Head Injury and Concussion

Important information for the first 24 hours after a head injury

Information for patients discharged from the Emergency Department or Urgent Care Centre:

You have had a mild head injury. The doctors have examined you and decided that it is safe for you to go home.

In the next 24 hours there could still be changes in your condition that might need treatment.

Your friends or family have been asked to watch you and make sure that you come back to the hospital if you are not well. Another adult should watch you for at least 24 hours.

People who have had a head injury often have headaches. Acetaminophen (Tylenol) can help.

Do not take ASA (Aspirin) or Ibuprofen for 24 hours after your concussion.

Call your family doctor or nurse practitioner for a follow-up appointment.

Other instructions: ___________________________________________

___________________________________________________________

Date: ______________________________________________________
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Contact for more information

Local:
Your family doctor

Ontario:
Ontario Brain Injury Association (OBIA)
PO Box 2338
St Catharines, Ontario
L2R 7R9
Phone 905-641-8877 or toll free in Canada 1-800-263-5404
Web Site: www.obia.on.ca
E-mail: obia@obia.on.ca

Brain Injury Services of Hamilton
Phone: 905-523-8852, ext. 117

Internet resources

Health Services for Hamilton Niagara Haldimand Brant
http://www.hnhbhealthline.ca/

Ontario Neurotrauma Foundation
www.onf.org

Hamilton Public Health (Parent Algorithm)

CanChild

Concussions Ontario
www.concussionsontario.org

Information for family and friends

Please carefully watch your family member or friend for the next 24 hours.

Look for these problems:
- You cannot wake the patient up. The patient seems very sleepy.
- The patient has a headache that gets worse.
- The patient vomits two or more times.
- The patient is shaking or having convulsions (fits).
- The patient is hard to understand when he or she is talking (slurred speech).
- The patient seems confused about where they are and what happened to them or they are not making sense when they speak. If they cannot sit still or seem unusually upset.
- There is fluid coming from the nose or ear.
- The patient is stumbling or feeling weak or numbness.
- The patient is acting strange or saying things that do not make sense.
- The patient cannot remember conversations or things that just happened.
- Double vision or change in vision

If the patient has any of the above problems, please bring them back to the Emergency Department or call 911.

The rest of this booklet is for people who have been diagnosed with a concussion. It explains what can happen after a concussion. It also tells how to get better and where to go for help and information. You still need to see your family doctor after your concussion.

Researchers know that people who get information about their concussion feel better. They know what to expect. Knowing about your concussion and getting support from your family, friends and doctors can help you get better faster.

If you have more questions about your concussion, you should see your family doctor.

This booklet does not replace talking to your doctor.
What is a concussion?

A concussion is a traumatic brain injury caused by either a direct blow and/or jolt to the head, face, neck or elsewhere on the body.

A blow that affects the head can happen many ways and can include a car accident, a fall, an assault or from sports. It can happen if something heavy hits the head, or in other ways. Sometimes, whiplash causes a jolt to the head that results in concussion.

After a concussion some people lose consciousness or are "knocked out". You can also have a concussion without being knocked out or have no memory for what happened when you were injured, but others say you were talking and interacting. You can also have a concussion without any changes in your ability to remember what happened during the injury/event, although you would have been confused.

A blow or jolt to the head can cause the brain to move inside the skull. This can result in the nerve fibers stretching and some tiny tears to occur in the very small blood vessels. The stretched nerves, and broken blood vessels cause the symptoms of a concussion. Nerve fibers can heal and get better. Blood vessels can also heal like a cut does.

A bad blow to the head can cause bruising or swelling to the brain which is a much more serious head injury. However, bruises and swelling can also get better in time.

The symptoms of concussion can be different. Sometimes symptoms appear right away or they may show up in a few days after the concussion. The signs and symptoms of concussion are not always clearly seen by others. Patients, family members or doctors may miss them. A person with a concussion may look fine but act or feel different.

Sometimes the concussion makes it hard for people to know or admit they are having problems.

What about legal issues?

If your injury was caused by a car accident, call your insurance company within 7 days and tell them about your injury.

Where to get help

For urgent medical problems go to the Emergency Department.

The Emergency Department doctor may send you to the:

Adult Concussion Clinic
Hamilton General Hospital
237 Barton Street East
Hamilton, Ontario

Phone: 905-521-2100, ext. 46755

If it is not an emergency, see your family doctor or nurse practitioner.

For more specific information about returning to sport or exercise after a concussion, speak with your family doctor.
When can I drive?

Currently there are no guidelines for return to driving after a concussion. However, if you feel your symptoms will interfere with your ability to drive safely, then refrain from driving and follow-up with your family doctor or nurse practitioner.

Tips for recovery

- If you feel like sleeping then rest. If needed, take rest breaks through the day.
- Return to your normal activities gradually. If your symptoms worsen, reduce the intensity or frequency of the activity and try again.
- Talk with your family doctor or nurse practitioner about when you can return to work or school. If they are not certain, they will send you to someone else who can help.
- Ask about ways to help your employer or teacher understand what has happened to you.
- Talk with your employer about returning to work gradually and changing your work activities until you recover.
- Do not play contact sports until your symptoms have completely gone and you have seen your family doctor or nurse practitioner.
- Light exercising is recommended, but if it makes your symptoms worse, do less then gradually increase again.
- Only take medications that your doctor or nurse practitioner has approved.
- Do not drink alcohol until your family doctor or nurse practitioner say that you can. Alcohol and drugs may slow your recovery and put you at risk of further injury.
- If it is harder than usual to remember things, write them down.
- Know that getting better does not always happen smoothly. You may feel you are slipping backwards. In that case adjust what you are doing but keep trying as some level of activity is good for recovery. This is normal and will get better with time.

What are the symptoms of a concussion?

Someone who has had a concussion may have physical problems, changes in their behaviour or thinking problems. These problems may last for days, weeks or even longer. However, in most cases the symptoms will not last beyond a few weeks or months.

After your concussion, you may have some of these symptoms:

- Headache. Your headache may get worse if you exercise or concentrate too hard.
- Neck pain.
- You may feel nausea (a sense of needing to throw up).
- Trouble remembering things, concentrating, or paying attention. Your thinking may be slow. You may feel confused or foggy. Therefore, problem solving and making decisions may feel more difficult.
- You may hear noises like ringing in your ears.
- Sad, nervous or restless feelings. You may feel frustrated or angry.
- Sleeping longer than usual. You may also have trouble falling asleep and wake up often during the night.
- You may find that you are sensitive to noise and/or sensitive to bright light.
- Feeling tired.
- Feeling dizzy or light-headed. You may have trouble with your balance.

You may not experience all these symptoms. Your symptom(s) may be worse when you do a demanding activity.
How is a concussion treated?

Rest helps the brain to heal. For the first 24 to 48 hours after a concussion, you may feel the need to rest from physical and cognitive (thinking) activities. Resting your brain means doing less of your normal activities so that you do not make your symptoms worse. Avoid all contact sports or activities that could increase your risk of having another concussion, such as climbing a ladder. Resting your brain could include not reading, working on the computer, watching television, or using your smart phone as much. You may use electronics but only do so to the point of not making your symptoms worse. You may need to take time off of work or school.

If you go back to physical or thinking activities before your brain is ready, your symptoms may be worse or last longer. Before returning to school or work, check with your family doctor or nurse practitioner.

Healing takes time. Go back to daily activities, such as work or school, at a graduated pace your own pace. As the days go by, you will start to feel better.

Even after your concussion has healed, you should protect yourself from having another concussion.

How long will it take to recover?

It may take 1 or 2 weeks for you to feel completely back to normal. Most people start to feel better after 1 or 3 days.

How quickly you get better depends on many factors. A bad concussion can take longer to heal. If you were healthy before your concussion, you will heal more quickly. It takes longer for older adults to feel better. It also can take longer to feel better if you have had a concussion before.

If you already had a medical problem at the time of your concussion, it may take longer for you to feel better. Anxiety and depression can make it harder to adjust to the symptoms and cause symptoms to last longer.

While you are recovering, be careful to avoid doing anything that could cause a blow or jolt to your head.

When can I return to school, work, exercise and sports?

Please see your family doctor before returning to school, work, exercise and sports.

Rest from physical and thinking activities until your symptoms are reduced. Then, return to work or school bit by bit. Once you are back at work or school, follow the steps below. Do not return to exercising or sports until your symptoms are gone.

Graduated Return to Exercise and Sports Protocol

<table>
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<th>Step</th>
<th>Activity</th>
</tr>
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<td>1</td>
<td>Daily activities that do not cause symptoms. Once you have seen your family doctor or nurse practitioner, go to step 2.</td>
</tr>
<tr>
<td>2</td>
<td>Walking or stationary cycling at slow to medium pace. No resistance training such as weight lifting.</td>
</tr>
<tr>
<td>3</td>
<td>Running or skating drills. No head impact activities.</td>
</tr>
<tr>
<td>4</td>
<td>Harder training drills, such as passing drills. May start progressive resistance training. See a doctor or nurse practitioner before going to Step 5.</td>
</tr>
<tr>
<td>5</td>
<td>Following medical clearance, take part in normal training activities</td>
</tr>
<tr>
<td>6</td>
<td>Normal game play.</td>
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Note: If the symptoms on page 3 continue (more than 10 to 14 days in adults or more than 1 month in children), the athlete should be referred to a health care professional who is an expert in the management of concussion.
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Ontario Brain Injury Association (OBIA)
PO Box 2338
St Catharines, Ontario
L2R 7R9

Phone: 905-641-8877 or toll free in Canada 1-800-263-5404
Web Site: www.obia.on.ca
E-mail: obia@obia.on.ca

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**Look for these problems:**
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- The patient has a headache that gets worse.
- The patient vomits two or more times.
- The patient is shaking or having convulsions (fits).
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- The patient is stumbling or feeling weak or numbness.
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- The patient cannot remember conversations or things that just happened.
- Double vision or change in vision

If the patient has any of the above problems, please bring them back to the Emergency Department or call 911.

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Other instructions: ____________________________________________________________

______________________________

Date: __________________________

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