TBI

Traumatic Brain Injury

EDUCATIONAL MANUAL

For parents and caregivers of children with a traumatic brain injury.

HARBORVIEW MEDICAL CENTER
UW Medicine

Seattle Children's
HOSPITAL · RESEARCH · FOUNDATION

HARBORVIEW
INJURY PREVENTION
& RESEARCH CENTER

1 2 3 4 Modules

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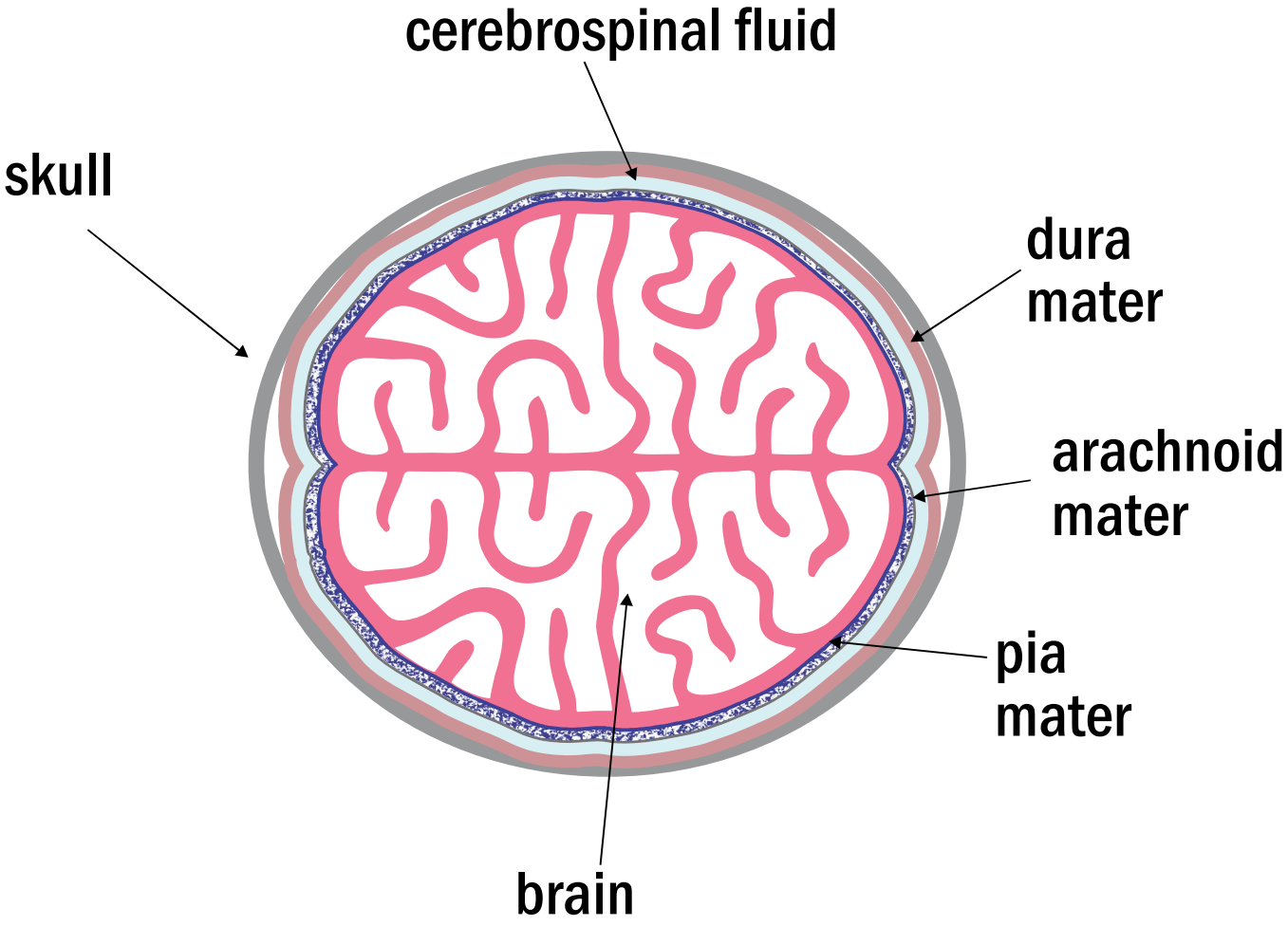
Module 1

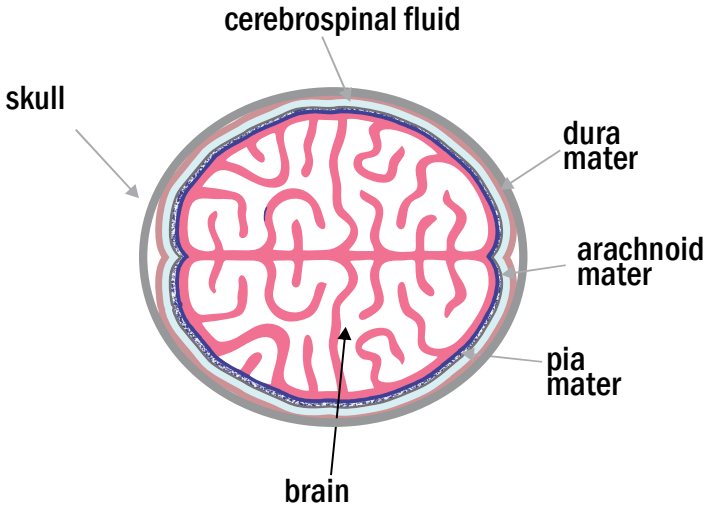
Traumatic Brain Injury - TBI

The brain

The brain is located inside the skull, surrounded by liquid (cerebrospinal fluid) and covered by three membranes: the pia mater, the arachnoid and the dura mater. These membranes, together with the cerebrospinal fluid protect the brain from shakes and blows. A brain injury is produced when the brain has a blow that is too strong or has a very abrupt movement.



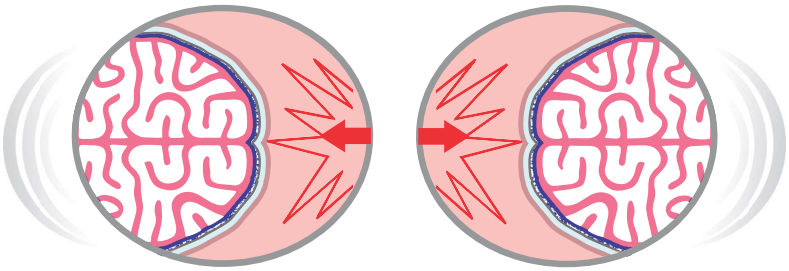
☐ Concussion



Normal brain

Concussions are the most common and less serious type of brain injuries. When a child has a concussion his brain undergoes chemical changes and sometimes some brain cells are stretched and damaged.

Children who have concussions may lose consciousness, but this does not always happen. They may also feel disoriented, move awkwardly, respond slowly, and complain of blurred vision, headache, or vomiting.



Moving head suddenly stops

The brain is compressed into the skull

It can also be compressed by bouncing back.

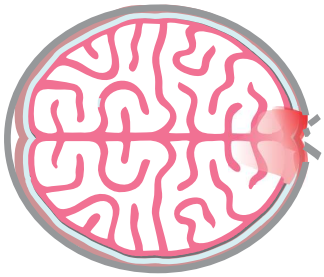
References:
https://www.cdc.gov/headsup/youthsports/parents.html

☐ Skull fracture

A skull fracture is a damage in the continuity of the skull bone. A skull fracture can be displaced or not and may occur in any place of the skull.

☐ Non-displaced skull fracture

Skull fractures can cause injuries to the brain tissue, such as contusions.



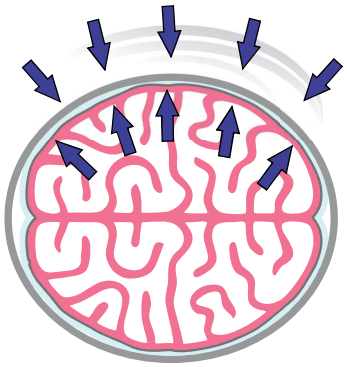
☐ Displaced skull fracture, contusion and bleeding

Broken bones can break into the dura and arachnoid membranes as well as the brain tissue, causing contusions and bleeding.

☐ Basilar skull fracture (picture not shown)

A basilar skull fracture is a fracture of the base of the skull. This type of fracture can be manage differently from other types of skull fractures, if it causes tears in the membranes of the brain resulting in leaks of cerebral spinal fluid (CSF).

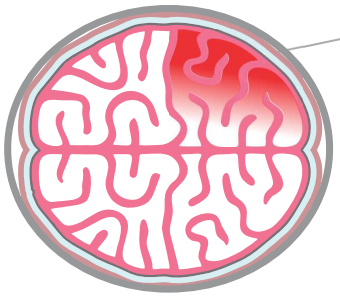
☐ Cerebral edema



Cerebral edema is a generalized swelling of the brain that causes an elevation of the intracranial pressure (pressure within the brain).

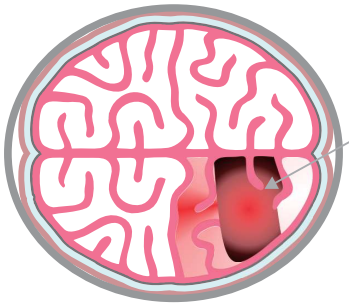
☐ Contusions and Intracranial hematomas

An intracranial hematoma is a bleeding within the skull. Is caused by damage to the blood vessels (veins and arteries) of the head. There are three types of hematomas.



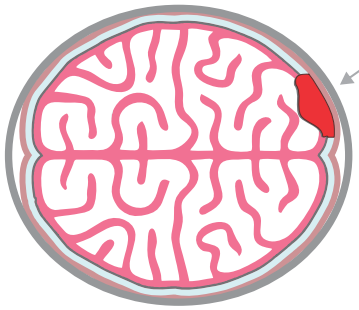
☐ Contusion

A contusion is an area of brain tissue that is swollen, like a "bruise" on the brain.



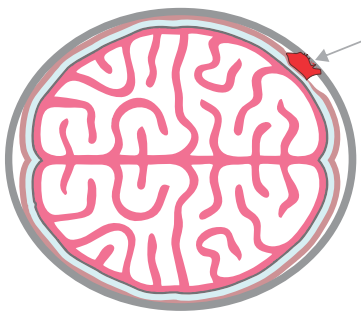
☐ Intracerebral Hematoma

Bleeding into the brain itself is called an intracerebral hematoma.



☐ Subdural hematoma

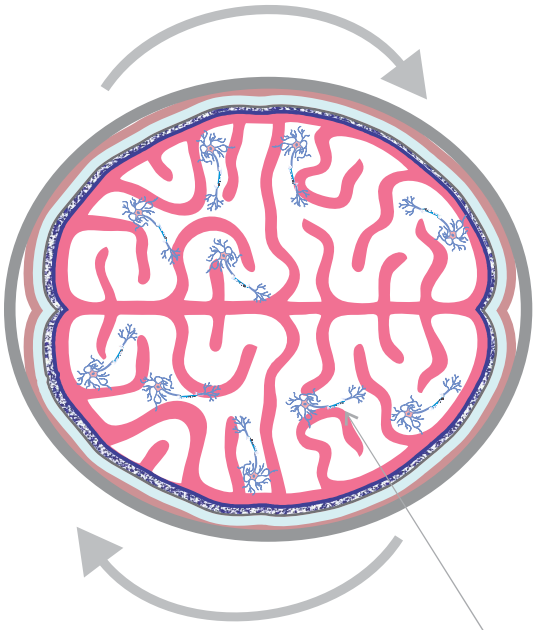
It is the accumulation of blood between the dura and the subarachnoid membranes.



☐ Epidural hematoma

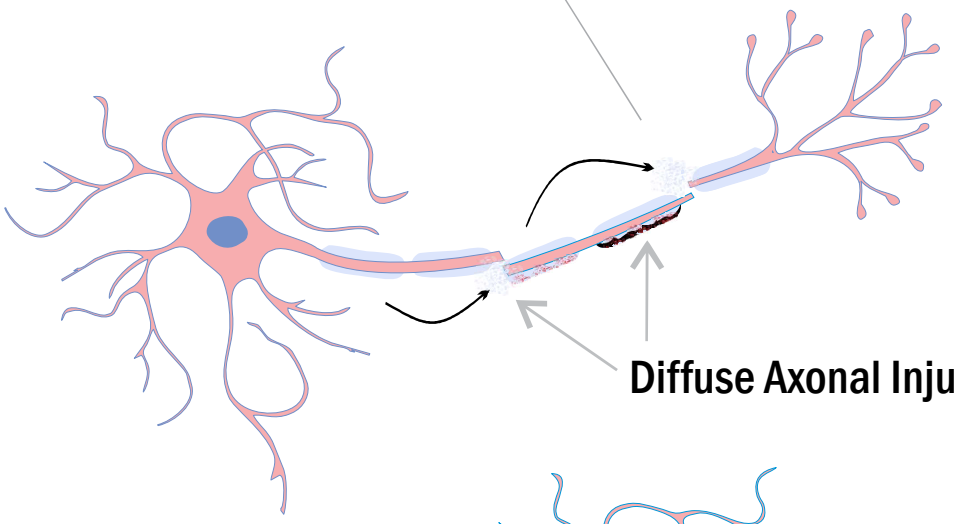
It is the bleeding between the skull and the dura.

☐ Diffuse Axonal Injury (DAI)

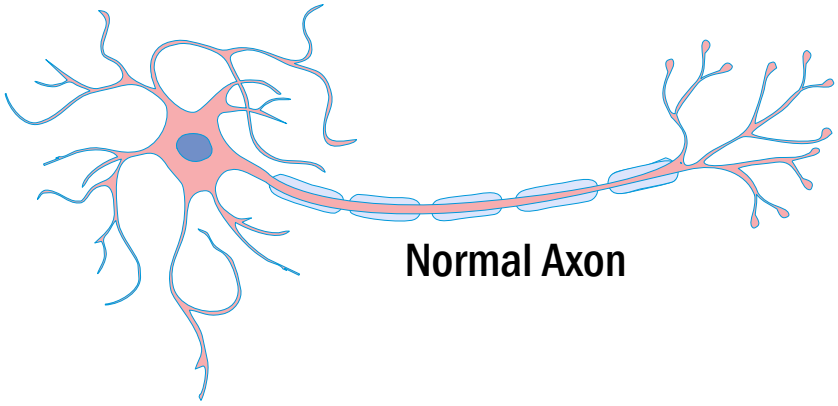


Diffuse axonal brain injury is caused by shearing forces due to movement of the brain within the skull. It is not a localized injury but rather an injury affecting multiple areas of the brain. The movement stretches, or shear the axons of the neurons (nerve cells) affecting its function.

The neurons (nerve cells), have two parts a cellular body and a tail (axon). The axon transmits information from one neuron to the other. When the axon is damaged, communication is disrupted and the normal function of the brain is affected.

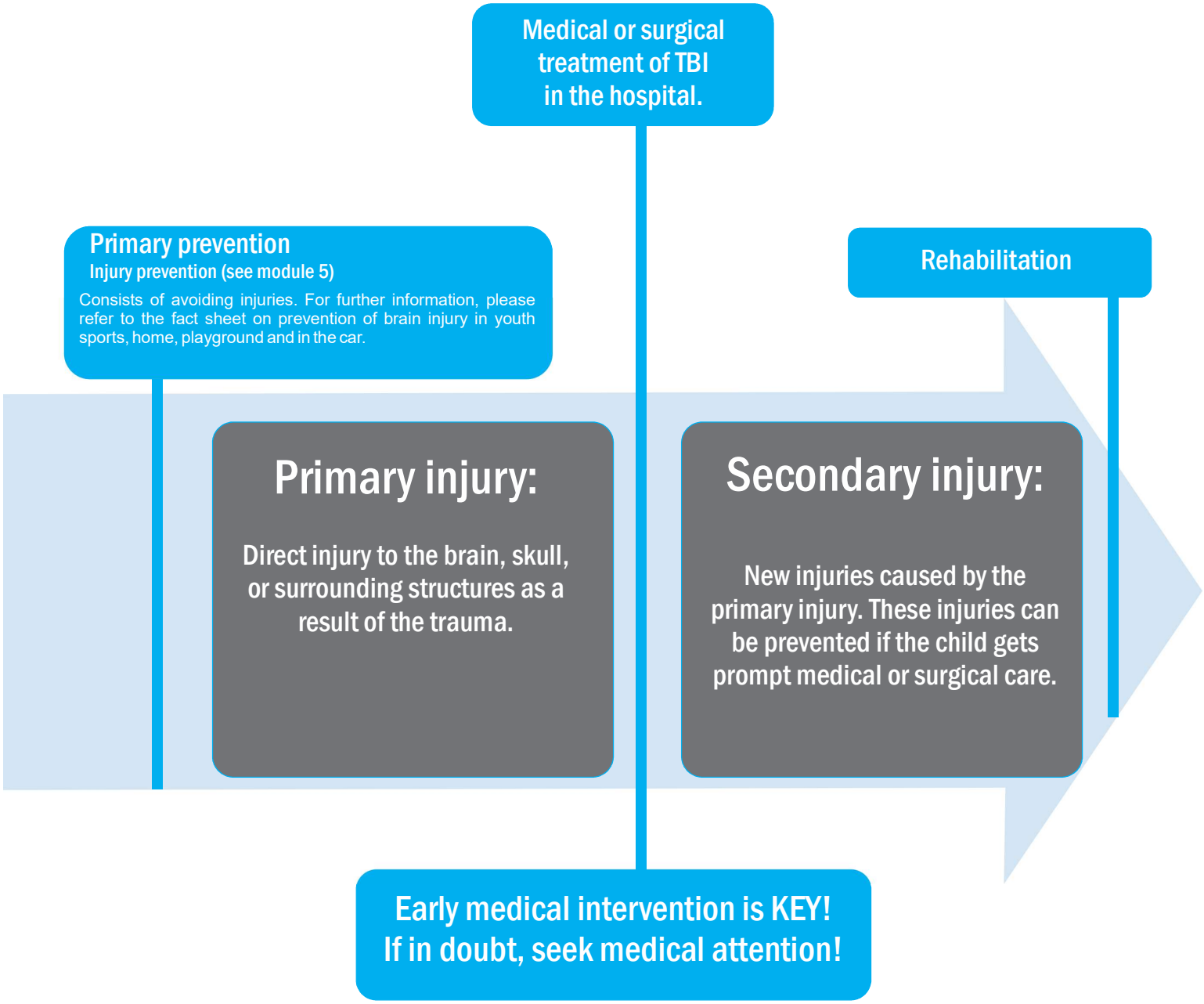


Diffuse Axonal Injury (DAI)



Normal Axon

Primary and secondary brain injury



TBI symptoms

TBI symptoms fall into four categories: cognitive, physical, emotional and other problems. These symptoms can appear right away or can take days or months to appear. Not everyone experiences the same symptoms because symptoms vary depending on the severity, location, and other characteristics of the injury.

Cognitive (Thinking)	Physical	Emotional	Other symptoms
Attention difficulties (difficulty concentrating)	Paralysis (inability to move one or more extremities)	Little or no expression of emotions	Fatigue (tiredness, lack of energy)
Speech and language problems	Numbness or weakness of the limbs	Depression	Sleep problems (sleeping more or less than usual)
Learning difficulties	Balance problems (disequilibrium, or dizziness)	Unable to deal with emotions (more emotional)	Visual changes
Memory problems (Difficulty remembering information)	Loss of coordination	Anxiety	Trouble swallowing
Reasoning difficulties (Difficulties with planning, problem solving and decision making)	Seizures		Hearing changes (difficulty to hear)
Lack of self-control (inappropriate, embarrassing or impulsive behavior)	Headaches		Changes in the sense of smell
	Muscle spasticity (stiffness)		

Adapted from the CDC website (https://www.cdc.gov/traumaticbraininjury)

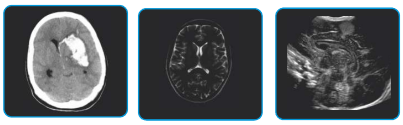
Detecting a Traumatic Brain Injury

While your child is in the hospital, one or more of the following tests may be done to better understand the location and severity of their injury.

While tests are useful, the most important part of detecting and following up a TBI is the physical and neurological exam of your child.

Physical exam:

Repeated physical exam is key to assess progress in your child's treatment.



Imaging:

Imaging is useful for detecting possible lesions that can be treated with surgery. It also helps to assess initial prognosis.
After initial diagnosis, there is no need for extra images, unless there are changes in the physical exam or condition of your child.

CT Scan or CaT scan:

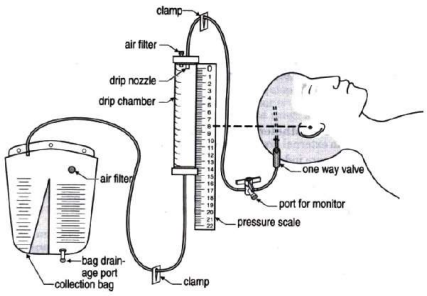
A Computer Tomography machine takes a series of detailed X-Ray images and show multiple images of different parts of the brain. CT scans take less time than MRI.

MRI:

Magnetic Resonance Imaging. MRI uses a magnetic field, radio waves and a computer to see the brain. MRI does not use radiation, and takes more time to complete than a CT scan.
Note: Some children require anesthesia or sedation for the MRI.

Ultrasound:

Ultrasound imaging may be used to detect increased intracraneal pressure (pressure inside the brain). This test also tells doctors if the brain is receiving enough blood flow.



Other ways to monitor the brain:

Intracranial Pressure (ICP) Monitoring and External Ventricular Drain (EVD)

Doctors may also use catheters and sensors that are placed by drilling a hole in the skull to measure the pressure inside the brain.

slideshare.net (EVD picture)

Acute treatment of a TBI

1 Initial treatment

- When a patient with a TBI arrives to the hospital, the first steps are to monitor vital signs and address any life-threatening challenges.

2 Acute treatment

- The goal of acute treatment is to minimize secondary injury. Sometimes a patient may be put on a machine to help them breathe in order to keep down the pressure inside the skull (intracranial pressure).
- Doctors can also drill a hole in the skull to monitor the intracranial pressure.
- Medications are used to sedate a patient to minimize the risk of further agitation and secondary injury.

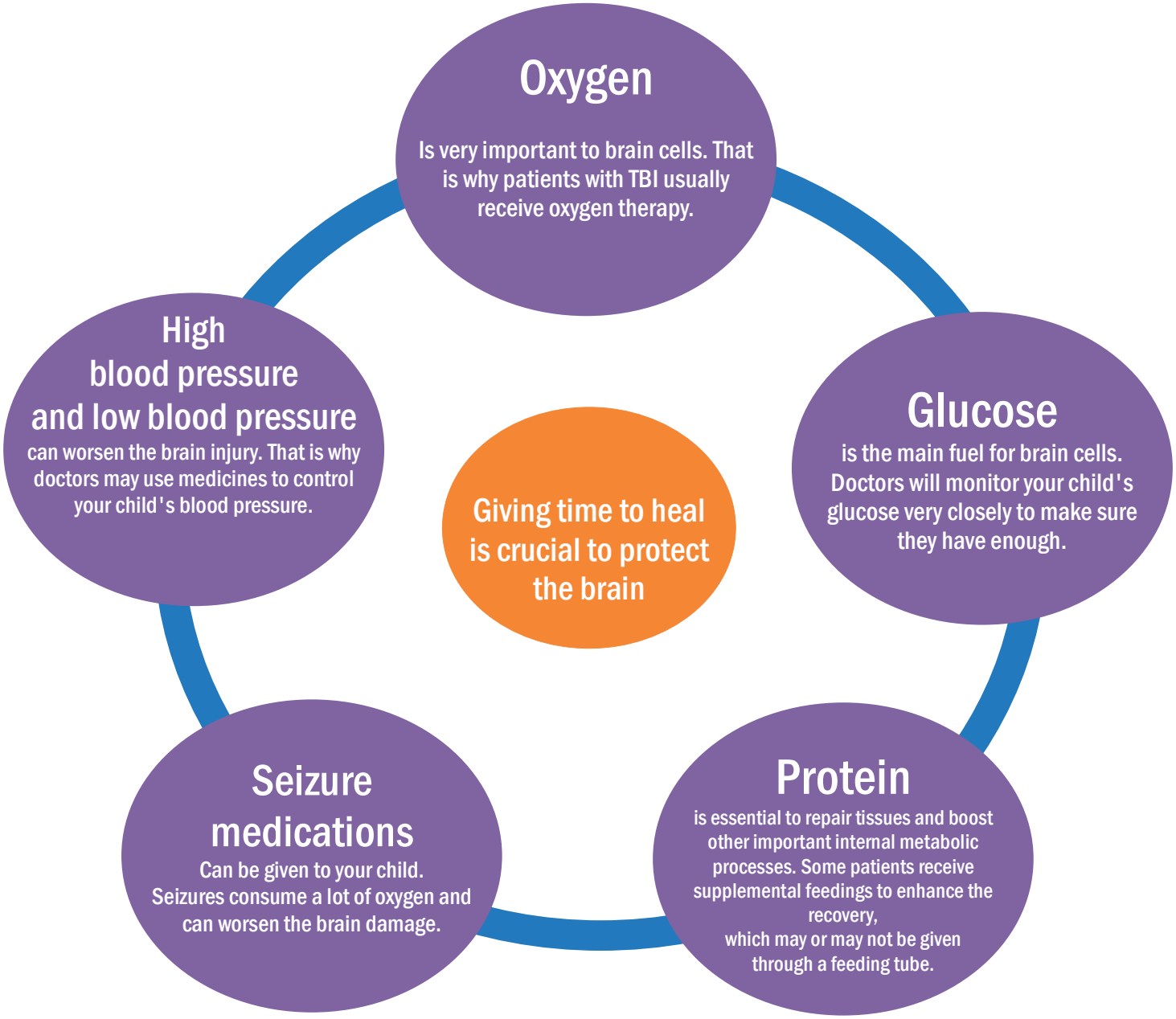
3 Surgical treatment

- Not all patients need surgery.
- Bleeding in the skull cavity can be surgically removed or drained and broken vessels (arteries and veins) can be repaired.
- Extensive swelling of the brain might require surgical treatment to decrease the pressure of the brain.
- Some patients may required leaving drains like External Ventricular Drain (EVD) for a short period of time.
- Ventriculoperitoneal Shunt (VP shunt) may also be placed to manage the pressure of the brain for longer periods of time.

4 Support treatment

- After initial, acute and surgical treatment, patients must be monitored for changes in breathing, heart rhythm, blood pressure, pulse, and temperature.
- Patients may also be monitor for changes in intracranial pressure.
- Other symptoms to monitor and treat are seizures and dystonia (muscle stiffness).

Protecting the brain



5 Questions to ask to your doctors, nurses and therapists.

1) What type of injury did my child have?

2) What type of treatment is my child receiving and why?

3) What are the next steps in her/his treatment?

4) Will my child have deficits after the injury?

5) How can I help my child to recover from these deficits?

Module 2

What to expect after discharge

1. Follow up
2. What to expect when leaving the hospital
3. Rehabilitation and types of therapies
4. Why rehabilitation therapy is important?
   - Physical therapy examples
   - Occupational therapy
   - Speech therapy
   - Mental health /Behavioral therapy
4. Examples of therapy exercises
5. Equipment
6. Questions

Follow up

After your child's hospitalization, your child may have to follow up with several doctors depending on the type and severity of their injury. Some of these doctors can include **Rehabilitation doctor, Pediatrician or Family Medicine doctor, Orthopedics doctors, Neurosurgeons, Nurse Practitioners and Mental Health Professionals.**

Sometimes is difficult to differentiate the function of each doctor; however it is important that you recognize each of the doctors who take care of your child, in this way you will be able to follow the treatment plan better.

Here are the descriptions of some providers who may be taking care of your child.

- **Rehabilitation doctor:** The rehabilitation doctor decides which rehabilitation treatments your child may need to improved physical, emotional or cognitive functions. The rehabilitation doctor will be in close contact with all of your therapists and will make sure that all aspects of treatments are covered.
  He or she will coordinate all aspects of care including medications and therapies. The rehabilitation doctor also coordinates returning to school and sports.

- **Primary Care Providers (Pediatrician, Family Medicine Doctor, or Nurse Practitioners):**
  While you may have multiple follow up appointments with multiple types of doctors. Your pediatrician or family medicine doctor should be your closest contact. Always follow up with them if you have questions; even if you are receiving therapies and treatments from other doctors.

- **Orthopedics doctors:**
  Orthopedics doctors can follow up on other injuries that may have occurred at the same time as your child's TBI, such as broken arms or legs.

- **Neurosurgeons:**
  A neurosurgeon may follow up with your child if your child required a brain surgery during the hospitalization. This is to make sure that your child is healing properly from the surgery.

- **Mental Health Professionals:**
  Psychologists, Psychiatrists, and Counselors are professionals that can help patients with mental health problems. If your child has mental or behavioral problems after the TBI, one of this professional can help your child.

What to expect when leaving the hospital

After leaving the hospital

When your child is stable enough to leave the hospital, he/she might be transferred to:

Inpatient rehabilitation

Patients with significant physical, cognitive or behavioral difficulties after injury will go to an inpatient rehab facility. A multi-disciplinary team of health care providers will work daily with the patient and family towards specific rehabilitation goals.

Home and Outpatient rehabilitation

Outpatient rehabilitation can be individualized to a patient and can include any combination of physical therapy, speech therapy, occupational therapy, or behavioral therapy. The period of treatment can be short or long term and can be offered in hospitals or community clinics.

How can I access rehabilitation services?

Rehabilitation therapies may be ordered by a physician and can be received in the hospital, a clinic or at school. If you feel that your child can benefit from therapies and these have not been ordered, you should go to your primary care doctor to get your child an evaluation and see if your child is eligible for rehab therapy. Remember that recovery is a multi-stage process with different specialists. You are the one who knows your child better and doctors and therapists need your help to evaluate and treat your child. If you have any questions, ask your doctor. A timely evaluation can prevent serious complications or sequelae.

What is rehabilitation?

3

Each child will follow different treatments depending on the severity and type of brain injury your child suffered, they will have many options and paths that they can take. Some patients, but not all, will need rehabilitation therapies which are: speech therapy, physical therapy, occupational therapy and behavioral therapy; however there are other types of rehabilitation and services available as well. A patient may see one type of therapist, or different therapists, depending on the injuries and physical recommendations.

After your child is well enough to receive therapies at school, their care will be transferred to the school's therapist. The school can provide all or some of the therapies your child needs. So it is important that you communicate with your school as soon as your child has a traumatic brain injury, so they can anticipate further care.

Members of the rehabilitation team

Rehabilitation Doctor

Speech Therapy

Speech therapists help your child improve comprehension and communication skills. They can do specific tests and treatments for chewing and swallowing, language skills, oral motor skills, reading and writing, organizational skills, memory, and more.

Physical Therapy

Physical therapists help your child with body movement. They help your child with balance, coordination, endurance, muscle strength, and flexibility. Physical therapists can create a care plan and exercises targeted to regain those abilities.

Your child

Occupational Therapy

Occupational therapy is a more broad form of therapy with the goal of integrating your child back to their daily life and overcoming new challenges. This therapy encompasses all aspect of your child's life such as self care, social activities and school demands.

Recreational therapist

An important part of going back to the community is to give your child safe play and leisure opportunities. Recreational therapists help families finding these opportunities and help them get back into the community. Remember that playing is essential to the healing process.

Behavioral Therapist

Mental health and behavioral are important aspects in the care of children with traumatic brain injury. If your child has mental or behavioral problems, a psychologist, psychiatrist or another mental health care provider may be part of the rehabilitation team.

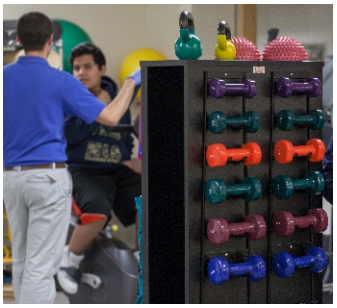
Why rehabilitation therapy is important?

After a traumatic brain injury, some functions in the brain may work differently than they used to. Patients may have trouble moving like they used to, speaking like they used to, thinking or remembering like they used to, and their emotional responses to things may be different. Therapy can help a patient re-gain skills that may have changed and can help them adjust to any possible disabilities or injuries that were sustained in the trauma.

For children, therapy can often include play. Although this kind of therapy may just seem like fun and games, play is how kids engage best with therapy and is essential to the healing process!

Examples of therapy exercises

Physical therapy examples



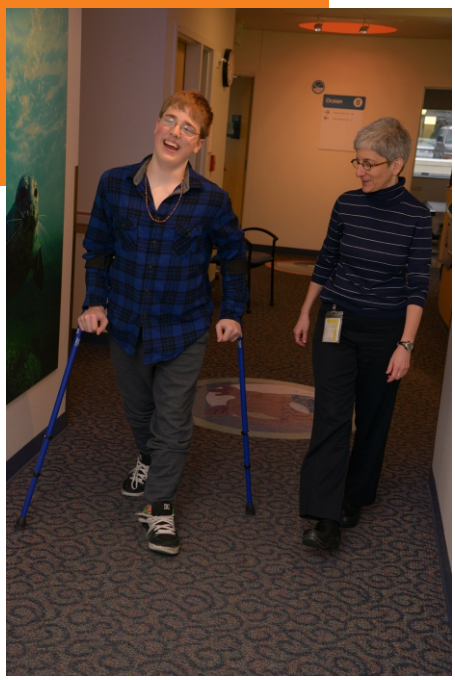
Occupational therapy examples

Courtesy of Seattle Children's Media Library

Equipment

Your child may need some equipment aids. These include:

Ankle orthosis
Walker
Manual wheel chair with belt
Bath chair
Helmet
Gait belt
Other:_____
_____
_____
_____
_____
_____
_____
_____
_____



Courtesy of Seattle children's Media Library

5 Questions to ask to your doctors, nurses and therapists.

1) Who are the doctors that will follow up my child? And who should I contact first if my child is not well?

2) What type of therapies will my child need? And why?

3) For how long does my child need to do therapy?

4) When can my child go back to school?

5) What are the recommendations to take care of my child at home?

Module 3

I am not alone

1. My medical team
2. Insurance
3. Other resources
   - (BIAWA, Headstrong),
   - Traumatic Brain Injury comics
   - Sea Mar Community Health Centers
   - El Centro de la Raza
4. Questions

My medical team

Before leaving the hospital you will be given orders for follow up appointments with doctors and therapists. Below you will find information about your doctors. Remember that it is important to understand who is following up your child so you can advocate better for your child's needs.

Care coordinator: As well you may be assigned a care coordinator, depending on your child and your family needs. The care coordinator's job is to help organize the care of your child especially if your child is seen by multiple doctors or if your child receives multiple therapies. The care coordinator will advocate for you and can help you make your medical appointments more convenient. If you live far from the hospital, the care coordinator will try to help you find proper treatment for your child near your home. If you require interpretation services, the care coordinator can also advocate for you and give you access to interpretation services.

My family doctor is:

Name:	
Phone number:	
E-mail:	
Hospital/clinic:	

My pediatrician or primary care physician is:

Name:	
Phone number:	
Hospital/clinic:	

My care coordinator is:

Name:	
Phone number:	
E-mail:	
Hospital/clinic:	

My therapists are:

Specialty:	*Physical therapist*
Name:	
Phone number:	
Hospital/clinic:	

...my therapists are:

Type of therapy:	*Occupational therapist*
Name:	
Phone number:	
Hospital/clinic:	

Type of therapy:	*Speech therapist*
Name:	
Phone number:	
Hospital/clinic:	

Type of therapy:	*Rehabilitation Psychologist*
Name:	
Phone number:	
Hospital/clinic:	

Specialty:	*Behavioral therapist/Mental Health*
Name:	
Phone number:	
Hospital/clinic:	

Other medical providers that I have to follow up with:

Specialty:	
Name:	
Phone number:	
Hospital/clinic:	

Specialty:	
Name:	
Phone number:	
Hospital/clinic:	

Insurance

While your child's health is your priority and the priority of the medical team, families also worry about how medical expenses will get paid.
Payment for medical care varies widely depending on your type of insurance or if you don't have insurance at all.

If you have questions about insurance coverage, it is best to ask your medical team to put you in contact with a social worker and / or a financial counselor.
The social worker and/or financial counselor will help you understand

- ✓ What are your options if you don't have insurance?
- ✓ If you have insurance (private or Medicaid) you may want to know:
  - What is the deductible? Will your insurance pay all of the medical bills or only a percentage?
  - What are the "exclusions" in the insurance policy? Insurance policies differ in which services are covered. A financial counselor must be able to work with your insurance company to help you understand which services are covered and which not.
- ✓ Sometimes your child's medical expenses can be covered by insurance different from her/his health insurance (i.e. a homeowner or car accident insurance). Your health insurance company will coordinate with the other insurance service about which bills will be covered by each one of them. This process can be confusing.

If you are concerned about any of these issues, you should get a copy of your insurance policy and plan booklet and consider asking for financial counseling or social work services.

Brain Injury Support Groups in Washington

Here are a list of support groups available in Washington State.
Please keep in mind that dates and times may vary. Always make sure to contact them and verify the information before going to any support group.

Seattle - Harborview Medical Center
For people who have had a traumatic Brain Injury (TBI). Family, friends and caregivers are invited to attend - First Thursday of every month.
UWHarborview/Maleng Building, MB#118, 12-1:30pm.
"Social Happy Hour" to follow @ Diva Espresso, across the street location 502-9th Ave, 1:45-3:00pm.
Contact: Michele Kauffman 206-535-0920 / tbimichele@gmail.com or
Joel Laguatan 206-948-8552 / joelvl62062@yahoo.com

Seattle Brain Injury Caregiver Alliance
Meetings 4th Wednesday of every month from 6:00-7:30pm
This group is trying out new meeting spaces. Contact Natasha for exact location.
Contact: Natasha Pietila at 415-246-1092 or natashap.bica@gmail.com
http://nwbicablog.wordpress.com/

Bellevue/Eastside
1st and 3rd Mondays of each month, 1:00-2:30pm Highland Community Center - 14224 Bel Red Road Bellevue, WA
Contact: Karen Ljunggren 425-653-2480 for more information.

Bainbridge Island Traumatic Brain Injury Support Group
Survivors, Family Members and Caregivers, all are welcome
2nd Tuesday of every month, 4:30 p.m. to 6:00 p.m.
Bainbridge Island Library, downstairs meeting room
1270 Madison Ave N. Bainbridge Island WA
Contact: Roberta Dueno

Skagit Valley
2nd Tuesday of each month, 6:30-8:30pm
Creekside Retirement Community, Puzzle Room
400 Gilkey Road; Burlington, WA
Contact: Karen Furney 425-268-2934

Spokane - Brain Injury Self Development TBI Advocacy Club & Leadership
Every Tuesday from 2:30-4:30pm
Spokane Community College and Spokane Falls Community College Institute for Extended Learning
Building 24; Room 204
Gail Tumlinson at Gail.Tumlinson@scc.spokane.edu

Yakima – Adaptive Recreation for Community Integration
Activity-based support group that meets in the community depending on the activity. This group is for survivors, friends, family, and caregivers.
Once per month, dates and times vary.
Facebook: Adaptive Recreation for Community Integration
Contact: Emily Lowndes, (931) 308-8189

Yakima – Brainstorm Rehab Support Group
Once per month, dates, times and locations vary.
Facebook: Brainstorm Rehab
Contact: Bethany Davis, MA, CCC-SLP, (509) 833-1983

For more information about Brain Injury Support Groups or assistance finding the
right Support Group call the Washington

Brain Injury Resource Center
at BIAWA 877-824-1766, ,

or the Brain Energy Support Team Website

http://www.brainenergysupportteam.org/support-groups-2/find-a-support-group/

BIAWA
Brain Injury Alliance of Washington.
Pediatric Brain Injury Resource Management

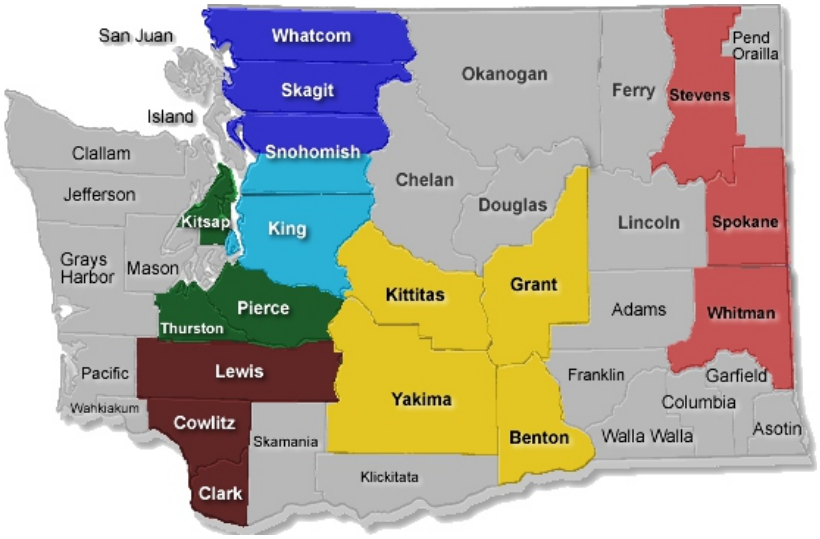
A FREE service of BIAWA for survivors between ages 3-18 includes:

BIAWA helps with:

- Obtaining basic Brain Injury information
- Assistance with planning action steps
- Monitoring progress
- Attending medical appointments
- Obtaining medical records
- Applying for governmental assistance, seeking financial aid/ low cost services
- Finding treatment programs, home health/medical care
- Referring to legal assistance
- Overcoming transportation barriers
- Helping families develop advocacy skills, linking to outside advocacy agencies.

Washington TBI Resource Center
A PROGRAM OF BIAWA

Available in-person pediatric support resources in the colored regions



For patients who live in areas where in-person pediatric support resources are not available, please contact BIAWA main office:

BIAWA Office:

Phone number: 206-467-4800

Toll-free: 877-982-4292

E-mail: info@biawa.org

Seattle Children's Pediatric Brain Injury Support Group

Sponsored by Seattle Children's in partnership with HeadStrong and the Brain Injury Association of Washington
This group meets quarterly, providing an opportunity for parents and caregivers to connect and share information, stories, successes and challenges faced when caring for a child or youth living with brain injury. There are also fun, organized activities provided for the children and youth ranging in ages from 5 to 21 years old. Siblings are also welcome to attend, and free childcare for children under 5 years old is provided.

-For more information, to find out when the next meeting is taking place or to register please call at: **206-987-4265** as space is limited.

Sea Mar Community Health Centers

Sea Mar Community Health Centers, founded in 1978, is a community-based organization committed to providing quality, comprehensive health and human services in Washington state.
Sea Mar proudly serves all persons without regard to race, ethnicity, immigration status, gender, or sexual orientation, and regardless of ability to pay for services.
Sea Mar's network of services includes more than 50 medical, dental, and behavioral health clinics and centers, and a wide variety of nutritional, social, and educational services.

www.seamar.org

University of Washington Traumatic Brain Injury Comics

The TBI InfoComics were created to educate survivors of Traumatic Brain Injury, their families/caregivers, and healthcare providers about common symptoms of TBI and how to manage them. Our InfoComics are written to be accessible to people who may have memory issues or trouble reading large blocks of text. They present the most vital and up-to-date information about physical, cognitive and emotional issues people with TBI may be dealing with.

Comics tell stories, which can be easier to remember than facts on their own.

To access our InfoComics use the following link:

http://comics.tbi.washington.edu/

Headstrong Foundantion

http://headstrongforlife.org/

I am uninsured. What should I do?
Medical resources and contact information

Sea Mar Community Health Centers

County:	Health Centers:	Phone numbers:
Clallam		
Clark		
Cowlitz		
Franklin		
Island		
King	Des Moines	206-212-4500
	Bellevue	425.460.7140
	Seattle	206-762-3730
	White Center	206-965-1000
	Burien	206-812-6140
	Kent	206-436-6380
Pierce		
Skagit		
Snohomish		
Thurston		
Whatcom		

El Centro de la Raza

2524 16th Avenue South
Seattle, WA 98144
(206) 957-4634

Ingram, Grace
Family support specialist
(206) 957-4637
gingram@elcentrodelaraza.org

Stafford, Janet
Parent-Child Home Program Coordinator
(206) 957-4642
pchp.coordinator@elcentrodelaraza.org

Chavez, Stephanie
Housing Counselor
(206) 957-4638
schavez@elcentrodelaraza.org

Lopez, Mayra C.
Financial Counselor
(206) 957-4639
mlopez@elcentrodelaraza.org

Maldonado, Wanda Luz
Default and Foreclosure Counselor
(206) 957-4633
wmaldonado@elcentrodelaraza.org

5 Questions to ask to your doctors, nurses and therapists.

1) Do I have to pay the hospital before I leave?

2) How is the care of my child billed? ...
...If I have private insurance?
...If I have medicaid or no insurance?

3) Can I talk to other parents that had a similar situation? Are there support groups?

4) I have difficulties with transportation, can I get help?

5) How can I find out how much of the bill I will be responsibly for?

Módulo 4

De regreso a la escuela

1. Programas de Educación Individualizada (IEP)
2. Equipo de IEP
3. Artículo 504 (504 Acommodations)
4. Para niños que aún no están en la escuela
   - Programa Head Start (3-4 años de edad)
   - Programa de Educación y Asistencia Temprana a la Niñez
     (desde el nacimiento hasta los 2 años por sus siglas en inglés E-CAP Early Childhood Education and Assistance Program.)
4. Servicios de Interpretación
5. Preguntas

Después de una lesión cerebral traumática, su hijo puede necesitar servicios de educación especial cuando regrese a la escuela. La ley requiere que las escuelas hagan acomodaciones para su hijo. Estos pueden ocurrir como un Programa de Educación Indivudualizada (*IEP* por sus siglas en inglés) o Acomodacoines del artículo 504 (*504 acommodations* en inglés).

¿Que es un Programa de Educación individualizado (IEP)?

El IEP es un documento legal que explica las necesidades de aprendizaje de su hijo, los servicios que proporcionará la escuela y cómo se medirá el progreso del aprendizaje de su hijo.

Algunas de las cosas que un IEP puede incluir son:

- **El nivel actual de rendimiento educativo de su hijo**
  Sobre la base de las evaluaciones de los maestros y los resultados de las pruebas, el IEP describe las habilidades, fortalezas y limitaciones actuales de su hijo.

- **Educación especial y otros servicios que su hijo recibirá**
  Los servicios de terapia tienen el objetivo de apoyar la participación de su hijo en la escuela.
  El tipo de servicios se detallará con cuándo, la frecuencia y duración de éstos.

- **Acomodaciones y modificaciones**
  Las acomodaciones son cambios en cómo un niño demuestra lo que ha aprendido. Por ejemplo, su niño recibirá más tiempo para completar sus pruebas.
  Las modificaciones son cambios en lo que se enseña a un estudiante o lo que se espera de él. Por ejemplo, su hijo tendrá diferentes tareas que los otros niños de la clase.

- **Ayuda y servicios complementarios**
  Tales como el apoyo individualizado, la tecnología de asistencia o notas especializadas en el aula.

- **Metas anuales de educación**
  Se establecerá una lista de metas académicas para su hijo. Estas metas serán desarrolladas por el equipo del IEP y se establecerán de acuerdo con las habilidades de su hijo.

  También habrá una descripción de cómo el progreso hacia estas metas será medido y reportado a usted.

- **Participación de su hijo en clases de educación general y actividades extracurriculares**
  La ley requiere que el estudiante participe en la mayor medida posible

- **Un plan de transición para cuando su hijo cumpla 16 años.**
  Este plan describirá los servicios y el apoyo para ayudar a su hijo a graduarse de la escuela secundaria y alcanzar los objetivos de la escuela superior.

- **Servicios del año escolar extendido**
  Si su hijo requiere servicios de educación especial fuera del año escolar regular, éstos serán descritos en el IEP

- **La fecha en que el IEP entrará en vigencia**

El IEP es creado por un equipo de IEP

Artículo 504 (504 Acommodations)

Si su hijo no califica para educación especial pero necesita acomodaciones de aprendizaje para discapacidad, un plan 504 puede ser una buena opción para su familia. El plan 504 es menos detallado que el IEP, pero puede ayudar a proporcionar acomodaciones y servicios similares.

El plan 504 define la discapacidad de una forma muy amplia. La discapacidad puede ser un impedimento físico o mental, un deterioro, o dificultad que no es temporal.

Para recibir un plan 504, se evaluará al niño con su discapacidad documentada (con una nota del médico), la evaluación del IEP (si está completa), las evaluaciones u observaciones de los padres y maestros así como su expediente académico.

Una vez evaluado, el plan 504 del estudiante será creado por los padres, un maestro de educación general, un maestro de educación especial, un administrador de escuela y posiblemente el niño.

El plan 504 contendrá acomodaciones específicas o servicios de apoyo, el nombre del profesional de la escuela que proveerá esos servicios y la persona que asegurará que el plan 504 es implementado.

Para niños que aún no están en la escuela

Si su hijo no tiene la edad suficiente para ir a la escuela, hay otros programas que pueden ayudarle a prepararse para la escuela después de una LCT.

El Programa Head start:

Head Start es un programa de desarrollo infantil financiado con fondos federales para niños de bajos recursos y sus familias. Está dirigido por el sistema de Escuelas Públicas y sirve a niños de tres y cuatro años. El objetivo del programa es mejorar la competencia social y la preparación escolar del niño. Se ofrece como un programa de medio día en varios distritos escolares.

Programa de Educación y Asistencia de la Primera Infancia (E-CAP):

E-CAP es un programa financiado por el estado para niños pequeños desde el nacimiento hasta los 3 años de edad. También ayuda a los niños y familias a prepararse para el kinder. Ayuda especialmente a los niños que tienen factores de riesgo en su desarrollo o ambiente que podrían interferir en el futuro o en su éxito escolar.

¿Cómo inscribirse?

Para inscribirse en los programas de Head Start o E-CAP, comuníquese con la agencia de desarrollo temprana cerca de usted.
https://del.wa.gov/parents-family/eceap-and-head-start

¿Quién es elegible?

Los niños son elegibles para E-CAP y Head Start según su edad y sus ingresos familiares. Aunque estos programas están diseñados para ayudar a las familias de bajos recursos, hasta el 10 por ciento de los niños de ECAP y Head Start pueden ser de familias por encima del límite de ingresos si es que tienen:

Factores del desarrollo tales como retraso en el desarrollo, discapacidad u otras necesidades especiales, o factores ambientales como la falta de vivienda, violencia familiar, dependencia química, participación de los servicios de protección infantil, cuidado de crianza o padres encarcelados.

Los niños con déficit después de un LCT, pueden ser elegibles para estos programas.

Usando un Intérprete

Las escuelas están obligadas por ley a hacer todo lo posible para proveer el servicio de interpretación durante las reuniones y discusiones sobre su hijo, tales como la creación de un plan IEP o 504.

5 Preguntas que puede hacer a sus médicos, enfermeras y terapeutas

1) Cuando mi hijo esté listo para volver a la escuela, ¿Qué debo decirle al maestro?

2) ¿Cómo puedo pedirle a la escuela una acomodación especial para mi hijo?

3) ¿Qué recursos educativos necesitará mi hijo para regresar a la escuela?

4) Si mi hijo tiene menos de 5 años, ¿puede recibir apoyo a temprana edad?

5) ¿Qué debo hacer si no estoy de acuerdo con el apoyo brindado por la escuela?

Lista de términos en inglés y español.

A continuación encontrara una lista de términos en Ingles ordenados alfabéticamente con su respectivo término en español. Éstos términos son usados frecuentemente por profesionales de la salud que atienden niños con enfermedad cerebral traumática.

Término en inglés	Término en español	Página
504 Accommodations	Artículo 504 (acomodaciones)	33
Ankle orthesis	Órtesis inmovilizadora de tobillo (bota)	18
Bath chair	Silla de baño	18
Behavioral Therapy	Terapia de comportamiento	15, 16
Brain	Cerebro	2
Cerebral edema	Edema cerebral	4
Concussion	Concusión	3
Contussion	Contusión	4, 5
CT scan or CaT scan	Tomgrafía Axial Computarizada	9, 10
Diffuse Axonal Injury	Lesión axonal difusa	6
Early Childhood Education and Assistance Program (E-CAP)	Programa de educación y asistencia temprana a la niñez	34
Epidural hematoma	Hematoma epidural	5
External Ventricular Drain (EVD)	Drenaje Ventricular Externo	9
Gait belt	Cinturón de marcha	18
General Education Teacher	Maestro de educación general	32, 33
Helmet	Cascos	18
Inpatient rehabilitation unit	Unidad de rehabilitación (paciente hospitalizado)	15
Interpreter	Intérprete	24, 32,34
Intracranial hematoma	Hematoma intracranial	5
Intracranial pressure (ICP)	Presión intracranial	4, 9, 10
Invidualized Education Programs (IEP)	Programa de Educación Individualizada	31, 32
Magnetic Resonance Imaging (MRI)	Resonancia Magnética	9, 10
Manual wheelchair with belt	Silla de ruedas con cinturón	18
Occupational Therapy (OT)	Terapia ocupacional	15, 16, 17, 22
Outpatient rehabilitation	Rehabilitación ambulatoria	15
Physical Therapy (PT)	Terapia física	15, 16, 17, 21
Recreational Therapy (RT)	Terapia recreacional	16
School District representative	Representante del distrito escolar	32
Skull fracture	Fractura de cráneo	4
Special Education Teacher	Maestro de educación especial	32, 33
Speech Therapy (ST)	Terapia de lenguaje	15, 16, 22
Subdural hematoma	Hematoma subdural	5
Traumatic Brain Injury	Lesión Cerebral Traumática	1, 7, 9, 16, 24, 25, 26, 27
Ultrasound	Ultrasonido o ecografía	9
Walker	Caminador – andador	18

NOTAS

NOTAS