

Chapter 1 : Living with Brain Injury: A Guide for Families by Richard C. Senelick

ABI Rehabilitation is the place people come to recover from Traumatic Brain Injury (TBI). In this episode we meet Terry, Tekaha and Eltje. Terry was injured when his truck jackknifed on the highway.

Patient is a year-old, Filipino-Caucasian man. He is English speaking and right-hand dominant. He was admitted to the adult brain injury service for inpatient rehabilitation following a motorcycle accident. Patient is an ex-Marine; he has one son and is divorced from his wife. Patient worked as an inspector for a fire safety company. His job involved driving to various locations where he inspected and tested various fire safety equipment such as fire alarms, fire extinguishers, and so forth, which involved a moderate amount of physical activity. There are three steps to enter the home, with no handrails or ramp in place. Patient is medically stable and able to participate in a rehabilitation program. Prior to this injury, patient was believed to be in good general health. Social and Health Habits: Patient enjoys playing basketball and softball with his friends. Prior to injury, he was not involved in a formal exercise program but remained active playing sports, spending time with the children and through work activities. Patient states his favorite activities are riding motorcycles and "hanging out at the bars. Medical history is unknown due to incomplete medical records from previous facility. Patient is agitated and unable to consistently and appropriately answer questions. Surgical history prior to this injury is unknown. History of Present Illness: This is a year-old male, status post motorcycle accident while intoxicated on June. The patient was reportedly found approximately 70 feet 21 m from the site of impact. Owing to the low GCS score and decreased oxygenation, the patient was immediately intubated and ventilated. He was noted to have 2-mm pupils bilaterally and was nonreactive with motor function evident on only the left side. There were multiple skin abrasions on the right shoulder, chest, and hip. Upon admission to the acute facility, the patient underwent computed tomography CT scan and was diagnosed with the following:

Chapter 2 : TBI: Video Library

Meet a handful of people with brain injury who give courage and tenacity new meaning.

There were times when I thought it was just so absurd, so unfair, that I had some real moments of despair. The thing that I miss the most is having the capabilities and ability that I used to have. I was just in shock. Why am I here? Why am I speaking funny? Almost a quarter of a million Americans are hospitalized every year with brain injuries. Even more devastating are the potential personality changes and loss of cognitive skills. People may have paralysis, they may have problems with speaking or understanding language, they may have problems with double vision, they may have difficulty with moving about. The most common problems that people have, and this stretches across mild to more severe brain injuries, are problems with thinking and problems with managing behavior or emotions. Even for people who have relatively mild brain injuries, they often have a more difficult time with thinking. They may think slower. It takes them longer to process information. They may have problems with their memory. The day before the accident, I ran around Discovery Park, for example. About nine months after my wreck, I had a neuropsych evaluation. The neuropsychologist said that with the kind of head injury I had, it could take four and a half years for it to be better. And I got very angry when I heard that. I thought he was a quack. I was in complete denial, and I completely pushed that information away. And those neurons carry out our vital functions of thinking, of emotions and all of our physical behaviors. The job is going to have to be done differently procedurally, or we may have to modify the work station, or we may have to use a certain type of computer program to help you do the work better. They helped me work toward those goals, and they would adjust the therapies that would help me to develop abilities that would get me back to what I want. And those things for me again were to be able to go back to work, doing something like my former work, to be able to go back outside and enjoy athletics again. And so that helped a lot. I think support groups are helpful also. What happens is that the force is transmitted through the skull, and the brain, which is a very soft material, kind of on the order of cottage cheese, gets this force applied to it and, not surprisingly, deforms, has bleeding, has swelling, and that ends up either destroying or at least partially damaging the neurons that make up the brain. I love the Latin term for that. As someone with a tough Italian mother, I like the notion of *dura mater*-- tough mother is what protects it. And the cerebrospinal fluid protects it. The skull is very thick. So people with temporal injury are often, or can be, quite irritable. People may say things very impulsively or may do impulsive things that they would not ordinarily do. They may not be able to manage outbursts of anger because that sieve that usually helps them to react more appropriately may not be working very well. So they may say or do something that they later regret. He was in a coma for three months. When he woke up, he found he could barely communicate. You think it is hard to understand me now? You should have heard me when I first got out. Because of his brain injury, he is learning a new way to live. I tell myself, "Make it easier! I graduated in the year , and they held my diploma for that long. And my mom, she works mostly with my mental and emotional comeback. It makes me feel like Superman. When I go visit him, I take my manual chair and get on the floor to play with him. He then turns in the chair and gets in it and says, "Hi! In my opinion, self comes from here and here. Even though this is not all the same, this is constant. The first one is contusion to the brain, which is essentially a bruising of the brain matter where there is some bleeding inside the actual body of the brain. Then there is a diffuse axonal injury. In the brain the neurons actually have very long stalks that travel through various parts of the brain. And if the brain is twisted, if there is any kind of torque placed on the brain, these very delicate fibers can twist and they can break. And the third kind of injury that you can see with the brain is a large collection of blood which can happen if a blood vessel is injured in the brain or if the lining of the brain is torn so that you can have large collections such as subdural hematomas or subarachnoid hemorrhages. The prospects for recovery relatively rapidly are quite good. And within several weeks, a good number of people have recovered entirely. The majority of people will recover with a mild brain injury within several months to a year. When we get up into the moderate and severe injuries, the difficulties become accordingly much more significant. The first stage of treatment is to get the person stabilized medically. Once that person becomes medically stable, the second

phase of treatment may start, and that is in rehabilitation. Maybe a message of hope for everybody who is trying to get back on their feet whether from mild, moderate or severe that the appropriate treatment can really make an important difference in how people cope and to not give up on getting that treatment. Another important factor is support from friends and family. It can challenge all of their roles within a family and in the community and in a workplace. Place on a surface generously sprinkled with Bisquick. And she has been very good in keeping me on track to do different things. She uses a computer to print out a list from our calendar that today is Tuesday and at The strong bond they share has made it possible to work through the changes in Allen and in their relationship. I know that I made her feel bad a lot. He certainly has gotten better. They have difficulty with initiating activities so that they look lazy. They can tell you what they have to do, but getting to do it is a whole other story. I think I usually cope by banging my head against it or getting into it more to see if I can figure it out. We do a time out and you just kind of walk away from it for a while. And sometimes I get tired of walking. For the family member, my main message to them in the course of the recovery is patience, is patience. Recovery from traumatic brain injury takes time and takes treatment but oftentimes time. Sometimes the families kind of take it on the chin because all of the frustration and maybe anger or disappointment that people have is sometimes directed at the people that they feel safest with, which are their family members. They have to get help. This is the timer, right there. You have to be ready to do that. Join a survivor group or a support group, rather, to have other people to talk to. You have to talk to other people. To be exposed to other people and to learn about their injury and be able to compare it to other people. It affects everything they do because your brain is who you are. I just wanted to prove to myself and the world that I still had something upstairs. So I read and played chess and just did mental things to try to prove to myself that I could still do it. That was occupational, speech, physical, all the therapies. I was partially paralyzed--I think they call it hemiparesis--on the left side, so I had to learn how to use my left side again, had to learn how to talk again, learn how to walk again, learn how to eat again. So there was a lot to do. As a student, it was discouraging to be intelligent but not always be able to demonstrate it. It was the typical symptoms of head injury like executive function problems like organizing and keeping track of things and focusing, stuff like that. And I would intellectually know stuff, memory permitting, but the actual application of those skills was holding me back. And that makes it harder for other people to understand his ongoing concerns. He seems fine to me. At the same time, acceptance by no means means not to participate in activities, including treatment, that might improve their situation too. One day I walked into my office and went into an examining room, and the entire office was filled with canvases, beautiful oil paintings all around the office. And he was smiling and sitting there and saying, "Look! I love to paint! You just keep going moment by moment or day by day and you dare to think that what you used to think was impossible might be possible for you to do if you just keep going. Posted on BrainLine January 26,

Chapter 3 : Independent Living | TBI National Resource Center

*Living With Brain Injury, (VHS Tape) [Richard C Senelick] on www.nxgvision.com *FREE* shipping on qualifying offers. With this companion videocassette to Living with Brain Injury, facts are reinforced and insights into Brain Injury are made clear.*

Organization and Evaluation of Brain Function This module introduces the general external topography of the brain. To illustrate the relationship between specific behaviors and brain function, the module begins by showing a racecar driver exercising his skill, and then presents graphic illustrations of the internal activity of his brain. **The Effects of Hormones and the Environment on Brain Development** This module presents some startling and significant findings relating to the effects of sex hormones on brain development. Beginning with in utero photography and then visiting an animal laboratory, this module shows how Dr. Social Influences Shifting from the biological focus of the previous module, this segment shows how social factors affect gender-specific behaviors. Mother-child interactions are shown, illustrating typical differences in how male and female children are treated, and how this treatment affects gender identity, roles, and expectations, and perceived differences in ability. Theories of cultural influence on cognitive processing and the shaping of the brain are suggested as explanations for tested differences in ability. The extreme case of a patient who has undergone split-brain surgery for treatment of epilepsy illustrates the role of hemispheric organization in sensory perception and verbal skills. Relationships between specific brain areas and verbal processing are shown through the historic example of Dr. Brain Anomaly and Plasticity: While patients with this disorder experience compression and destruction of brain tissue early in life, many are able to function normally later in life, after their brains have compensated for the loss. Researchers at the University of California, Berkeley, present their work on the visual cortex of the monkey using x-ray images. Two Nobel laureates also recount their serendipitous discovery of "feature detector" cells in the striate cortex that respond only to stimuli of certain sizes or direction of movement. **Perception** This module concentrates on higher visual areas beyond the striate cortex, addressing the questions of when seeing becomes perception and where it all takes place. Face recognition provides an illustrative example – patients suffering damage to their temporal lobes may see familiar faces, yet be unable to recognize them. **Inverted Vision** The peculiar image inversion process that takes place in the normal visual system is examined in this module. The program traces the experiences of an art student who volunteers to wear lenses that invert her visual world, connecting the adaptation process she undergoes with how the visual system functions. Graphic animations reinforce understanding of the mechanism involved. **Sensory-Motor Integration** Three spectacular dives of Olympic gold-medalist Greg Louganis provide vivid illustration of the human body in motion. The complex visual and motor coordination involved in sophisticated sensory-motor integration calls upon the faculties of the motor cortex, cerebellum, and basal ganglia. The roles of kinesthesia, vestibular functions, and cutaneous sensitivity are also covered. Nancy Wexler of the Hereditary Disease Foundation and Columbia University recounts her research on the demographics, symptoms, and genetic cause of this debilitating illness. The module also explores ethical and moral dimensions of DNA testing, which can determine who will develop the disease. **Sleep and Circadian Rhythms** This module covers our natural rhythms and the stages that occur during sleep. The remainder of the module is devoted to an experiment conducted by Michel Siffre, a French cave explorer, in which Siffre spends seven months in a Texas cave. Without external cues, the body is shown to have its own built-in clock. **Brain Functions** What is the purpose of sleep? Characteristics of the five stages of sleep and the typical minute cycle are explained. The module also covers sleep disorders and the current techniques used to treat them. The uniquely individual experience of dreaming requires researchers to look beyond conventional methods of study. Allan Hobson discusses the function of dreams, explaining his theory of the biological mechanism behind the phenomenon and reflecting on the contribution of dreaming to human creativity. **The Locus of Learning and Memory** In the history of psychology, the question of where learning and memory take place has occupied investigators for years. Recent work at the National Institute of Mental Health has brought scientists closer to resolving the issue. This module shows magnetic resonance imaging MRI technology being used to

identify specific changes in the motor cortex of human subjects – changes that correspond to training in particular tasks. **Learning As Synaptic Change** This module presents researchers investigating the structural changes involved in learning. Research conducted at the Pasteur Institute in Paris shows that the learning process involves the formation of new brain connections and the elimination of others. Other researchers dispel the myth of brain loss in aging, present evidence of changes at the cellular level, and review research on associative learning. **The Hippocampus and Memory Amnesia** appears in many different forms. This module shows how the extent and location of damage can result in varying levels of memory impairment. Footage of Mike, an amnesic individual, demonstrates the result of an injury to the hippocampus. The module discusses our current knowledge of the disease and the direction of future research. Rajan Mahadevan, a "super-memorist," demonstrates his phenomenal memory by scanning a 7 by 7 matrix of digits and recalling all forty-nine digits forward, backward, and by columns. He also claims to have memorized , digits of pi. Mahadevan offers suggestions to help college students improve their study habits when learning new material. **Emotions, Stress, and Health** Commentary from scientists, dramatic reenactments, and graphic illustrations show the consequences of prolonged stress on health. Animated diagrams show the brain releasing hormones, followed by a role-playing situation illustrating on-the-job stress that may set this process in motion. **Researchers explain how low-level stress leads to the breakdown of frontal lobe functioning.** **Locus of Control and Predictability** The classic rat experiment described by Dr. Two rats are connected to a stressor – an electric shock to the tail. One rat is able to turn off the stimulus by turning a wheel, while the other receives the stress stimulus regardless of what it does. The rat with more control is shown to suffer fewer deleterious health consequences. **Multiple Personality** Tony, walking down a country road, is shown talking to himself about his multiple personalities. The narrator explains the phenomenon as triggered in childhood by the need to flee psychologically from physical or sexual abuse. **Aggression, Violence, and the Brain** This module links human aggressive behavior with specific regions of the brain. A striking case of violent human behavior is then linked to a brain lesion – the surgical removal of which restored normal emotional control. **Frontal Lobes and Behavior: The Story of Phineas Gage** This module relates the story of Phineas Gage, whose name appears in virtually every general psychology textbook. After a heavy metal rod was blown through his temporal lobe, Phineas experienced dramatic mental change. The study of the trauma and its physiological effects provided the first documented evidence of how brain injury can affect human behavior. **Symptoms** In this module, mental health professionals observe a patient named Jerry, a classic schizophrenic. Prominent psychiatrists describe schizophrenia and the prognosis for those diagnosed with this disease; a locked psychiatric ward provides a graphic illustration. **Etiology** This module covers the history of attitudes, beliefs, and theories about the etiology of schizophrenia. While the illness was long thought to be environmentally caused, this module emphasizes the scientific evidence in support of its organic origins. A genetic component is also demonstrated. **Arnold Scheibel** reviews the various ways in which schizophrenia has been treated since the s, ranging from the use of physical restraints and cool baths to the administration of antipsychotic drugs. He and other psychiatrists elaborate on the ways in which drugs alter the chemistry of the brain. **Drugs that are effective seem to reduce the levels of dopamine in the brain – to provide amelioration and stabilization, not a cure.** **Autism** This module opens with statistics and a description of autism and how the disorder has been viewed historically. Studies now support the theory that autism results from a lack of normal neural growth during prenatal development. **Temple Grandin** of Colorado State University, severely autistic as a child, is presented as someone who overcame her autism and managed to use her way of perceiving the world to her advantage. **Fritz Dreifuss** describes what is happening to him on a medical level. He explains that a lack of adequate inhibitory neurotransmitter function leads to an "electrical storm" in the brain. Different types of treatment are covered, including valproic acid and radical surgeries, along with how and why they are effective. It explains the effectiveness and limitations of traditional treatment using L-dopa. **Neurorehabilitation** The promising results of rehabilitation after brain trauma have encouraged a growing number of centers dedicated to working with brain-injury victims. Specialists at such centers discuss the range of treatments now available, and the cases of actual patients are reviewed. The module shows that people can recover significantly from brain damage.

Chapter 4 : New Brain Living | Brain Injury Blog TORONTO

Living with a Brain Injury A person who has suffered a brain injury may experience changes that may affect his or her life, work, and relationships. These changes can be physical, cognitive, or behavioral.

This is what they had to say: It makes it more difficult for us to keep moving on in the right direction. I need more rest. I need more time to form thoughts into words. I need more time to complete seemingly simple tasks. I need compassion and cooperation. I need love and comfort. And crying hurts the head. I will never be the same again. They may have plenty to say. They just say things a little differently. It just may work a little differently than ours. To plan a day. I need someone to go with me. I need help to shop, cook and clean. I need new hobbies that are gentle to get my mind off my problems ,and I need help to get started. I need help to help myself. Things I just did automatically prior to TBI require so much work. Everyone goes through moments in their lives which are difficult. For most there is an end in sight, a goal to work towards or for. I have no idea when my difficulties are going to lessen or even if they will. But we can create a new journey, learn old stuff and new stuff. The strength and determination it takes to learn, try, try, try again, fall down and get back up is painstaking, but worth it. I have to have a schedule or I am lost. Things that are easy for you are challenging for me. I have worked for years to get where I am now. Find this story helpful? Share it with someone you care about. Melissa is also a New York City comedian who does sketch, improv and stand up. She is passionate about social justice, politics, Thai food, literature, disability rights and more. She is currently in a long-distance relationship with her cat, Sneakers, who lives in California. You can follow her on twitter at OhHeyMeliss.

Chapter 5 : Living with brain injury

Living with a Traumatic Brain Injury [â™ªmellow musicâ™ª] [Living with a Traumatic Brain Injury] Having a head injury ended my life, the way it was before. There were times when I thought it was just so absurd, so unfair, that I had some real moments of despair.

My brother lives next door to my parents who are elderly. Because he has memory problems, my parents make sure he is home each evening, that he takes his medication, and basically that his safety is maintained e. Although my brother can take care of all his basic activities of daily living, he needs a minimum level of daily supervision. Are there any supervised housing programs for people with traumatic brain injury who do not need nursing care or a "locked ward? ANSWER The availability of supervised housing programs specifically designed for people with brain injuries differs from state to state. In addition, you may contact the state government agency that handles housing matters, such as the Housing Development Authority or Community Development Department. Your state may have advocacy agencies that could be of help, such as a Commission for the Rights of People with Disabilities or a Fair Housing "watchdog" agency. Check with the agency responsible for nursing home oversight, such as the Department for the Aging and Rehabilitative Services. This agency may have information on housing that accommodates people with disabilities as well as the elderly including group homes and other congregate living that offers supervision and services. In Virginia, the Department for the Aging and Rehabilitative Service s offers lists of nursing homes, group homes, and other congregate living situations, along with guidelines for choosing appropriate housing and an ombudsman program. The Brain Injury Association of Virginia has information on the availability of special housing for people with brain injuries. This is just a sampling of the housing resources available in Virginia intended to give you ideas for starting your housing search. Finding appropriate housing can be the most difficult issue to face after brain injury; success requires creativity. A secure condominium may be suitable if a personal assistant provides regular monitoring. Perhaps a nursing home can accommodate a younger resident by coordinating recreational time with local programs. The more avenues you investigate, the more resources you will find. Our father will need help with many activities of daily living when he returns home from the hospital. He will be using a wheelchair for the first time. The family wants to help my father function as independently as possible. How can we prepare the home for his return? What modifications and assistive devices should we be considering? ANSWER There are many considerations to take into account and many resources to utilize when making homelife accommodating to a person with a disability. For example, the therapists will teach the patient how to transfer from bed to wheelchair and advise him on arranging his bedroom to allow for free movement of the wheelchair. Upon discharge from the hospital, the patient may need some personal assistance at home. This will help him retain the benefits gained by working with therapists daily in the hospital, and it can be the difference between him remaining in his own home and going to a nursing home. Personal assistants can provide a variety of services from nursing care to housekeeping. Personal assistants are available through private agencies, in-home nursing services, and state agencies. A good place to start when seeking a personal assistant is the hospital social work department. Home modifications and assistive devices will help the patient make the most of the gains made in rehabilitation by further facilitating independent functioning. Rehabilitation therapists in the hospital, rehabilitation center, and state rehabilitation agency can offer assistance to the family in determining what home modifications and assistive devices are needed. A secondary resource could be your local Homebuilders Association. The Virginia Assistive Technology System VATS offers information on devices and equipment, such as lift-equipped vans, as well as referral to the sources of these items. I am a case manager working mainly with people who have long-term mental illnesses. Some of my colleagues and I are curious whether the clubhouse model is being used for people with brain injuries. Is it a feasible approach for enhancing independence skills in this population? My organization may be interested in starting a clubhouse for these clients; are there any clubhouses already established for people with brain injuries? Today there are over such programs in 21 countries around the world. Each Clubhouse operates as part of the community where it resides and is locally

owned and operated through its consumers. A special non-profit organization called Alliance of Ability , helps groups establish Clubhouses operated by and for people who experience disability following brain injury. To learn more about Clubhouses operated by and for people who experience disability following brain injury and the alliance, you can contact either: Cerritos, Bldg 6, Anaheim, CA , , e-mail: Our son has been discharged from five nursing homes in the past few years due to unmanageable behavior. He has emotional outbursts, is non-cooperative with staff, swears at staff and patients, and has been known to hit other patients. We cannot provide the care he needs at home, nor are we able to manage his behavior. What can we do? ANSWER Behavior changes frequently occur as a result of traumatic brain injury, and so many brain injury programs offer treatment to persons with mild behavior problems. These specialized behavioral programs have staff members with expertise in behavior management and the structure and array of services to help the individual learn effective behavior. To find out where these behavioral programs are located, you may wish to contact the Brain Injury Association, Inc. If at all possible, visit the programs to decide which one of them you believe will be best for your son. I have been referred to my local center for independent living. What can I expect to see there, and how can they help someone with a brain injury? The core services provided at a Center for Independent Living include: Information and referral regarding community resources, such as accessible housing, transportation, and affordable services. Independent living skills training in areas such as money management, mobility, and personal growth. Some can help with finding and hiring personal assistants, too. Peer counseling to assist consumers in setting and pursuing goals, and maintaining overall well-being. Systems advocacy and individual advocacy to increase public awareness of disability issues and increased opportunities for people with disabilities. Centers for Independent Living operate locally, and many services, besides the core activities, are offered based upon local needs. For people with brain injuries, as well as others with disabilities, the Center for Independent Living is a good source of information on the community and how to live in it as self-sufficiently as possible. The consumer-driven CIL provides people with disabilities the opportunity to help themselves and each other. You will also receive an electronic copy of our newsletter, TBI Today.

Chapter 6 : TBI: Surgical Treatment: Traumatic Brain Injury

A traumatic brain injury, or TBI, is defined by the Centers for Disease Control and Prevention (CDC) as a "bump, blow or jolt to the head or a penetrating head injury that disrupts the normal function of the brain." Traumatic brain injury can range in severity from mild (brief change in mental state or consciousness) to severe (extended).

Brain injury affects who we are, the way we think, act, and feel. It can change everything about us in a matter of seconds. The most important things to remember: A person with a brain injury is a person first. No two brain injuries are exactly the same. The effects of a brain injury are complex and vary greatly from person to person. The effects of a brain injury depend on such factors as cause, location, and severity. Why do Brain Injuries Occur? A head may be bumped, hit, jolted or penetrated during a variety of accident types. They account for 40 percent of all traumatic brain injuries in the United States. The second-leading cause of traumatic brain injuries is being hit by an object, or blunt trauma. Motor vehicle crashes are the third-leading cause of traumatic brain injuries, comprising 14 percent of all TBIs. The fourth leading cause of traumatic brain injuries in the U. While the above may be the most common causes of traumatic brain injuries, they are not the only ones. A brain injury may also occur from an accident while playing sports, a motorcycle accident, a pedestrian or bike accident or from an oxygen deprivation accident such as a near-drowning experience. The signs and symptoms of a brain injury can vary greatly depending on whether a brain injury is mild, moderate or severe. The following are physical, sensory and cognitive symptoms to pay attention to: Mild to Moderate Usually, one of the first signs of a mild to moderate brain injury, according to the Mayo Clinic, is the loss of consciousness for a brief moment or a few seconds. If loss of consciousness does not occur, then the victim may report feeling dazed or may appear to be confused or disoriented. Other physical symptoms are: In addition to physical symptoms, a victim and his or her family should also stay on the lookout for sensory and mental signs of a brain injury, too. Moderate to Severe Brain Injury Signs Many moderate to severe brain injuries will share the same symptoms of mild to moderate brain injuries. However, the more serious the brain injury type, the more developed and prolonged are the symptoms. For example, rather than losing consciousness for a few seconds, a moderate to severe brain injury may be characterized by a loss of consciousness of a few minutes or even a few hours. Further, rather than mild nausea, a person suffering from a severe TBI may experience uncontrollable vomiting. Other symptoms of a more serious brain injury are: The mental and sensory complications of a more serious traumatic brain injury are also more pronounced. Confusion may be profound, and a TBI victim may be unable to speak lucidly and form sentences and may slur speech. A severe form of TBI may also render the victim unable to remember important details about the accident or about himself or herself such as his or her name or the day of the week. The person may also demonstrate extreme aggressiveness or agitation and may fall into a coma that persists for an extended duration of time. When most people think of brain injuries, they usually associate them with some sort of physical impact such as a car accident or an injury sustained in military combat. But there is another class of brain injuries known as an acquired brain injury. An acquired brain injury ABI can be the result of an illness, oxygen deprivation, metabolic disorders, aneurysms, cardiac arrest, near-drowning experience, etc. In short, it includes injuries to the brain that are not caused by an external physical force to the head. Other nonviolent circumstances like tumors and lead poisoning can also injure the brain. Previously mentioned and most important, they do not feature any outer blow to the head. ABI also has a direct impact on cells throughout the brain. Because it attacks the cellular structure, a non-traumatic brain Injury has the ability to spread to all areas of the brain as opposed to TBI, which only affects concentrated areas. The brain receives inadequate levels of oxygen, usually following cardiac arrest when there is minimal to no blood reaching the brain. Toxic or metabolic injury: This occurs after coming into contact with unsafe substances e. This is caused by an infection of the brain. This is the most common cause of non-traumatic brain injury. Brain tumors and methods used to treat them: Chemotherapy and radiation can lead to diffuse brain injury. A traumatic brain injury TBI is defined as a blow or jolt to the head or a penetrating head injury that disrupts the function of the brain. Not all blows or jolts to the head result in a TBI. The severity of such an injury may range from "mild,"

i. A TBI can result in short or long-term problems with independent function. A traumatic brain injury can affect a person physically, cognitively and emotionally. Thinking, memory, and reasoning Sensations such as touch, taste and smell Language and communication abilities.

Chapter 7 : Living with Brain Injury | Brain Injury Association of Louisiana

Books on adults living with brain injury in the community Life in the community can be very different for an adult after a brain injury. These books on rebuilding life after a traumatic injury to the brain address the challenges of living with a disability, going to college, finding a job, or returning to work.

Chapter 8 : Denbigh House " Community Brain

Demographic Information: Patient is a year-old, Filipino-Caucasian man. He is English speaking and right-hand dominant. He was admitted to the adult brain injury service for inpatient rehabilitation following a motorcycle accident.

Chapter 9 : 14 People Living With Traumatic Brain Injury Explain What It's Like | The Mighty

Individuals with a brain injury may refer themselves, or any support person, including a professional, family member, or friend can make a referral. Referrals to the program may be received by phone, fax, or mail.