

language and living skills

language and everyday living skills may need particular attention to ensure that a child with a brain injury recovers to the fullest extent possible over the years

language and brain injury

Language is one of our most important and complex skills and is often affected by a brain injury in ways that may be subtle but nevertheless important. We start to hear, respond to and learn language from the time we are born. By about five years of age, most of the basic language structures are in place, but the process of extending and refining these structures, building vocabulary and thinking skills, learning to read and write, goes on throughout childhood and adolescence.

A brain injury can interrupt this process. The younger the child when the brain injury occurs, the smaller the 'store' of vocabulary and language structures he/she has built up, and can call on after the injury. In general, the more severe the brain injury, the more severe the language problem - although there are exceptions to the rule (as in most areas of brain injury).

A speech pathologist is the person to help with language problems-ideally one who is experienced in working with young people with a brain injury.

Language involves both 'comprehension' - understanding what others say, and 'expression' - saying things ourselves. And it also involves the thinking that links these two together, enabling us to respond appropriately to what someone else says. There are many skills and resources involved such as a large vocabulary, the rules of grammar, stringing ideas into a narrative and organising the mouth, throat and lungs in complex sentences to talk.

speaking & understanding language

Children who are very young when they sustain a brain injury may have difficulty learning the building blocks of language. These are words, grammar, and skills such as how to talk about something that happened yesterday.

Most often, children with a brain injury can talk quite well. The problems are often less obvious, involving the processing of language - that is, the way we understand and organize things in language. Children with a brain injury may, for example, have difficulty:

- Understanding similarities and differences between things, and putting things in categories - the differences and similarities, for example, between a car and a truck
- Being able to link ideas and build associations between different things
- Sequencing and organising information logically
- Knowing how much to say, or being able to think of what to say
- Following instructions.

Children who have problems in these areas may fail to understand humour, metaphor, innuendo and the 'social rules' in each situation. If the young person has problems with memory or with focusing attention, it can be more difficult to understand what's said and follow a conversation.

A young person with a brain injury may have real problems developing grammar, sorting out the order of words within a sentence.

Putting ideas in sequence can also be difficult such as telling a story. Without strong oral language, it's very hard to develop good reading and writing skills.



Sometimes children can read but find it hard to understand what they have read, put it into their own words, or write down their own thinking.

A speech pathologist can often help substantially to develop these skills. If a child is unable to communicate verbally then a speech pathologist can also help by providing the child with an alternative way of communicating. This may include using pictures, words and/or hands.

Articulation

Slurred and jerky speech - 'dysarthria' - can be a problem after a brain injury. Usually this clears over the first few days or weeks, but sometimes, with more severe injuries, speech is more affected. A child with weak or tight muscles of the face, tongue, jaw may have slurred or imprecise speech. You will have to pay good attention to your child's efforts to speak.

Helping your child to listen & understand

Use language that is concrete and straightforward. If you are giving instructions, use short, simple sentences and limit yourself to one or two at a time.

Model or demonstrate what you want, while you say it as well. Ask your child to restate the information you've just given: "Now tell me, how are you getting home from school today?" Allow time for your child to take in what you have said.

Say the same thing twice, in different ways (allowing your child time to take in each): "We're going to the beach soon. Are you ready to go to the beach?" Allow your child time to think of what he/she wants to say. Talk with your child a lot-just ordinary, everyday conversation. Listen, don't correct and interrupt, but hear what is said and respond in a way that shows your interest. Make talking enjoyable and rewarding.

Help your child to listen as well as talk-for example, explain that everyone has a turn in conversations, and it's your turn now (or the turn of another member of the family, etc.). Then encourage your child to respond e.g. "what do you think about it?"

Organize things so that your child has to ask for things at the shops such as buying the milk. Make opportunities for talking in all sorts of everyday situations.

Do things together and talk through the steps together. For example, packing a bag to go away for a weekend - ask your child what he/she is going to take, help to write a list - and fill it out, e.g. "What's going to happen if it rains?"

Find out what games are 'in' at school or in the playground, and rehearse them at home. Or play other games-cards, checkers, etc. Take it slowly, talk through the rules step by step, practice each step, and help your child learn to take turns. Use the communication aids you and your therapist might make.

Physical & everyday living skills

A brain injury can interrupt and complicate the development of a young person's physical and everyday living skills. There are, nevertheless, many positive and constructive things that can be done to minimize the difficulties, maximize recovery, and find ways to work around ongoing problems.

Physical and sensory skills

Physical and sensory problems can affect, to a greater or lesser extent, a person's ability to get about and do simple, everyday things such as walking, dressing and managing cutlery.

Problems may include weakness and changes in muscle tone, decreased coordination or balance, fatigue, visual problems and changes in sensations such as touch, pain and temperature. Often these problems are coupled with cognitive and behaviour problems, making it more difficult for the child to compensate for the physical difficulties. When the brain injury has been caused by an accident, the situation may be further complicated by other serious injuries.



The physical, cognitive, sensory and visual realms are all interwoven. For example visual problems, slow reaction time and poor coordination can make it very difficult to do something apparently simple, like throwing and catching a ball against a wall.

Recovery from physical problems is usually more rapid than recovery from cognitive, thinking and behaviour problems. Much of the physical recovery happens within the first 6-12 months after the injury with active rehabilitation.

Orth

Growth spurts can disrupt abilities that were previously under control. This is because a child's musculoskeletal system is often less adaptable after a brain injury. The long bones may grow faster than the muscles, so the muscles become tight and less well controlled.

Physical demands and challenges increase as the child grows older, and physical problems may show up as the child is increasingly challenged - even years after the initial injury.

The complexity of games and rules also increases as children grow older. For example, a lot of sports and games for 5-7 year olds are about drill training and learning the skills. But when the child has to take these skills into the context of a competitive game and respond to lots of other things going on around about, it can often be much more difficult.

Major transitions can create extra challenges. For example, the move from primary to secondary school involves a change from having all lessons and books in the one classroom, to having to walk from one side of the school to the other between lessons, carrying books, negotiating stairs, and in a sea of other kids all going different ways.

What you can do to help

Break down the skills involved into small components and practice them with your child. You might, for example, play in a smaller space, use a bigger ball, practice somewhere where there aren't lots of other distractions.

Talk to your child's teachers, and any sports coaches, so they understand your child's special learning needs, are aware of the challenges that can be expected over time, and can help to reinforce a structured approach in teaching skills.

Children with a brain injury need lots of encouragement to take part in physical activities, in order to maintain their physical ability and a basic level of physical fitness. You might need to help your child find a sport or activity that is not competitive, so he/she can experience success in it - for example, swimming or cycling.

Aids & equipment

Children and young people with a brain injury may benefit from a range of different equipment and aids, including:

Mobility aids-including walkers, crutches, splinting

Wash equipment, bath chairs, toilet chairs

Adapted car seats, adapted bicycle seats

Aids for writing-different work surfaces, adapted pens

Ways to make eating easier-for example, adapted spoons, cups, plates

Computer access-for example, laptops with modified screens to make print larger

Splints to maintain range of movement, stretch tight muscles, or provide stability.



Self-care

Self care includes a wide range of everyday activities that we take for granted - dressing, washing, eating and toileting. Self care can present problems for someone with a brain injury, particularly during adolescence when young people are striving to become independent of parents.

There are various ways to address these problems.

Clothes, utensils and environments can be adapted. Look for different shaped cutlery or specially adapted cutlery. Experiment with different types of clothing and fastenings-for example, T-shirts or tops that don't require buttoning, clothes with larger buttons, slip-on shoes rather than laces or small buckles.

Break down tasks into small steps, and start by getting the young person to do only the easiest step, or maybe the last step. And provide lots of opportunities for practice.

Use cues to remind the young person of a daily routine. For example, list what has to be done to get ready for school-it might include, Get dressed, Brush teeth, Brush hair, Pack bag. Put the list on the fridge door, or your child's wardrobe door.

Set priorities and do the important things first, so fatigue and stress don't interrupt them. If necessary, help with the less important tasks so you've time and energy to focus on the skill currently being learnt.

Arrange with the school and/or other agencies involved to use a daily diary system, to keep track of what has been learned.

References and further information

Many thanks to Brain Foundation Victoria for permission to adapt their material for this fact sheet.