Head injuries, particularly as a result of motor vehicle accidents, have become a national epidemic. The National Head Injury Foundation (1986) estimated that 100,000 people die annually from head injuries and more than 700,000 have injuries severe enough to require hospitalization. From a medical, social, and economic standpoint, head injuries place a heavy burden on communities (Askenasy & Rahmani, 1988), and persons with severe head injuries often require more services than can be provided in traditional rehabilitation programs.

The client with head injury who emerges from a coma characteristically demonstrates agitated behavior (Berrol, 1988). This behavior can continue and interfere with the client's rehabilitation potential (Klauber & Ward-McKinlay, 1986). When the client's behavior becomes unmanageable, he or she requires treatment that manages both mental health and physical disability progress (Kinsella, Moran, Ford, & Ponsford, 1988). This paper describes the occupational therapy program of a woman with brain injury who exhibited not only cognitive problems but also severe behavioral problems.

Client History

The 48-year-old client sustained a closed head injury when she was thrown from a speeding car. She was admitted to an acute care hospital, comatose and ventilator-dependent, with a blood alcohol level of .109. After emerging from a 5-day coma, her clinical condition was further compromised by pulmonary problems, including bronchospasm, pneumonia, and vocal cord edema. Once stable, she was weaned from the ventilator and her tracheostomy was subsequently closed. After 58 days, she was transferred to a rehabilitation hospital to continue treatment.

At the rehabilitation hospital, the client began acting out, and her behavior was unmanageable. On several occasions she used her room phone to call local police on the 911 line, and she was both physically and verbally abusive to staff. She began to refuse all therapy and required close supervision to ensure her safety and the safety of others. As a result of her unmanageable behavior, she was confined to a net bed, which is an adult-sized crib covered with a nylon net. After 79 days, the client was transferred from the rehabilitation hospital to the neuro-behavioral unit of Cedar Lane Rehabilitation and Health Care Center, Waterbury, Connecticut, for an intensive behavioral program. On admission, the client was agitated, verbally and physically abusive, and uncooperative with all interventions. Her primary goal was “to get out of this place.”

Evaluation

The initial occupational therapy intake and interview showed that the client's gait was mildly ataxic and her
attention span was less than 5 min. She appeared depressed, stating that she had no friends. The client demanded to go home. Her insight, reality testing, and judgment were poor. She neglected her diabetes-related needs and showed low motivation to complete her activities of daily living. Two psychosocial evaluations—the Bay Area Functional Performance Evaluation (Bloomer & Williams, 1982) and the Comprehensive Occupational Therapy Evaluation (Brayman & Kirby, 1982)—were used to supplement the in-house occupational therapy evaluation. Her resulting psychosocial behaviors were limiting her ability to make progress in her cognitive and independent living areas due to such problems as poor insight, reality testing, and judgment. The interdisciplinary team established the following long-term treatment goals with the client, to be addressed through occupational therapy:

1. The client will extinguish aggressive, demanding behavior and use effective coping strategies in times of frustration.
2. The client will understand the consequences of negative social behaviors and will develop prosocial skills.
3. The client will improve reality testing and awareness of her environment to a level that allows her functional independence.
4. The client will be able to focus on a task, without cueing, for at least 30 min.
5. The client will complete her activities of daily living (i.e., grooming, dressing, eating, housekeeping) with minimal supervision.
6. The client will develop and then follow a daily schedule independently.

Barriers to reaching these goals included the client’s poor coping skills and inhibition of feelings as well as a tendency to overreact when her needs were not met. The in-house evaluation showed that her cognitive abilities were limited and that she was unable to identify the source of her frustrations. She interpreted the program limits as punishment. Before admission to the neurobehavioral program, she had had negative experiences when trying to make her needs known. For example, when she needed assistance, she had demanded staff attention by screaming and then viewed staff feedback about her negative behavior as a personal attack. The client had impaired organizational skills and seemed unable to clearly screen sensory input. She was confused as to her surroundings and had difficulty focusing on questions. She became agitated and defensive when she was unable to make sense of her environment and had difficulty facing the consequences of her negative behavior. She sometimes denied she had diabetes, and her negative social behavior interfered with her ability to comply with her grooming, dressing, housekeeping, and dietary responsibilities.

**Intervention**

A basic premise of the neurobehavioral program at Cedar Lane is the reinforcement of prosocial behaviors and the extinguishment of negative social behaviors as soon as possible. Negative behavior that is not dangerous to the client or others is ignored. To address this client’s specific behavioral problems, such as her aggression, poor reality testing, and negative social behavior, the treatment team required her to participate in daily community meetings with staff and peers to review expectations for the day. Team members provided clear guidelines of expected behavior. I, as the occupational therapist, reviewed the client’s daily schedule and the behaviors that were expected in therapy sessions. Any positive behaviors already exhibited by the client were encouraged, and verbal praise was used whenever possible. A wrap-up meeting to review progress for the day was scheduled in the evening and carried out by evening staff. Peer feedback was encouraged in both meetings. This environment provided the opportunity for both peers and staff to use positive reinforcement or praise when the client exhibited appropriate behavior. This was a new experience for the client, who had only met with negative experiences when her behavior was inappropriate.

In addition to these community meetings on the unit, the client attended small structured groups three times per week. I conducted these groups and provided social skills training and projective art experiences. In these groups, the client was encouraged to develop coping skills by role-playing in various social situations and to ventilate her feelings through guided art projects. Social skills training focused on the clients’ awareness of passive, aggressive, and assertive behavior, as outlined by Alberti and Emmons (1974). Projective art techniques were used from several sources, depending on the therapist’s evaluation of the client’s most urgent need at the earlier community meeting. For example, an issue such as arguing with a roommate the night before could result in a project about being frustrated. These techniques included exercises from Striker (1983) and craft projects developed by the therapist to elicit feelings. Whenever possible, social skill techniques learned earlier were incorporated into the projective art session summary to assist the client in learning how to deal with her feelings in a socially appropriate manner.

Throughout the day, staff provided reality orientation during individual conversations with the client. The client was encouraged to think through her behavior, choose a behavioral option, and identify the consequences before she acted.

To address the cognitive problems seen earlier in the in-house evaluation, the occupational therapist and a special educator had the client complete further cognitive testing. Allen’s Cognitive Level Test (Allen, 1985) was used, along with other tests administered by the special
The client showed a great decrease in demanding behavior and showed no aggressive behavior. She appeared calm and relaxed. Her behavior was controlled without medication. When upset, she made her needs known appropriately. She developed and successfully implemented such coping skills as asking clarifying questions or going to a quiet area to reduce environmental stimuli. However, she occasionally needed a reminder to think out a problem before acting on it. The client showed appropriate social skills with staff, peers, and visitors. She was helpful and supportive to new clients on the unit, and her family reported that her social skills were better than they had been prior to her injury and that she appeared calmer.

The client was able to focus on a task for 30 to 60 min, depending on the level of her personal interest in the task. She was again enjoying hobbies that she had enjoyed before her injury, such as needlework. Oriented to person, place, and time, she was alert to events around her and could accurately report them to others. Her insight into maladaptive behaviors improved greatly. Initially with reminders and then independently, the client was able to cognitively process her behaviors.

The client was able to manage her diet and could verbally report the importance of not drinking alcohol. She agreed to attend one meeting of Alcoholics Anonymous, which was arranged with a family member.

She was independent in bathing, dressing, and maintaining her clothes and personal items. She could correctly identify home emergencies and how she would handle them. She followed her own schedule and outlined the schedule she would need to follow when she returned home and to work. She verbalized appropriate expectations for returning to work.

**Discharge and Follow-Up**

The client was discharged to her apartment after 58 days of treatment. She returned to her job 1 week later. Initially, she faced some difficulty at work related to her behavior (i.e., she did not get along with her peers) but was able to turn this around with the support of outpatient therapy. Six months after discharge, she continued to live independently and maintained her job. Both she and her family reported that she was not drinking alcohol and that the transition from the facility to the community was successful. The client was successful because the treatment program provided her with the structure needed to meet her rehabilitation goals.

**Outcome**

After 58 days of treatment in the neurobehavioral program, the client showed a great decrease in demanding behavior and showed no aggressive behavior. She appeared calm and relaxed. Her behavior was controlled without medication. When upset, she made her needs known appropriately. She developed and successfully implemented such coping skills as asking clarifying questions or going to a quiet area to reduce environmental stimuli. However, she occasionally needed a reminder to think out a problem before acting on it. The client showed appropriate social skills with staff, peers, and visitors. She was helpful and supportive to new clients on the unit, and her family reported that her social skills were better than they had been prior to her injury and that she appeared calmer.

**Discharge and Follow-Up**

The client was discharged to her apartment after 58 days of treatment. She returned to her job 1 week later. Initially, she faced some difficulty at work related to her behavior (i.e., she did not get along with her peers) but was able to turn this around with the support of outpatient therapy. Six months after discharge, she continued to live independently and maintained her job. Both she and her family reported that she was not drinking alcohol and that the transition from the facility to the community was successful. The client was successful because the treatment program provided her with the structure needed to meet her rehabilitation goals.

**Acknowledgment**

I would like to acknowledge the assistance of Peter Evangelisti, program director at Cedar Lane Rehabilitation and Health Care Center, Waterbury, Connecticut, in the preparation of this case report.
References


*Editor's Note*. To continue the Case Report department, we need welcome reports that document the practice of occupational therapy for specific clinical situations. Guidelines for writing case reports are available from the Editor.