

Mild Traumatic Brain Injury



Information for Parents

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How can this booklet help?

This booklet contains information designed to help parents help their children after a mild TBI. The information inside is designed to help answer questions commonly asked by parents following their child's injury.

What is a mild traumatic brain injury?

A mild traumatic brain injury (TBI) is also known as a concussion or head injury. Many children experience a mild traumatic brain injury every year in Australia. This usually occurs after a child has had a bump or knock, to the head. Such injuries may happen during a sporting game, car or bicycle accident, falls, and general play. Most mild TBIs do **not** involve bleeding on the brain, or significant damage to the brain.



What are the common symptoms?

After a mild TBI or after the experience of going to hospital many people report a number of symptoms. These symptoms may include:

- Tiredness or fatigue
- Headaches
- Dizziness
- Blurred or double vision
- Noise or light sensitivity
- Difficulty remembering or concentrating
- Slower thinking
- Some difficulty with speech and language (e.g., expressing themselves, following instructions, difficulty interacting with peers)
- Physical difficulties (e.g., clumsiness, poor balance, decreased endurance levels, and difficulty performing everyday activities)
- Behavioural changes (e.g., increased sleep, decreased frustration tolerance)
- Emotional changes (e.g., symptoms of anxiety or depression, irritability, difficulty making or keeping friends)



How long will my child feel this way?

Studies in the area have generally indicated that children's symptoms following a mild TBI usually decline during the first week after injury. By three months after injury, most children no longer experience symptoms related to their injury.

What are the long term effects?

The long term effects of mild TBI on functioning are not well researched. However, the available information suggests that most children who experience a mild TBI do not experience long term difficulties from the mild TBI.

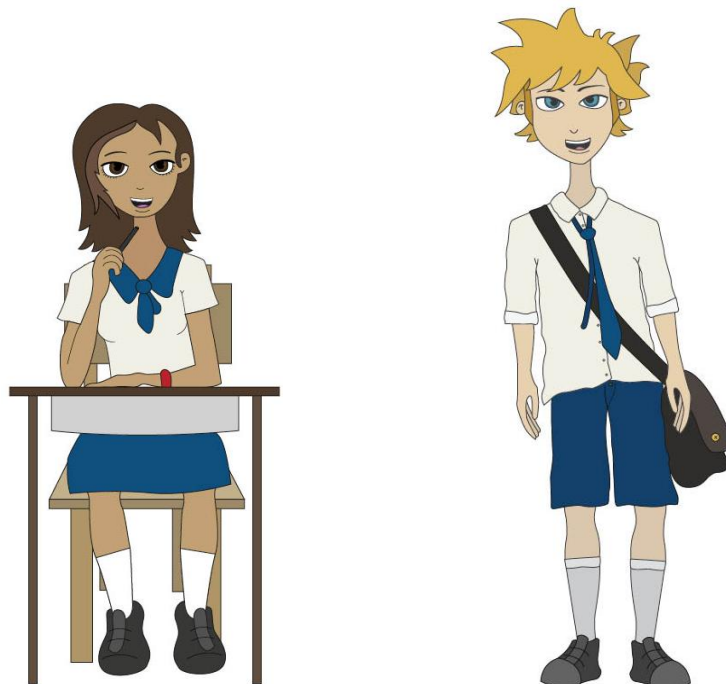


How do other parents feel?

After a mild TBI many parents ask themselves questions such as: “What happened?” or “Should I have gotten my child to the hospital faster?” or “Would it have been better to call an ambulance?” These types of ‘what if’ questions are common after children have been involved in an accident and may be associated with feelings of anxiety or guilt. Should you be concerned that you may need some support please contact your doctor.

When can my child return to school?

After a mild TBI children may find it harder to pay attention, remember things (e.g., their homework), and keep up with their school mates when they return to school. It is possible that your child may need to attend school for half days or take a few days off for awhile.



What can I do to help my child return to school or when they are at home?

After a mild TBI children may find it harder to do things for awhile. The following suggestions may be useful, however please see your child's treating doctor or therapist should you have concerns about your child's recovery.

- If your child is feeling tired or fatigued encourage them to let their teacher know. Also, encourage him/her to take breaks to reduce fatigue.
- If your child is having difficulty paying attention or concentrating, it may be helpful to minimise distractions (e.g., turn the TV off when doing homework), and to keep instructions short and clear.
- Sometimes it might be better to leave important tasks (e.g., school exam), until your child has had a chance to recover and is able to concentrate better.
- If your child is having difficulty remembering things, they may benefit from having written class notes, a checklist of tasks, regular repetition and summarising of important information, and breaking down of information into smaller "chunks".
- Allow your child extra time to complete tasks if they seem to be having more difficulty keeping up with other children, or completing tasks as quickly as they did before the injury.
- If your child is frustrated with a task, they may benefit from taking a short break and coming back to the task later.
- After a mild TBI children may have difficulty with noise or light sensitivity. In such instances your child may benefit from wearing sunglasses outside and being able to go to a quieter or darker environment.
- Sometimes children may be more dizzy or clumsy than they were before the injury and may benefit from having more time to do things. Also sudden movement (e.g., standing up quickly) may make the dizziness worse.
- If your child is becoming upset or frustrated, they may benefit from doing something relaxing, such as taking a walk or petting a family pet.

When can my child return to sport?

Parents often ask: “when can my child return to sport?” At the moment there is limited evidence in the medical literature to answer this question. The following are general recommendations based on information that is available. When a child is safe to return to sport depends on many factors including:

- Your child’s age and previous medical or learning problems.
- Type and severity of injury.
- Problems or impairments from the injury (e.g., muscle weakness/tightness, co-ordination/ balance, vision and visual perception, judgement and impulsiveness, and fatigue [physical and mental]).
- The nature of the sport and risk for further injury (see table next page for examples). As children become older, team sports may become more competitive and may increase the risk of injury.

If your child has a mild injury and has been referred to the Royal Children’s Hospital it is recommended:

- Return to non-contact/low risk activities when symptoms such as headache and fatigue have settled (this may take a few weeks).
- Return to higher risk activities only after advice from your doctor (usually between 6 weeks and 6 months after the injury, provided all symptoms have settled). Normal safety precautions should be taken.
- Your child should not return to contact or high risk sports for the rest of the season (or 6-12 months) – again at the discretion of your treating doctor or therapist.

Please check with your child’s treating doctor or therapist before recommencing activities.

Table 1. Sporting activities that children may engage in at varying levels of risk for further injury

Low Risk	Moderate Risk	High Risk
Walking	Cricket	Soccer
Running	Golf	Netball/ Basketball
Swimming (supervised)	Cycling (supervised – with helmet)	Rugby/ AFL
Tennis	Volleyball	Contact Martial Arts
Dancing	Softball	Wrestling and Boxing
Yoga/ Tai Chi	Gymnastics	Skating/ Skateboarding
Bowling		Cycling on Road
Rowing		Trampolining
Non-contact martial arts		Surfing
		Skiing/ Snowboarding
		Horse Riding
		Motorcycling



Who is in the rehabilitation team?

After a mild TBI, children may sometimes be referred to a rehabilitation service. At the Royal Children's Hospital this service is the Queensland Paediatric Rehabilitation Service (QPRS). This service is a specialist service for rehabilitation management of children after an acquired brain injury.

Team members from QPRS are involved in the assessment of your child's abilities, family support, school liaison, and therapy for problems that may arise from the injury. The team may also consult with other specialists as required. At QPRS the team may consist of:

- Doctors
- Clinical Nurse
- Neuropsychologists
- Occupational Therapists
- Physiotherapists
- Social Workers
- Speech pathologists
- Orthotist
- Dietician
- Music Therapist

What is a neuropsychological assessment?

A neuropsychological assessment is an assessment of children's relative strengths and weaknesses in many different areas of functioning. This may include an assessment of children's cognitive skills (e.g., memory, attention), emotional, and behavioural functioning. These types of assessments may be done to assess change in functioning after an injury and to utilise a child's strengths to compensate for their weaknesses in rehabilitation programs.

Who should I contact for further assistance?

If you are worried about your child's recovery following the injury you can contact:

The Royal Children's Hospital
Department of Emergency Medicine
Ph. (07) 3636 8085 or Ph. (07) 3636 8642

You may also contact your local GP or emergency department.

Should you feel that your child is experiencing on-going difficulties, you may contact the Queensland Paediatric Rehabilitation Service, located at the Royal Children's Hospital (Ph. (07) 3636 5400).

In an emergency, call 000 for an ambulance.

When should I return to the hospital?

Following discharge from the hospital, it is important to return immediately if you notice that your child's symptoms are getting worse. This may include the symptoms increasing in intensity (e.g., headache becoming worse), frequency (e.g., vomiting), or type (e.g., development of symptoms the child did not have prior to discharge).

Should your child develop any of the following symptoms early on after the head injury, seek medical review immediately.

- Headache
- Dizziness
- Nausea or vomiting
- Drowsiness
- Disorientation (e.g., does not appear to know name, time, location) or confusion
- Is unsettled or continued crying
- Unsteady walking
- Slurred speech
- Blurred or double vision

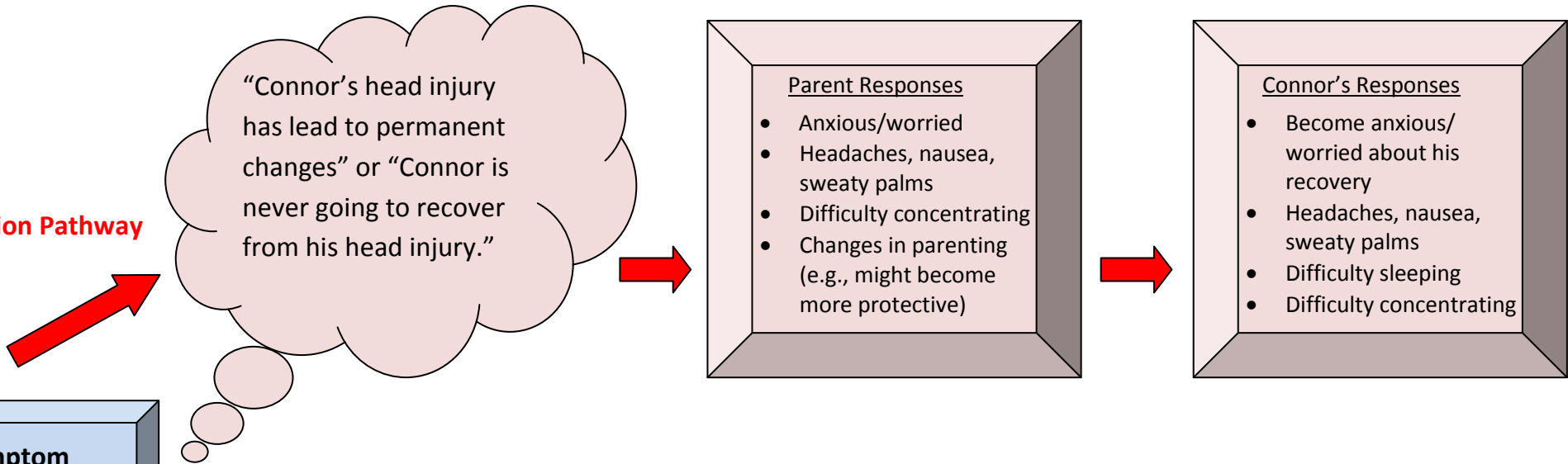
For Parents

Parents play an important role in their child's recovery following a mild TBI. In particular, parents support their child, advocate for their child, and help their child cope with any stress from their injury.

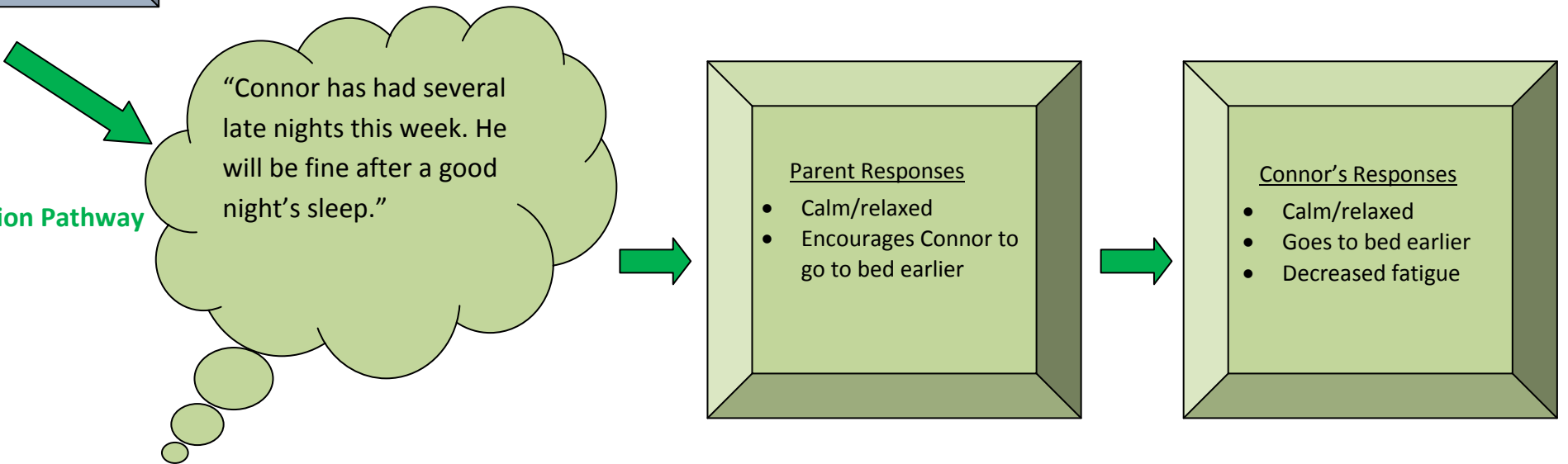
Parents also help shape their children's beliefs about an injury and symptoms. This is important because a researcher named Mittenberg has suggested that following a head injury we may be more likely to misattribute common body signs (e.g., fatigue) to the mild TBI than to other sources (e.g., many late nights during the week). Unfortunately, misattributing the cause of symptoms may be associated with expectations of long term problems or poor recovery following the mild TBI (see diagram on next page).

While it is quite normal to find your child's head injury to be a negative or a difficult experience there are some things you can try to help both you and your child cope. The strategies presented in the next few pages can also be used in other situations or taught to your child to help them out at a difficult time.

Misattribution Pathway



Re-attribution Pathway



Problem Solving

Problems are part of everyday life and have many different causes (e.g., having an argument, coping with difficult events). Often something becomes a problem for us when we have no effective way of dealing with the situation. Sometimes a problem may seem so large or overwhelming that we want to avoid it all together. While at first this might be helpful, avoiding the problem often just makes it bigger and harder to overcome later on. Problem solving is a technique that we can use to help solve problems and stop them from becoming too big.

Problem solving involves 6 steps:

1. Ask yourself – “What is the problem that I would like to solve?” This involves identifying the problem and what you would like to achieve.
2. Next, think of all the different ways you could solve the problem. These can include any unrealistic and crazy solutions as well.
3. Now, for each of your solutions list what the positive and negative aspects of each solution are. This means you need to think about the consequences of each possible solution.
4. Now pick the best solution for the problem (the one with the most positive and least negative consequences) and put that at the top of the list. Then list the remaining solutions from next best to worst solution.
5. Try out your solution!
6. Decide if your solution solved the problem. When you do this also try to think about what went well and what you could do differently next time. If the solution didn't solve the problem you can always go back to step 4 and try out the next solution on your list.

Here is a problem solving example:

Sandra's ten-year-old son, Connor, was recently injured while playing football with his mates. During the game he was tackled and bumped his head on the ground. He was taken to hospital where doctors said he had a mild TBI. Now Connor is back at home and doing well, but Sandra has noticed that he is more aggressive towards his siblings than normal.

What is the problem?

- Connor is more aggressive towards his siblings

What are the possible solutions?

- Yell at him
- Time out from the situation and return once he's calmed down
- Point system for good behaviour (e.g. sticker chart)
- Ignore the behaviour

What are the positives and negatives of these solutions?

Positives	Negatives
Option 1: Yell at him	
<ul style="list-style-type: none">- He might stop what he is doing the first few times	<ul style="list-style-type: none">- Become upset and get scared- Escalation of angry feeling for parent and child- Possible poor family relationships- Not learning to manage his aggression appropriately
Option 2: Time out	
<ul style="list-style-type: none">- In the long run it might work- He might learn to manage his aggression	<ul style="list-style-type: none">- Requires consistency- Behaviour is likely to get worse before it gets better
Option 3: Point system	
<ul style="list-style-type: none">- He might learn to manage his aggression- Reinforces good behaviour	<ul style="list-style-type: none">- Requires consistency
Option 4: Ignore the behaviour	
<ul style="list-style-type: none">- He might stop the behaviour because it doesn't cause a reaction	<ul style="list-style-type: none">- He might not learn that the behaviour is bad- May cause him to escalate his behaviour

What is the best solution?

- Based on the positives and negatives, it looks as though the point system is the best option to go with followed by the time out method. Remember you can always go back and reformulate to find the best option.

Talking to Yourself

Everyone has thoughts all the time. Sometimes these thoughts are helpful (e.g., “I’ve done that well”), sometimes they are neutral (e.g., “I’m going to the shops”), at other times they may be unhelpful (e.g., “My child will never get better”).

When we have helpful thoughts we often feel pretty good about ourselves or situation. However, when we have unhelpful thoughts we often feel sad, upset, or anxious. These unhelpful thoughts are the types of thoughts that Mittenberg suggested might increase the likelihood of parents and children developing long term expectations of poor outcome following a mild TBI.

So what can we do about unhelpful thoughts? Research has shown that using coping statements can help. That is, we can make ourselves feel better by saying positive things to ourselves. These types of thoughts can help us cope. Some examples are:

- “I’m okay, I’ve done this before”
- “I can get through this”
- “It’s okay, just relax”
- “It’s going to be alright”
- “My child will get better”
- “My child has headaches in the past that weren’t due to the head injury”
- “I know what to do should another child have a head injury”
- “I know what might happen at the hospital, so I don’t have to worry so much next time.”
- “I know how to get to the hospital”
- “My child was able to cope with going to hospital”

Coping

At some stage everyone will feel stressed out, anxious, sad, or upset. Many people report that talking to someone (e.g., their partner, friends) about their problems or how they are feeling can make them feel better. When was the last time you talked about how you felt with someone? Who did you talk to? How did it make you feel?

Sometimes it might be hard to find someone to talk to, but that doesn't mean that you are alone. There are things that you can do to help make yourself feel better. Everyone has something that makes them feel better and this is usually different for each person, but here are some examples to get you started:

- Play with your child
- Go for a run/walk
- Take a bubble bath
- Listen to relaxing music
- Draw, paint, write, or build
- Do something that you enjoy!

Sometimes there are times when we find we really need to talk to somebody. If you feel this way you could speak to:

- Your GP
- Parent Line (ph. 1300 30 1300; cost of a local call)
- Life Line 13 11 14 (cost of a local call)



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