

- iii) Callosal atrophy
- iv) Fornical atrophy, etc.

Note: Higher brain dysfunction may develop even if no pathological findings is observed in MRI.

(Appendix)

- ① Relationship between ventricular expansion or hippocampal atrophy and IQ has been reported.
  - Findings of deep white matter injury or ventricular expansion and decreased performance IQ (PIQ)
  - Increased volume of the inferior horn of the left lateral ventricle and decreased verbal IQ (VIQ)
  - Increased volume of the inferior horn of the right lateral ventricle and decreased PIQ
  - Decreased volume of the left hippocampus and decreased PIQ
- ② Findings that are characteristic to diffuse (widespread) axonal injuries such as brain-stem and callosal injuries observed in the acute phase *suggest* that the patient has higher brain dysfunction.
- ③ MRI findings regarded as related to higher brain dysfunction of infants
  - Findings of deep white matter or brain-stem injury
  - Findings of frontal lobe injury
  - Findings of cerebellar atrophy

### III Higher Brain Dysfunction and ICD-10 (Mental and Behavioral Impairments of ICD 10: the International Statistical Classification of Diseases and Related Health Problems, 10th Revision [F00 - F99])

- The diagnostic criteria for higher brain dysfunction apply to persons having disorders that are included in F04, F06 and F07 as causative disorders.
- Although not all persons having the disorders included in these three items are eligible for support, those disorders included in other items are excluded.  
Ex. Alzheimer's disease (F00), Parkinson's disease (F02)
- Cases whose causative disorders include traumatic brain injury, cerebrovascular damage, hypoxic encephalopathy, encephalitis and brain tumors, and whose main pathological conditions are memory problem, are classified in F04 and eligible.
- Cases whose causative disorders include traumatic brain injury, cerebrovascular

damage, hypoxic encephalopathy, encephalitis and brain tumors, and whose main pathological conditions are not amnesia, are classified in F06 and eligible. Cases only with attention problem or executive dysfunction are classified in F06.

- Posttraumatic stress disorder (PTSD) falls under F43 and is excluded.
- Functional amnesias represented by traumatic generalized amnesia fall under F40 and are excluded.

ICD 10: the International Statistical Classification of Diseases and Related Health Problems, 10th Revision (1992)

Items included in the diagnostic criteria for HBD.

**F04 Organic amnesic syndrome, not induced by alcohol and other psychoactive substances**

**F06 Other mental disorders due to brain damage and dysfunction and to physical disease**

**F07 Personality and behavioural disorder due to brain disease, damage and dysfunction**

Items excluded from the criteria

**F40 Phobic anxiety disorders**

**F43 Reaction to severe stress, and adjustment disorders**

## Chapter 2.

### Standard Training Program for Persons with Higher Brain Dysfunction

#### Overview

#### 1. Condition of higher brain dysfunction

##### Who are the persons with higher brain dysfunction (definition)?

Those who comply with the diagnostic criteria of higher brain dysfunction in Chapter 1.

##### What kinds of symptoms do persons with higher brain dysfunction have?

(Glossary: <http://www.rehab.go.jp/ri/brain/betten.html>)

Persons with higher brain dysfunction have symptoms such as the following:

- Memory problem
- Attention problem
- Executive dysfunction
- Unilateral spatial neglect
- Lack of disease consciousness

##### Focal symptoms

- Aphasia
- Apraxia
- Agnosia

##### Physical dysfunctions

- Hemiplegia
- Ataxia

##### Social behavioral disorders

- Anaclysis, regression
- Decreased desire control
- Decreased emotional control
- Poor interpersonal skills
- Perseveration
- Decreased willingness/spontaneity
- Depression
- Affective incontinence

##### How does higher brain dysfunction look?

Higher brain dysfunction is apparently often difficult to identify. This is like the fact that each of us has a different personality, and in many cases you do not see a person's internal characteristics unless you associate with the person. As a result of organic lesion of the brain, persons with higher brain dysfunction are sometimes reminded of the following points in social life through persons around them. These points serve as important clues to recognizing persons with higher brain dysfunction.

- Late for an appointment
- Gives up any job halfway
- Writes in random places/pages of a notebook for supplementing memory problem
- Is absent-minded
- Repeats the same question many times
- Takes food from children and eats it
- Generously spends money

- Insists that the superior, instead of himself/herself, is to blame for failure.

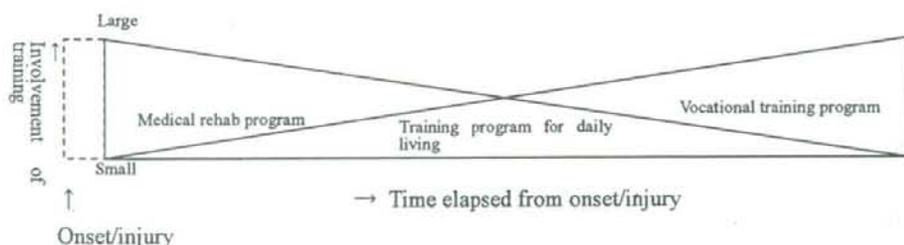
## 2. Training for higher brain dysfunction

### What kinds of trainings are available?

There are the following three types of training according to the relative period from the onset/injury and the goal:

- Medical rehabilitation program
- Training program for daily living
- Vocational training program

Medical rehabilitation programs (hereafter abbreviated "medical rehab programs") include psychological counseling, drug treatment and surgical treatment in addition to programs for coping with individual cognitive impairments (cognitive rehabilitation). In contrast, training for daily living and vocational training place a focus on acquisition of skills considered necessary for daily living or vocational skills, rather than on the cognitive impairment itself, even if the impairment is a serious problem.



### Implementation system of training

#### Medical rehabilitation programs are conducted under instructions from doctors

Medical rehabilitation programs are conducted under instructions from doctors. In the higher brain dysfunction support model project, patients received training at hospitals or rehabilitation facilities for the physically disabled persons in most cases. In the remaining cases, local facilities and workshops were used. In training programs for daily living and occupational skill, non-doctor professionals may take the lead. However, since those programs are series of trainings, medical information and cooperation with doctors are important. In any case, it is important for all the staff members share the problem(s) of the user and stay focused on the objective when conducting training.

#### Professions involved in training

Doctor: psychiatrist, neurologist, neurosurgeon, psychiatrist, internist, etc.

Non-doctor: psychological personnel, occupational therapist, physical therapist,

speech therapist, nurse, rehabilitation sport specialist, medical social worker, etc. Instructors for daily living and vocational instructors conduct training for daily living and vocational skills.

### **Training time**

Training time is adjusted according to the time from onset/injury and the circumstances (physical strength, concentration of the case).

### **Training period**

- Medical rehabilitation programs are conducted for up to 6 months
- Training should preferably be conducted for one year in total by linking various services

A report on the model project indicates that of the patients with impairments who received training, 74% showed improvement in the impairment scale based on the data obtained in the model projects in 6 months and 97% showed the achievement in one year. Therefore, medical rehab programs focused on functional recovery should be conducted for up to 6 months from the start. Thereafter, continuous training added with training for daily living and vocational skills should be conducted as necessary. The preference is to conduct the whole training program for one year.

### **Transition of training**

Concerning transition from a medical rehab program to training for daily living or vocational training, the rehab program should transition to training for daily living or vocational training if it is judged important for the patient to acquire skills considered necessary for daily living or vocational skills even if a cognitive impairment remains. Elements of training for daily living or vocational training should be added even during the medical rehab program, if necessary. In some cases, the client receives a medical rehab program again after receiving training for daily living. The flow of the whole training is not necessarily from a medical one to that for daily living and vocational skills.

### **Continuation and completion of the training**

Whether to continue or complete the training should be determined through evaluation performed every month to every three months. After completion of the training, the doctor should proceed to the support stage as requested by the patient or his/her family while referring to alleviation of symptoms indicated for higher brain dysfunctions, physical functions, ADL, neuropsychological test, change in

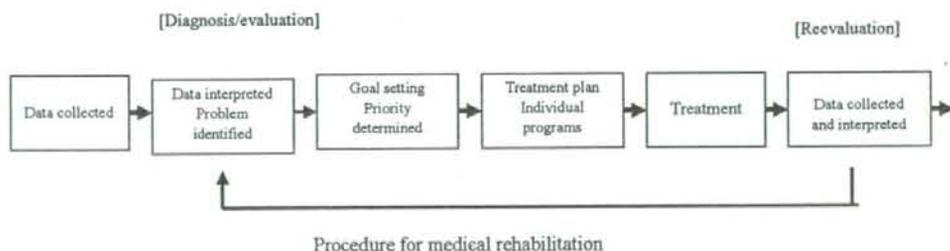
impairment scale, etc.

### Specific content of training by profession

Training for persons with higher brain dysfunction involves various specialists. The training consists of highly specialized contents and those elements handled as common issues between different professions. For example, for attention problem of a patient with higher brain dysfunction, an occupational therapist, speech therapist, clinical psychotherapist (psychological staff) and nurse are involved from their respective standpoints.

### Procedure for conducting training for persons with higher brain dysfunction

The procedure for the medical rehabilitation starts with the setting of a future goal while taking into account not only diagnosis and treatment of the disease but also the evaluation of impairment and functional limitation resulting from the disease as well as life history, socioeconomic environment and family background of the case, followed by formulation and implementation of a necessary plan and a specific program necessary to achieve the goal, evaluation of the progress after a certain period, modification of the goal and program as necessary, and then achievement of the goal.



### What is evaluation of higher brain dysfunction?

We function within a certain range of behaviors, such as being on time, keeping commitments and not spending money wastefully, by learning through school and social life from childhood. However, if a person is late for an appointment, the reasons include forgetting a commitment, forgetting time, being absorbed in something, being distracted by something else and taking the wrong way, and as a result, there may be various possibilities behind such a failure. If the patient does not keep a commitment, you have to also consider the possibility that the patient used to fail to keep commitment regardless of the injury/onset of disease.

When considering what kind of problem lies in higher brain dysfunction, you should pay attention to the following points.

- Interview on life history, intelligence level and behavioral characteristics before injury/onset (whether the dysfunction results from organic lesion of the brain)
  1. Evaluation through behavioral observation
    - (a) With a fixed viewpoint
    - (b) What in the higher brain dysfunction is the problem? → which test to use?
  2. Evaluation using a neuropsychological test
    - (a) Mean value and dispersion
    - (b) Reaction unique to persons with higher brain dysfunction
  3. Evaluation using a task
    - (a) Make comprehensive evaluation
    - (b) Consider the scene/situation

In making an evaluation, it is important to collect information on life and working place from the family, colleagues and teachers. In addition, information from the nurse and specialists concerning the place of conducting the training is needed. Based on these pieces of information, you should estimate what kind of cognitive impairment characteristics the patient has and which impairment concern the cause of difficulty in daily living. For example, if the patient cannot keep commitments as indicated above, you need to assess whether the memory impairment is the core problem.

Subsequently, conduct a neuropsychological test that corresponds to a specific function. Since the cognitive function of human beings is multifaceted, it is necessary to comprehensively make assessment through multiple tests. In addition, when conducting a test, it is necessary to fully consider the place of conducting the test, environment such as noise and difficulty of the task.

### **Formulating a training plan**

Set a goal based on the result of evaluation on higher brain dysfunction. In general, the need of the subject person is considered. However, in the case of higher brain dysfunction, the judgment or understanding of the patient is not always appropriate. It is important to set a realistic goal that meets the level of impairment through sufficient talks with the patient, family and school or working place. Examples of goals include reinstatement to work or school. However, given the recovery process of higher brain dysfunction, the goal may not be achieved during the medical rehab program period. Therefore, the preference is to set a goal that the patient can easily imagine and can be achieved in a short period in medical rehab settings.

When conducting the training, it is important to unite the intensions of all staff.

### **Specific goal setting is important**

The goal should preferably a realistic one that the patient can easily imagine. In many cases, the patient is not aware of his/her higher brain dysfunction, and therefore it is often difficult to gain the patient's understanding of conducting the training. It is important to identify the problem with daily living, working place and school based on the evaluation and have the patient understand the problem. It is necessary to unite the intensions of relevant professions through a conference in advance. Set a real-life goal that suits the ability of the patient, such as being able to make out a schedule and act according to the schedule, being able to manage cash by using a cashbook, being able to organize a cooking menu and being able to prepare necessary materials and being able to operate a personal computer, through consultation with the patient and his/her family or the like.

### **Precautions on conducting the training**

1. Selection of a task  
Adopt a realistic task related to the patient's daily life or working place.  
Select a task that meets the patient's interest as much as possible.  
Adjust the level of difficulty of the task so that the patient can have a sense of accomplishment.
2. Procedure for the training  
Proceed with the training in a stepwise manner.  
Provide feedback on the training effect to the patient in an easy-to-understand manner so that his/her willingness to receive training is maintained.
3. Adjustment of the environment (establishment of an environment where the patient will not be confused is essential for efficiently conducting the training)  
Coordinate physical environment of the patient room and the training room.  
Structuring of the environment: presenting a clue, patterning behaviors, etc.
4. Generalization efforts (a measure to enable the patient to apply what he/she has acquired in the training to everyday life is necessary)  
Exercise in various places and situations in the hospital.  
Set the training environment so that it is similar to the home life or working environment.  
Gain cooperation of the family so that training can be also conducted in the home.

### **Concept common to trainings**

Improvement of cognitive impairment is expected strongly. However, given that patients do not recover completely, it is necessary to take the following strategies for

any symptom.

- ①Improvement of cognitive impairment (cognitive rehabilitation in a narrow sense)
- ②Acquisition of a compensatory means
- ③Raising awareness of impairment
- ④Environmental adjustment (including approach to the family)

Strategy ① is a training method for specific cognitive impairments of persons with higher brain dysfunction, such as attention problem and memory problem. If this training is not effective, adopt compensatory means ②, which uses the remaining functions. For example, if the patient with memory impairment has more visual memory than linguistic memory, have him/her draw a picture and use a clue indicated in the picture. In contrast, if the impaired person is able to recognize his/her own dysfunction, it is easier to use various compensatory means (③). You should also take measures

④ designed to shape the surrounding environment in order to minimize inconvenience resulting from the impairment. Examples of this method include explaining the impairment to the family to gain their understanding and asking their assistance at the right time before the impaired person becomes confused, and asking the family to organize important belongings of the impaired person or have him/her carry them so that he/she can easily find them.

### **When actually starting a standard training program**

For professionals at hospitals or facilities that have not conducted training, for persons with higher brain dysfunction, there may be a number of uncertainties concerning specifically how to operate the team. The following are points that require your attention more than in daily rehabilitation.

1 The types of professionals at your hospital or facility

- (a)Encourage as many types of professionals as possible to get involved. Although not all types of professionals need to be involved, you should form a team by sharing the evaluation/training operations (in particular, the medical rehab program requires a doctor's leadership).
- (b)All the involved professionals should evaluate each case.
- (c)Hold a conference to set a goal for each case.

There are several forms of team rehabilitation. Since you handle abstract matters with higher brain dysfunction in many cases, many in the field agree an interdisciplinary team approach is preferable in order to deepen understanding among the team.

(d)Conduct the training.

The conventionally practiced one-day training is insufficient. Utilize innovative ideas such as practicing training conducted at the training room in a ward,

reducing spare time by giving homework assignments and producing an easy-to-understand daily schedule.

It is necessary to increase the ability of the team through actual experience such as selection of realistic training exercises and addressing psychological problems that arise in the course of training.

(e) Assess the result.

It is necessary to repeat evaluation on a regular basis and review the validity of the training program and the system for conducting the training. It is also important to receive an evaluation from the case himself/herself or his/her family.

2. Cooperate with a facility that provides training for daily living or vocational skills.

Establish cooperation from an early stage of the training. Create conditions where the patient and his/her family can lead their life at ease. Facilities used for training include hospitals (general hospitals, rehabilitation hospitals), rehabilitation facilities for the physically disabled persons, sheltered workshop, local facilities and small-scale workshops.

To manage these processes, the effective measures that enable the professionals, the patient and his/her family to share the problems and the solutions is to utilize an evaluation sheet such as the one below, identify the basic information (e.g., age, medical history, social background) and the problems (e.g., dysfunction, functional limitation, psychological problems), set the training goal, check the specific content of the training, have professionals involved, and evaluate and analyze the training result.

## **I Medical Rehabilitation Program**

### **1. Memory problem**

#### **a. Symptoms**

Suspect memory problem in the following cases:

- Cannot keep or forgets a commitment
- Does not remember where he/she has stored something important
- Insists that someone stole something
- Makes up a false story
- Repeats the same question many times
- Unable to remember new things

If there are any of the problems above and if memory problem is suspected, examine what aspect of memory is impaired and which function is relatively good. For future training, it is important to examine issues such as how long the case can remember an event, what types of memory (e.g., meaning of words, the case's experience and operations) it is about and whether there is a difference between word-based memory and vision-based memory. The following is a list of these factors.

#### Time related to memory

- Immediate memory or working memory (e.g., memory that lasts until making a phone call at a number he/she has found)
- Long-term memory (memory system for storing information until it is needed)
- Memory disturbance (e.g., recalling a phone number he/she called a while ago)
- Recent memory (e.g., about an activity on last Friday)
- Remote memory (e.g., an event from school days)
- Prospective memory (memory on a plan he/she is about to implement)

#### Types of memory

- Facts (semantic memory) (knowledge that he/she has remembered without noticing; e.g., the capital of the United States is Washington D.C.)
- Personal experience (episodic memory such as events that occurred to him/her)
- Skills and procedures (e.g., driving a car, word processing and printing)

#### Forms of memory

- Linguistic memory (information in the form of language such as written and spoken words)
- Visual memory (memory stored in visual form such as people's faces, patterns and layouts)

#### Stages of memory

- Coding (importing information and registering it)

- Storage (placing information in memory and keeping it until it is needed)
- Search (retrieving stored information when it is needed)

Ways of extracting memory

- Reproduction (act of recalling based on memory retention)
- Recognition (e.g., re-acknowledging whether he/she has seen the thing/person)

Time when an event is memorized

- Retrograde memory (memory of an event that occurred before an accident/illness)
- Anterograde memory (memory of an event that occurred after an accident/illness)

Establish what kinds of memory impairment characteristics the case has through evaluation concerning memory.

#### **b. Evaluation**

Perform evaluation in the following tests:

- (Generalized memory test) WMS-R (Wechsler Memory Scale-Revised.)
- (Verbal memory test) Miyake Verbal Retention Test
- (Visual memory test) Benton Visual Retention Test, REY figure test
- (Everyday memory test) RBMT (Rivermead Behavioural Memory Test)

In conducting training, pay attention to the following points:

- Understand the severity of the memory impairment, the impaired area and the relatively sustained area.
- Test on presence of other cognitive impairment.
- Aim at unerring learning.

#### **c. Training**

The following methods are available:

Repetitive training

Environmental adjustment

Internal memory strategy

- Visual imaging method
- Face-name association method
- Peg system
- Linguistic strategy
- PQRST method (Preview, Question, Read, State, Test)
- Verbal mediation method
- Initial letter memory method

- Rhyming method
- Story-making method

#### External auxiliary means

Each of us has the means to externally store information and clues to accessing information that is internally stored. If you have memory impairment, you forget these means themselves and cannot utilize them. To raise the case's awareness of these means and encourage him/her to actively utilize them, include them in the training and have the case acquire them.

#### Other methods

- Region-specific knowledge learning

This method focuses on the acquisition of information on everyday functions and is used in personal name learning, new vocabulary acquisition, etc.

- Clue reducing method

In this method, after presenting the definition of a term, add one letter after another and continue it until the case correctly reacts to it. Subsequently, remove the clue text one letter after another, and repeat it until the case can correctly react to the task without a clue.

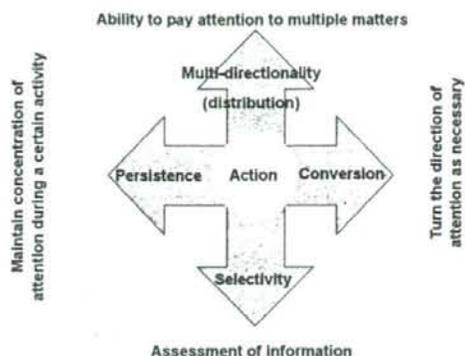
## **2. Attention problem**

### **a. Symptoms**

Presence of attention problem can be predicted from the following characteristics:

- Frequently sleeps in a chair or wheelchair
- Walks around on the ward and enters other rooms
- Interested in a person and sticks to the person
- Meddles in a task performed by a person next to him/her
- Tries to act without judging the surrounding conditions
- When an elevator door opens, immediately walks in
- Cannot continue a task for a long period
- Reacts to talk by a person and considers the talking as his/her own

These situations are not unique to attention problem and may include other elements of higher brain dysfunction. However, they will serve as clues to recognizing this impairment. Attention is the base for all cognitive functions, and it is included in all actions required for various persons to lead their social life and serves to integrate these actions. Attention is considered to consist of the following elements, and these elements need to be well balanced.



### b. Evaluation

Evaluation of the presence and degree of attention impairment is performed.

In performing evaluation/training of cases with attention impairment, you need to take into account their tasks and environments. In the meantime, if the evaluation or training advances, you can examine whether the speed of task processing is reduced or attention can be sustained by intentionally changing the environment.

### c. Training

In an early stage from injury/onset, it is likely that the case also has disturbance of consciousness. It may not be appropriate to start training suddenly in some cases.

## 3. Executive dysfunction

### a. Symptoms

Symptoms of executive dysfunction have the following findings.

- Late for an appointment
- Unable to finish a job as promised
- Gives up any job halfway
- Writes in random places/pages of a notebook for supplementing memory problem
- Unable to perform a task he/she used to be able to perform, if asked differently

Since executive dysfunction involves various factors as shown below, it is important to evaluate what kind of mechanism is the cause. In addition, the cause may be attention impairment or memory impairment. Carefully observe the case operation, and find a specific mechanism based on how a failure or mistake occurs.

- Self-recognition
- Goal setting
- Planning
- Spontaneity
- Self-monitoring

#### **b. Evaluation**

Neuropsychological tests: BADS, WCST, frontal assessment battery at bedside (FAB), TMT, Stroop test, WAIS-R, Verbal fluency test, Tower of Hanoi, SPTA, GATB, KOHS block-design test, notebook diagnostic strap knotting test, box building test, four-frame cartoon explanation, reading test (speed-reading)

Behavioral evaluation: specific tasks through paper crafts, handicrafts and woodworking

Behavioral observation in daily life and workplace

If the judgment is that a specific mechanism is involved, examine the following as training.

- Study a treatment (e.g., drug) that supplements that area.
- Break down the operation process into sub-processes as routines.
- Conduct training using a series of routines.
- If the case fails in a certain process, provide assistance for that part.

#### **c. Training**

- Direct training (the case exercises necessary behaviors/actions or combination of them)
- Self-teaching, problem-solving training (the case and the trainer think about a solution and planning together)
- Manual utilization (the case performs a task by himself/herself according to the steps)
- Simplification of the environment (show the schedule in a big framework and pattern the behaviors)
- Behavioral therapy (contrive ways of providing guidance and instructions)
- Feedback of the performance result
- Acquisition of a compensatory means

Provide training by using these methods in the following.

- Desk task (e.g., workbook)
- Work activity task (e.g., assembly kit)
- Task of activity of daily living (e.g., changing clothes training, housework)

- Work life task (e.g., document creation)
- Task of producing something in a group
- Social life task (e.g., schedule managing)

#### 4. Social behavioral disorder

##### a. Symptoms

Symptoms include anaclisis/regression, decreased desire control, decreased emotional control, poor interpersonal skills, perseveration, decreased willingness/spontaneity, depression, affective incontinence and others (e.g., withdrawal, disinhibition, paranoia, wandering).

Such symptoms have the following characteristics:

- Gets excited, shouts or behaves violently
- Shouts whenever a thing does not go the way he/she wants
- Pursues a person and becomes a nuisance
- Forces a trainer to associate with him/her
- Commits a filthy or sloppy act
- Injures himself/herself
- Dissatisfied if he/she is not the central person

##### b. Evaluation

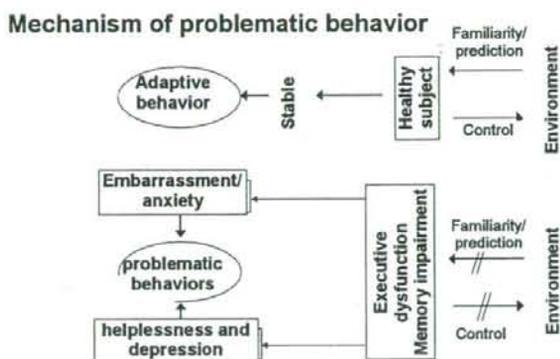
- Record and analyze findings of what led to the problematic social behavioral impairment in daily life/training scenes (contextual study).
- For anti-social behaviors and regressions, the adaptive behavior scale (ABS) and the social maturity scale are available.
- Examine whether there is any cause of inducement such as use of a sedative.

##### c. Response

- Environmental adjustment
  - ① Placing the client in a quiet environment
  - ② An environment where the client is not surrounded by too many people
  - ③ Placing the case in an environment where the client will not become tired
- Behavioral therapeutic response: Together with the client, think what the problem is and how to address it. If possible, have him/her write a pledge in advance.
  - ① Positive reinforcement: Use social-reinforcement means (praising/encouraging the client, grab his/her attention, etc.)
  - ② Interruption (time-out): Using the TOOTS (time-out on the spot) method, if the client commits an inappropriate behavior, ignore the behavior and leave the site for a while, or place the client outside the training room for a few minutes.

- ③ Response cost: Give a value to the client's behavior. If the client can control the behavior, the value is kept high and the client can replace the value with a certain article.
- ④ Treatment of avoidance behavior from saturation: Each time the client shouts, let him/her keep shouting for a few minute.
- ⑤ Positive punishment: This is regarded as unfavorable to use this method.

It has been reported that memory problem, executive dysfunction and other impairments observed in persons with higher brain dysfunction make it difficult for those persons to predict environmental change and prepare for it, and the resultant failure causes anxiety, confusion, helplessness and depression and could lead to problematic behaviors (see the figure below).



Sakazume, 1998

## II Training Program for Daily Living

The purpose of training for daily living is to increase the case's abilities to perform daily living tasks and social activities in order to stabilize his/her everyday life and enable him/her to actively participate in society.

For persons with higher brain dysfunction, it is extremely important to enhance their understanding of their impairments and acquire compensatory means through training. In addition, it is important not only to provide direct training to the patient, but also to improve his/her environment including asking his/her family for their support.

### 1. Evaluation

The training may be conducted mainly at social rehabilitation facilities rather than medical rehabilitation facilities.

<If the training is conducted at a hospital>

Perform evaluation of ① impairments such as physical dysfunction, higher brain dysfunction and mental dysfunction, ② life-related impairments such as difficulty in daily living and ③ environmental factors such as family background, growth history, living environment and economic situation through neuropsychological test, behavioral observation or interviews. Based on the evaluation result, set a goal and prepare an environment for hospital life while taking into account various needs and conditions.

#### 【Points to remember】

- Understand the attitudes of the patient and the family toward the impairment.
- If the patient is a child, it is necessary to take into account the growth stage.
- The patient may face a problem for the first time after being hospitalized. Utilize data on actual hospitalization and training scenes, and perform evaluation as necessary.
- Identify the differences between the need and the demand, and between subjective evaluation by the patient and objective evaluation by other people.

<If the training is conducted at a rehabilitation facility for the physically disabled persons>

As with the method for care management for the persons with disabilities, understand the living conditions and the circumstances surrounding the patient, identify the requests of the patient and the family and find out the specific living need from the chief complaint. If medical evaluation and neuropsychological evaluation are performed, the overall evaluation will be more effective.

#### 【Points to remember】

- In many cases, the patient's recognition of the impairment is insufficient and there

is a gap between the chief complaint and the reality.

- Cognitive and behavioral impairments are difficult to recognize from the appearance of the patient. Since in some cases ordinary handling is available, it is necessary to interview both the patient and the family.
- In finding out the living need, use a support need assessment sheet and an existing standardized assessment sheet.
- Ask the patient about unclear and sensitive matters only after a trust relationship has been built.

## **2. Planning the training**

Based on the information acquired through evaluation, make clear the future goal and the problem that has to be solved in order to achieve the goal. Identify the true problem for the patient after full understanding of not only the request of the patient and his/her family but also the actual living conditions. After thorough interviews with the patient and the family, confirm the specific problem, the required training (support) content, the support staff and the training period, and then, plan the training (support).

### **【Points to remember】**

- In formulating the plan, if there is a big gap between the request of the patient or the family and the reality, set long-term and short-term goals and provide support. Then, provide feedback of the result to the patient and set a new goal, to thus make the goal more realistic.
- Set a short-term goal using content and wording that are specific so the patient can easily understand.
- If the cognitive impairment or behavioral impairment significantly affects the patient, aim to establish a daily rhythm and enhance life management ability.
- If the impairment does not greatly affect everyday activities, strive to enhance the patient's social skill through actual experience.
- If the patient is hospitalized, strive to enhance his/her activity during daytime.
- Prepare a subsequent program from the viewpoint of continuous services.

## **3. Conducting the training**

<Content of the training/support>

### **① Establishing a daily rhythm**

Many patients have difficulty in building their routine and leading a life in accordance with routine. They spend much time in bed or have an activity problem such as reversal of day and night due to memory problem and decreased spontaneity or willingness.

Encourage those patients to acquire regular lifestyles and enhance their activity

during the daytime through life in the facility.

Even if the patient has difficulty controlling his/her emotions and desires and is prone to having a problem with routine accomplishment and interpersonal matters, presenting a clear framework for living frequently leads to stabilization of their life. The recommendation is to talk to the patient and guide him/her to perform checking whenever necessary so that the patient can live in accordance with their routine.

#### **【Points to remember】**

- Present a daily schedule or weekly schedule in an easy-to-understand manner in order not to build anxiety or confusion in the patient.
- For daytime, prepare various exercises and activities in order to also increase the patient's activity.
- The patient may easily behave and life may be stabilized if you minimize the idle time between trainings and establish a continuous training schedule.
- Observe whether life at a hospital or facility generates great stress for the patient.
- If the patient is mentally ill at ease and the state of participation in the training widely fluctuates depending on the day, write in a "memo notebook" among the staff and hold a staff meeting on a regular basis (e.g., once a week) in order to share information and unify responses among the staff.

#### **【Clues for the training】**

- Since life at a facility requires the patient to conform to other persons in the facilities, a daily rhythm is naturally created in many cases. Even for patients visiting a facility, it is relatively easy to build a daily routine since the visit serves as one of the cores of his/her life. The preference is to adjust the frequency of the facility visit in a stepwise manner from once to five times a week, according to individual circumstances.

### **② Increasing the life management ability**

Management of routine:

To help the patient behave independently in accordance with the routine, establish an environment that allows the patient to easily live by providing compensatory means such as utilization of a calendar and by posting noticeable marks and guide indications in the calendar.

Establish the use of compensatory means that suit the case such as a calendar and a notebook. Allow time for a "morning meeting" before starting the training, where the involved members check the schedule of the day. After the end of the training, allow time for a "gathering" in which the members reflect on the day in order to have them understand the necessity of recalling memory and use of compensatory means.

Management of drug administration: