colors and less fastened coloring materials, such as water colors and gouache. The following examples describe well the process done in this case.

One of the patient's initial works in plastercine was composed of two animals, one representing "me in the past," and the other "me at present." The first

was a gigantic fish and the second—an eagle standing, watching, on top of a cliff. He verbally stated that both animals had something in common—the eagle (of today) has the flowing ability of the fish (from the past). He apparently failed to realize consciously the whole meaning of his own symbol—today's eagle was just a small part of an object composed mainly of a huge, heavy, solid rock.

A subsequent task enabled the patient to introspect and examine the different moods he was encountering in the present. He had to choose two different colorful handkerchiefs, which represent two different extremes of mood. After placing them on both sides of the paper, he was asked to draw a connecting picture between the two. On one side, next to a colorful handkerchief, he portrayed a quiet home in the country. There was there a sense of a comfortable life and perhaps of loneliness. On the other side, next to a red handkerchief, there was the hospital, with elements as wheelchairs, denoting the painful actual situation.

In another session, the patient had to use art work to describe the circles to which he belonged. First there was his family circle, beginning from his roots—his parents, then the secondary branches of the family including his sister's family. The second circle portrayed his colleagues at the workshop he led and administered. In these works he emerges as a dominant, but not patronizing figure. Presumably, this was the way he interacted in all of the circles to which he belonged. Working on this subject and relating to it in the group, gave the patient the opportunity to assess his present relationships with others, and to confront the changes and the losses he went through.

In a subsequent session, patients were asked to express in art work, as well as verbally, the personal goals they would like to achieve in the AT group activity. Up until that meeting, the patient provided only positive descriptions of himself. From then on he began to share with others his fears, and his sense of being less of a person. Drawing in a concrete manner, he portrayed his painful confrontation with his new limitations in physical activity. As an example, he drew himself and his granddaughter in a playground (Figure 1). This is an example of how the patient selected to express his painful confrontation with the new limitations in physical activity. Following the stroke, this cherished activity with the child was no longer possible.

Another aspect of the patient's confrontation with loss and shaken self image was displayed in his common usage of phallic and machoistic elements in ar-



Figure 1. My granddaughter and me in the playground.

tistic self description (see Figures 1 and 3). The rapidly deteriorating metabolic condition of this diabetic man, the uncertainty involved in commencement of peritoneal dialysis, the new hemiparesis with its ensuing physical disability which followed the onset of stroke and the fact that these were augmented on top of a previous leg amputation all seemed to threaten his masculine self image. While verbally relating to the phallic element in his drawing, the patient realized that this was connected to his feeling of now being a “lesser” man. While expressing it as a need for physical support, it was clear to him that he could not expect to get that kind of support in an AT group. His task became one of accepting the change in himself, and the inevitable new state of limited abilities in different aspects of life. When this insight emerged, it proved to be a turning point in the personal process he went through.

The ensuing session began with an exercise aimed to bring the patients close to their current sensual experiences. While touching different materials, the patients were asked to relate to one of them in free association. The patient chose a soft silicon lump. His association was the body of a woman, which he also painted on paper later on. Notable in his painting was the emptiness of the white page surrounding the woman’s figure, contrasting the sensual expression in gouache of the figure itself (up to this meeting he had

drawn only with markers and pastels). The verbal accompaniment to this work elicited feelings of longing for a woman’s body, which then led to the expression of feelings of melancholy and sadness. We touched upon this issue very cautiously, just mirroring and containing, since it was not suitable for the group at that stage to delve into such a painful subject matter.

At a more advanced stage, group members were asked to think of a dilemma, satisfactorily solved by them in the past, and to think of an alternative solution to the same problem. Afterwards, in the sharing process, they were asked to think of how they would have solved such a dilemma today, in their current state. The realization that his cognitive capabilities, before and after the onset of stroke, had remained the same was very important for him, in light of the enormous regression he felt in almost all other aspects of his life.

One of the experiences introduced to the group comprised the pouring colors with limited control on the page, relating to them by association, then developing the emerging content. The uncontrolled use of flowing colors confronted our patient with the issue of self government and control. This experience made him think about “the twisted paths of my life,” recognizing that one cannot control everything. It was evident that this realization, for a man as independent

and determined as he, was very difficult. Relating to his art work in three parts (Figures 2a, b, c) he first described feelings of life full of activity and action (a splash of many vivid colors), followed by "boom, all has been changed" (a black stain) and ending with the narrow tunnel leading to light, symbolizing his recognition that a solution to his problems might be achieved. This patient's current situation is complex and poses many difficulties and uncertainties. By selecting just one issue to deal with at a time, the patient could perceive a way out.

In an exercise using guided fantasy, patients were asked to imagine themselves in a multistage excursion, passing through different landscapes, including a high mountain and a very difficult path, meeting some person, and finally finding a precious gift. The path symbolized the process of dealing with hardship, and the present—the reward one is entitled to, or wishes to get, for his efforts. This exercise gave the patient another opportunity to approach and meet his feelings of inadequacy and inferiority. In one of his drawings, where he describes the person he met in his imaginary tour, it happened to be a competing colleague (whom the patient portrayed in Figure 3), in an exaggerated masculine form, strong and potent, possibly the opposite of his own self image. For him, the gift in the end was a letter of appreciation received from his former students. As in previous occasions, the more emotional the subject was, the more he dared to use watercolors.

At the beginning, our patient introduced himself to the group by emphasizing two aspects of himself as a family man and a working man. In the process of creative activity in the AT group, he revealed many other dimensions of himself. He faced and evaluated changes in the personal, social and professional dimensions that occurred as a consequence of stroke. The atmosphere created in the AT group enabled him to feel free to express his emotions in relation to these profound changes. He cried every time we touched upon what was recognized by him as currently lacking in his present life, or when he dealt with "the inadequate me." He found a way to communicate at a deep level with the other group members and with the staff. This sharing ability was expressed also in a poem composed by him at the termination of group activity. The AT group clearly helped this patient recognize, evaluate, and realize the meaning of subject areas and relationships that have been changed in his life. For him, and for the other patients in the group, this process of readaptation has just begun.

Discussion

Soon after the onset of stroke, patients usually experience a major emotional turbulence. Loss of motor, language or cognitive capacities may have enormous implications in terms of personal independence, self image, social and economic status. All these factors need to be thoroughly processed by the stroke victim, while at the same period of time an intensive physical and mental effort has to be devoted to the rehabilitation process. In our view, the primary goal of AT in stroke rehabilitation is to help patients process and readapt to the multiple aspects of this new, alarming and often terribly shocking situation.

The first specific objective set for the AT program was to increase patient's awareness and insight for the implications of stroke, in terms of impairments, disabilities and handicaps. Each of these terms denotes a distinct level of analysis of the consequences of disease. For the stroke patient, impairment means any deviation from normality as revealed in the distinct functional systems of the brain (sensory-motor, language, memory, perception, attention, thinking capacity). Disability means deviation from normality as reflected in the functioning of the whole-person. Being a consequence of impairment, disability affects the basic activities of daily living (feeding, grooming, bathing, dressing, toileting, controlling bladder and bowel sphincter activity, mobility and transfer from place to place within the house, locomotion including stairs, communication, social interaction, problem solving). For the stroke patient, insight about disability means, at times, the painful recognition of the loss of personal independence, and of the necessity to receive the help of others in one or more of these basic activities. Handicaps are a collective term denoting deficiencies revealed in capacities, talents, opportunities and status of a specific person. Being impaired and disabled to a given degree may have very distinct meanings for different patients, according to their profession, economical status, marital status and age.

Patients were recruited for the AT program usually within the first month after the onset of stroke. At that time, recognition and understanding of all these aspects of the new situation may be very limited. In different neuropsychological disturbances, anosognosia (inability to recognize one's own disease) is a part of the clinical syndrome. Thus, a right-hemisphere-damaged patient with contralateral spatial neglect, may have an inherent inability to relate to the left part



Figure 2a. Twisted paths of life: Life full of activity and action.



Figure 2b. Twisted paths of life: Boom, all has been changed.

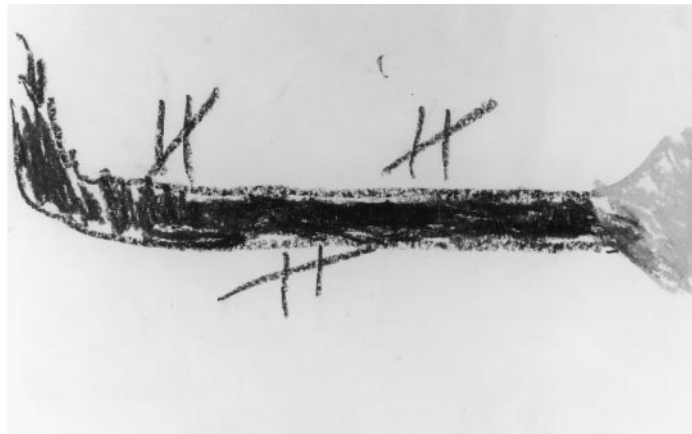


Figure 2c. Twisted paths of life: A narrow tunnel leading to light.



Figure 3. Competing colleague from work.

of his own body, including lack of insight to the fact that this side is paralyzed. An amnesic patient may be unaware of his memory problem, filling the gaps of his available knowledge with confabulatory material. An aphasic patient with posterior left-hemisphere damage may produce a fluent paraphasic speech, full of neologisms, while showing no sign of insight to the obvious fact that the man he is talking to understands practically nothing of what is said.

One should remember that full appreciation of the new situation is difficult also because of the instability of the neurological status at this stage, the (justified) expectations for natural recovery, and the abundance of personal, familial, social and economic implications of the new condition. Also, many patients try to understand their current situation and plan for the future on the basis of incorrect and inappropriate preconceptions about stroke (e.g., they may confuse the concepts of "rehabilitation" and "cure", failing to appreciate the irreversibility of neuronal loss, or they may judge their state and prognosis by comparison to some family member or relative of them who had a stroke, failing to appreciate the enor-

mous variance in phenomenology and outcome existing in this disease).

An appropriate level of awareness of the implications of stroke is a prerequisite for a successful rehabilitation process. The complexity of the problem makes it necessary that the AT clinician works jointly with other members of the multidisciplinary rehabilitation team. In this way, she/he gets an objective opinion about the multiple aspects of the patient's situation and prognosis, enabling her/him to meet the content areas raised by the patient in group meetings, with an adequate level of preparedness. The AT program provides an opportunity for a step by step exposure of the different aspects of loss and change. The patient is confronted not only with his own loss but also with that of other stroke patients. In this way he gets a better understanding of the multiple facets of this disease and the futility of comparing himself to others becomes evident. It also becomes clear that other patients have a lot to teach him about reaction and adaptation to loss.

The second objective set for the AT program was to help the stroke patient establish a more balanced emotional response to the above consequences of stroke. The different stages of the mourning process were dealt with in detail, taking into account the existing cultural and neuropsychological sources of interpersonal variance in expression of mourning, and in the attitude towards loss. Special care was given to the manifestation of anxiety and depression, so prevalent in this condition, and also to the motivational status of the patient with respect to the physical and mental efforts demanded in the rehabilitation process (Sandin, Cifu, & Noll, 1994; Schubert, Burns, Paras, & Sioson, 1992).

The third objective was to bring the stroke patient from an often-occurring state of extreme introversion into a more open social attitude towards others, with whom he could create significant interactions, and from whom he could learn and get support and encouragement. Thus, the goals were to improve social initiative, to increase patience, tolerance and receptivity toward self and others, and to enhance patient's inclination to convey personal feelings and thoughts to others.

The fourth objective set for the AT program was to offer new opportunities for recreational activity. Handicapped patients were encouraged to seek new directions for leisure activities to replace previous activities made impossible due to acquired disability. Thus, AT aimed to expand the patient's areas of interest, encouraging in this way the development of different, novel,

values and attitudes toward life (Landgarten, 1981; Wadson, Durkin, & Perach, 1989).

The five questionnaires were specially designed in accordance with the objectives set for the AT program. These tools were used upon admission to the group and towards the end of the treatment period. They helped the therapists understand the individual problems and needs of each patient in order to adjust treatment modalities accordingly. They serve also to assess the impact of the intervention and the contribution of AT in the general rehabilitation milieu.

Stroke patients are extremely heterogeneous with respect to lesion location and extent, type (sensory-motor, linguistic, cognitive or behavioral) and severity of impairment, the level of personal disability caused by impairment and the overall meaning of disability to the affected person (handicap level). Social, cultural, educational and occupational background, family structure and familial support, type of emotional response in situations of stress and loss—these all vary considerably among different individuals affected by stroke. As a consequence, stroke-rehabilitation programs consist usually of a coordinated interdisciplinary effort where treatment modalities are selected by members of the rehabilitation team (rehabilitation physician, nurse, physiotherapist, speech therapist, occupational therapist, clinical psychologist, neuropsychologist, social worker and others as needed) on an individual basis, according to the specific needs of each patient. Yet, recognition of the powerful effect of group dynamics and of the therapeutic usefulness of various group therapies is becoming more and more prevalent. Various disciplines now utilize group therapy, as well as individual therapy, to enhance the rate of functional recovery and to promote the achievement of desired therapeutic goals in stroke patients.

These considerations also apply to the use of art as a therapeutic modality in stroke rehabilitation. The Loewenstein AT model described in this paper was designed as a short-term, closed group activity, intended to constitute a part of a comprehensive program for patients undergoing rehabilitation in hospital, soon after the onset of stroke. The AT program emerged as an optimal answer to our goal setting, in view of the existing set-up limitations (e.g., the fact that mean hospitalization time for these patients was 10 weeks). However, we have recognized the therapeutic potential of organizing the AT treatment in a group of patients, sharing in common the same disease (stroke) and essentially similar problems of dealing with its acute, totally unexpected and grave con-

sequences. The group acted as a catalyst in raising for observation and discussion various issues of common interest to the patients. It encouraged patients, who in this stage tend naturally toward an introvert attitude, to turn outward and relate to others while reinforcing their self-expression. Patients often found it easier to express their feeling vis à vis their loss with others in a similar situation (often holding the sentiment that healthy persons cannot fully understand what they are going through). In such a group, patients were exposed to modes, other than their own, of coping with problems similar to their own. Their ability to accept and internalize such new strategies was increased by the fact that they come from patients like themselves. Patients also may have viewed the group as their temporary surrogate family, receiving warmth and support from the other participants.

The exact number of sessions, the time devoted to each meeting and the number both of patients and AT clinicians in a group were all of secondary importance and may have to be adjusted to the specific setup limitations existing in a given rehabilitation facility. Likewise, the exact AT methodologies applied need to be adjusted according to familiarity, experience and confidence of the staff. Our application of AT as part of a comprehensive rehabilitation program was not restricted to the short-term group therapy model presented here. For some patients, personal treatment extended over a period of several months (after discharge from the hospital) was found to be more suitable and beneficial than short-term group therapy. However, for many stroke patients, with a large variety of neurological and neuropsychological manifestations, who participated in our AT groups, the model presented here was found to be appropriate and effective.

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