Behavioral problems following traumatic brain injury (TBI) present tremendous challenges to family members as well as those working with persons who have a TBI. These behaviors can interfere with all aspects of individuals’ lives, from the rate of recovery, to safety issues, to an ability to socialize.

There is no way to predict if behavior problems will occur or how long they will continue. Some individuals with TBI do not experience behavioral problems, while others exhibit a variety of problems. Typical behavior problems of individuals with TBI include not being able to control their temper, not being aware of proper social behavior, not obeying directions, as well as restlessness and agitation.

All of these problems have one thing in common; they are all caused by the neurological disruption that occurs with a head injury. It is important to understand that when individuals with TBI have behavioral problems, they are not purposely misbehaving. Knowing this can help you understand the behavior of persons with TBI. It can also help lessen your concern and anxiety when interacting with them. In working with persons with TBI, keep all of your options open as to how you respond to problem behaviors.

Understanding Behavioral Problems

It is helpful to understand some general principles about behavior when dealing with behavior problems.

First, you cannot control other persons’ lives. You cannot force someone to do something. Each person is responsible for herself or himself. Thus, the goal for handling behavior problems is to manage your own behavior and not that of the other person. The same applies when dealing with individuals with TBI.

It is unrealistic to think you can totally do away with negative behaviors exhibited by persons with TBI. Expecting to totally eliminate behavior problems will lead to frustration. A more appropriate goal is to minimize the inappropriate behavior, even if there are periodic behavior problems.

Remember to not take the behavioral outbursts of individuals with TBI personally, even though they may behave in a very offensive manner and direct their comments or actions towards you. Try to distance yourself emotionally from this.

Agitation and Restlessness

Agitation and restlessness displayed by individuals with TBI are the result of injury to the brain. This type of injury can cause them to have a limited attention span, poor reasoning skills and limited memory. This makes it difficult to stay focused on a particular event or topic and to figure out what to do if a problem arises. All of these factors contribute to agitated and restless behaviors.

Agitation and restlessness are sometimes described as a stage in the recovery process following TBI. However, it is difficult to predict who might experience agitation and restlessness and if it will be a short or long-term problem. The length of time that individuals experience these behaviors varies. Often you need to “ride the storm” for a few days to see if the behavior will be short-lived or if interventions, such as medication, are needed. This means that you must be very patient and know ways to manage agitated and restless behavior.
Approaching and Interacting with Individuals with TBI

How you approach and interact with individuals with TBI can affect their behavior. Keep in mind, they may be confused and react impulsively. How you present yourself can influence how restless or agitated they become.

- **Use a social greeting**, such as “Hi (name), how are you?”, as you make contact. A handshake may accompany the greeting. The handshake and greeting are cues to relax. Remember, introduce yourself each time you make contact. The person may not remember you from previous contacts due to memory problems.

- **Speak slowly and clearly** during your conversations. This gives the person time to process what you are saying if his or her cognitive (mental) processing is slowed by the TBI. Be very direct and brief in what you say. It is better to say, “Can I comb your hair?” than, “You wouldn’t mind if I combed your hair, would you?”

- **Avoid repeatedly disagreeing** with the person. It is important to correct inaccuracies and confusion, but not to an extent that an argument occurs. A good rule of thumb is to correct an error when it first occurs, but do not insist on your viewpoint if an individual with TBI claims he or she is right. It is usually not effective to logically reason with an individual who has a tendency towards agitation. At that point it is helpful to change the subject or make comments that neither agree nor disagree. For instance, he or she may tell you something is lost when you know it is not. If a person is not willing to accept that the item is not lost, just assure him or her that the lost item will turn up shortly.

- **Always explain your intentions** before beginning an activity. Explain in very brief terms what is going to happen. This can prevent a startle reaction that could lead to agitation.

- **Avoid sudden touching or grabbing**. Use a greeting and some conversation before touching a person with TBI. Then you should only touch with a gentle hand pressure on the shoulder or arm. Grabbing and holding firmly should only be used in situations where there is obvious danger to the person or when other interventions do not work.

  - **Redirect the attention of a person with TBI**. When a person with TBI shows signs of becoming upset, you can change topics or activities to something less disturbing or confusing. Humor can also be a helpful distraction. Laughter shows that you are not too rigid or formal. It is important, however, that a person with TBI not feel that others are laughing at him or her.

  - **Formally end your contact** with a person with TBI. Although we do not commonly do this in our everyday contacts, it is an important step. Often individuals with TBI are not aware of cues that suggest that you intend to leave or end a conversation. Therefore, it is important to state your intentions, “I have to leave now (name).”

When you use these general rules of contact, your interactions with a person with a severe injury are likely to be smoother. There is less chance for agitation, restlessness or other behavioral problems to occur.

Managing the Environment

Managing the environment can actually be a way to treat behavioral problems and to decrease problems with agitation and restlessness in persons with TBI. It is often difficult for individuals with a head injury to remain calm in an active environment. A lot of stimulation, such as loud televisions, loud conversations, and crowds, can increase their restlessness.

- **Create a calm environment**. This may mean guiding the individual with TBI to a quiet room, closing a door, or turning off the television.

- **Stay in control of your behavior**. Remember, you need to stay calm and speak in a low, calm voice.

- **Use gentle physical contact**, such as rubbing the individual’s shoulder. Remember that you need to alert the person of your intended actions.

- **Physical restraints** are sometimes needed if there is significant danger to the injured person or others.
You should first discuss the type and use of restraints with the person’s doctor. The use of restraints can sometimes increase agitation in individuals with TBI.

**Medications**

Medications are another treatment used to manage restlessness and agitation. Propranolol® is one drug that can have good results. It decreases the behavioral dyscontrol and agitation commonly seen in individuals with TBI. Anti-depressants, such as Zoloft® (sertraline) or Prosac®, are also prescribed. Occasionally mild tranquilizers, such as Buspar® (buspirone), may be beneficial. Another class of mild tranquilizers are benzodiazepines (Ativan® or lorazepam). These drugs are used for short periods of severe agitation. However, research with animals shows that their prolonged use can possibly reduce cognitive function and slow recovery from TBI. In extreme cases, such as when individuals with TBI are at risk of harming themselves or others, major tranquilizers are used. Drugs such as Risperdal® (risperidone) or Zyprexa® are prescribed more often because they have fewer side effects than more traditional drugs (Haldol®, Mellaril® and Thorazine).

One consideration in using medications to reduce restlessness and agitation is their side effects. These drugs usually affect a person’s mental status. This is a problem for individuals who already have significant memory loss due to their injury. Certain drugs may make it more difficult for some individuals with TBI to participate in their daily activities. This can then slow the recovery process. However, there may be situations where medication is desired. For example, you may have a problem getting a person with TBI to stay in bed and go to sleep at night. A mild sedative would be a better choice than restraints.

**Noncompliance with Treatment**

Unwillingness to participate in normal daily activities is a common problem when dealing with individuals who have a TBI. This can be anything from refusing to dress, eat, or participate in therapy sessions. Often, this is a sign of confusion or it may be a way of saying that a certain activity is uncomfortable. This can be a difficult situation to handle. While you do not want to force your loved one to do something, you do need to see that she or he completes certain tasks. One-way is to change her or his mind is to create a situation where she or he wants to participate, even if not enthusiastically.

- **Determine what activity is being refused and why, if possible.** This may be difficult when working with persons who are confused. However, it may make the difference in getting them to participate in an activity. An example is when persons with TBI refuse to do a simple daily routine, such as getting dressed. You can ask why she or he does not want to get dressed. It may simply be that the color of the clothing is not right or the clothes are uncomfortable.

Another reason for not wanting to take part in an activity is because she or he is tired and need some rest periods during the day. If you take time to find the reasons for refusing to do something, you may find the answer for getting participation in an activity. Remember, something may not seem important to you, but it is to her or him.

- **Redirect the attention** of persons with TBI when you want them to take part in an activity and they refuse. Simply move on to a different activity. Then at some point in the future you can return to the refused task. This often works because of her or his limited attention span and memory abilities. One way to create a distraction is to play music during an activity or count during tasks, such as when doing stretching exercises. Be aware, however, that sometimes the distraction interferes with one’s ability to focus on the task at hand.

- **Explain activities to persons with TBI so they know what to expect.** Individuals are usually more likely to refuse to participate when they do not understand what is happening. If an explanation does not work, then you can try changing the order of the tasks. For instance, if dressing is very difficult, then it could be left until the very end of the morning routine. Other tasks can be done first, such as of taking medications and eating breakfast.

- **Provide choices.** As the mental abilities improve, individuals with TBI want to have some control over their lives. They may refuse to participate if they think they are being “forced” to do something. You can improve this situation by providing choices. Just be sure that the choices you give are acceptable. For instance, you can let your loved one make choices in
what to wear or in his or her daily activities. Present the choices as an either/or decision. For example, ask if he or she wants to wear the blue shirt or the red shirt rather than asking, “What do you want to wear today?” Too many choices make it difficult to decide and can increase confusion and agitation.

- **Bargaining** is another way to get persons with TBI to cooperate. This works best later in the recovery process. Bargaining is a way to reinforce their participation in an activity. The “bargaining tool” should be something that a person likes to do, such as watching television. You can encourage getting dressed as quickly as possible so there is time to watch a favorite morning TV show. It may be possible to get him or her to agree to do one activity if an enjoyable activity follows.

- **Written goals** can give a sense of control. Be sure to post the goals where they are easily seen, such as on the refrigerator or the door to an individual’s room. A checklist can be one way to encourage a higher functioning individual to complete his or her activities independently. For example, you can provide a checklist of activities to be completed every day. This makes a person responsible for carrying through with tasks.

- **Make the tasks meaningful.** This can be challenging. Often, routine activities and tasks are not very motivating. In addition, many individuals are limited in what they can do because of their brain injury. Individuals with TBI want to resume their lives and participate in daily activities. For an adult, this means returning to work, being with family, driving a car and engaging in social activities. However, they may first have to re-learn basic skills, such as balance, dressing, and attention skills. Explaining that these basic tasks are stepping-stones to being independent may be helpful.

- **Provide feedback.** You can do this by telling your loved one that he or she has done a good job and provide a smile for reassurance. The impact of such comments should not be underestimated. Positive feedback should be used often.

**Temper Outbursts**

Everyone’s temperament varies. For individuals with head injury, anger and irritability may occur more frequently than with the average person. The cause of these temper outbursts after TBI is related to the type of injury to the brain. Often a TBI occurs to the frontal areas of the brain where the damage causes individuals to be unable to hold back their emotional and verbal responses.

While most people become angry at some point in their lives, they are able to control their anger or “keep it inside.” However, individuals with TBI have what can be described as a “quick fuse.” It is like the gates fly open and emotions come out. Their temper rises rapidly and outbursts may occur over relatively minor events. These outbursts are often unpredictable. What makes them angry today may not make them angry tomorrow.

Individuals with TBI are usually not violent but may make harsh or loud comments and/or show changes in facial expression. Typically the event lasts only two to three minutes at most. After the outburst the person returns to normal rather quickly. She or he no longer seems concerned about what just happened, although she or he may give a short apology.

Remember, these temper outbursts by your loved one are a result of the injury and are not directed at you personally. Your best response is to:

- **Remain calm.**

- **Look for any obvious reason for the temper outburst. Remove the cause** if at all possible or direct the individual away from the stimulus.

- **Do not try to reason or get into an argument with a person with TBI.** This can create more difficulties since many individuals with TBI do not have good reasoning skills. When arguing, these individuals are very emotional. Wait until the temper outbursts are over before trying to talk about what caused the outburst and how it might have been handled differently.

- Get control of the outburst or “nip it in the bud.” As you get to know how your loved one reacts to situations, you may be able to tell when she or he is getting anxious or confused. You can then intervene before a temper outburst occurs.

- **Use a reinforcement program** to decrease the number of temper outbursts. This works best with
individuals who have higher functioning abilities. You keep track of the number of temper outbursts during the day. If the number of outbursts does not exceed a specified number, then the person can choose an activity. For example, if only one temper outburst occurs in the morning, after lunch she or he can watch a movie or play a video game.

- **Medication.** This should be a final choice to help decrease temper outbursts. These drugs can be expensive and they usually result in some clouding of mental abilities.

**Socially Inappropriate Behavior**

Sometimes individuals with a head injury say things that are rude or insensitive. Again, you need to remember that this is the result of cognitive problems caused by an injury to the brain. They are unaware how their behavior affects those around them. It is not meant as a personal comment to you. If you react to this behavior personally, it may create more problems.

Crowds and conversations with more than one person often cause individuals with TBI to become more confused. When this happens they are more likely to make inappropriate or irrelevant comments. Some ways to handle this behavior if it occurs in a social setting are to:

- **Redirect attention to another topic.**
- **Try to gently remove the person from the situation.**
- **Use nonverbal cues, such as a time-out signal.** This can let them know that there is a problem with their behavior.
- **Avoid embarrassing a person with TBI** by commenting on his or her behavior in front of others. An individual with TBI is still an adult and wants to be treated like an adult. You need to talk about the improper behavior, but do this one-to-one and in a sensitive manner.
- **Be a role model and teacher.** With daily or regular contact, you have the chance to be a role model and show your loved one proper social behaviors. By being a good listener and not interrupting others, you give a person with TBI clues as to how to behave. You can take turns when speaking and show how this gives everyone a chance to speak. Another activity you can do is practice having conversations. Select topics that will be interesting. This can be on topics like family issues, sports, or the weather. Keep your responses brief so you are understood and the person can “stay in” the conversation.

- **Role-playing** is another activity to help prevent inappropriate behaviors. For example, when a person with TBI makes a sexual comment to others, suggest other responses such as “You have been very nice to me today” or “I like the way you’ve done your hair.” It does not help to correct or criticize the behavior without giving the person some ideas of a better way to respond.

**Denial of Disability**

Individuals with TBI usually do not fully realize their problems. These problems can include the cognitive, physical or behavioral issues. Once again, this is in part due to the brain injury itself. There are areas of the brain that control one’s abilities to monitor themselves and their surroundings. The area of the brain that controls emotions also directs individuals to not want to accept the major limitations they now have due to TBI.

While you want a person with TBI to understand his or her disability and the difficulties that may be experienced, the person may deny there is any problem. To argue about this may only cause an individual to become more defensive and more strongly deny that there are any problems. This can increase problems with your relationship.

There are, however, some times when you must confront this denial of disability, such as if your loved one is in danger. For example, some individuals with TBI may be non-weight bearing but think he or she can walk and try to do so. They must be confronted directly, but in a nice way. It must be emphasized that the situation may change. Explain that in the future they may be able to walk. You can explain why they cannot do the task at this time, but when their balance improves, they can begin doing things on their own.

If denying the disability does not put a person at any danger, it may be easiest to simply ignore it.
Change the topic and move on to another activity. In most cases, a person’s understanding of his or her abilities will improve with time and as he or she participates in more activities. Experiences in trying to do an activity will often have more effect than simply talking with them about the problems. You can gently explain this, but avoid any arguments. There are usually few benefits from arguing. In most cases, a lack of awareness by the individual is a sign of limited reasoning skill. Remember to avoid embarrassing comments. Do not comment on the disability in front of others or address them in a teasing or demeaning manner.

You can watch for signs of positive growth, such as when a person with TBI does something that you did not think she or he could do. When a person with TBI insists on doing something, it is usually best to let her or him try it with supervision. For example, if a person believes she or he can do some chores in the kitchen, start with an easy chore. First begin with activities like simple food preparation, setting/clearing the table, or putting dishes away. This shows you what the individual can actually do in a safe setting.

**Final Words**

The most important thing to remember in living and working with an individual with TBI is to remain calm and be flexible. Do not take it personally when she or he exhibits behavioral problems. You need a calm and sensitive approach as you help your loved one, who has a TBI, as she or he struggles through a difficult time.

**About the Author**

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**Additional Resources**

**Guide to Traumatic Brain Injury Resources**

**By:** The National Center for the Dissemination of Disability Research (NCDDR) and the Research and Training Center (RTC) on Community Integration of Individuals with Traumatic Brain Injury.

2002


This Guide includes resources produced by NIDRR Grantees, including the TBI Model System Centers.

**Home Based Cognitive Stimulation Program**

By: Tom Novack & Jacqueline Blankenship

2002, UAB Model TBI Care System, Birmingham, AL


Booklet of activities to use with individuals following their brain injury designed to assist in the recovery of thinking skills. Activities grouped by levels of difficulty and different thinking skills. 56 pp. $3.

**Living with Brain Injury: A Guide for Families, 2002**

By: Richard C. Senelick, MD and Cathy E Ryan, MA

This book will help families, persons with brain injury or professionals. Topics include: Causes and treatments; physical, cognitive and behavioral symptoms; and questions family members commonly ask. 145 pp. To order call 800-321-7037 $10.95

**Management of Behavioral Problems during Acute Rehabilitation of Individuals with TBI**

By Tom Novack, PhD

2002, UAB Model TBI Care System, Birmingham, AL


A paper for rehabilitation staff who work with individuals with TBI that suggest ways to manage their own behavior in relation to behavioral problems of individuals with TBI.

**Understanding Brain Injury: Guide for the Family**

By: Mayo Clinic Model TBI Center, Rochester, MN

[http://www.mayo.edu/model-system/navpos5b.html](http://www.mayo.edu/model-system/navpos5b.html)

A booklet to help families adjust including topics such as: the structure and function of the human brain; causes of brain injury; the recovery process and behavior and communication changes after TBI. 34 pp.

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This paper is published by the UAB Traumatic Brain Injury Model System, supported by grant #H133A980010 from the National Institute of Disability and Rehabilitation Research, Office of Special Education and Rehabilitative Services, Dept of Education, Washington, DC. Opinions expressed are not necessarily those of the granting agency. Permission to reprint this newsletter, in part or completely, is granted for educational purposes. Published by the UAB-TBIMS, Birmingham, AL.” © 2002 Board of Trustees, University of Alabama.

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