

Thinking, learning and neuropsychology assessments

Health information after cancer treatment as a child or teenager

Most children and young people who are treated for cancer now survive and recover well. Sometimes there may be long term or 'late effects' from the disease or treatment such as difficulties with thinking and learning (also known as cognitive difficulties). However, it is important to remember that everyone is different – one person may have a few difficulties, while others may have no concerns, and sometimes 'late-effects' show up several years after treatment.

Areas of thinking and learning most likely to be affected following treatment are:

- Attention and concentration.
- Working memory (doing things 'in your head' e.g., mental math).
- Planning and organising.
- Processing speed (the rate of thinking and speed tasks are completed).



Research shows several factors may increase the chance of cognitive difficulties; these include:

- Type of cancer, tumour size and location.
- Type of treatment e.g., surgery, cranial radiation, chemotherapy drugs (cognitive difficulties are more likely to be associated with higher doses of certain drugs/radiation).
- Younger age during treatment.
- Being female.
- Non-biological factors (e.g., missed school days, loss of social and environmental stimulation).



How will I know if this is a problem for me?

The Long Term Follow-up Program (LTFP) provides assessment, monitoring and support for all survivors of childhood cancer in Victoria. At clinic, families are seen by the LTFP doctor, a clinical nurse consultant, and sometimes a clinical neuropsychologist. The clinical neuropsychologist will ask about things like attention and memory and academic skills like reading, writing and maths. If there are any concerns, a further assessment may be needed. This is called a neuropsychology assessment.



What is a clinical neuropsychologist?

A clinical neuropsychologist is a psychologist who specialises in the effects illness or brain changes may have on thinking, learning, behaviour and emotions. They help families better understand and manage these impacts in day-to-day life and help children and young people reach their full potential.



Purpose of neuropsychology assessment:

- To identify any difficulties which might affect your learning, behaviour or learning the skills needed for everyday living.
- To provide you and your family with information on your strengths and challenges.
- To provide you with personalised strategies (based on your strengths and difficulties) to use in the classroom, at home and to inform education, life and career choices.
- To provide help finding more assistance if needed.



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What a neuropsychology assessment involves:

- Consent from parents and/or the young person before the assessment.
- Interviews and questionnaires to help collect information from children/young people, parents and school.
- Assessment via telehealth or face-to-face with the clinical neuropsychologist (this may be spread over 2 or more sessions). Assessment can include answering questions and doing tasks involving problem solving, concentration, remembering information, drawing, reading, etc.



After the assessment:

- You'll receive detailed feedback from the neuropsychologist (usually via telehealth) about 2 weeks after the assessment.
- You'll receive a copy of the report which can also be shared with other health professionals like your GP, as well as school contacts.
- Depending on your specific needs (and with consent), the clinical neuropsychologist may seek extra support by contacting the Department of Education, the NDIS, your school, or charities such as Ronald McDonald Learning Program, Brainwave, or the Children's Cancer Foundation. These organisations will make final decisions about whether and what type of support is provided.



Tips for parents and carers - how to explain the assessment to your child:

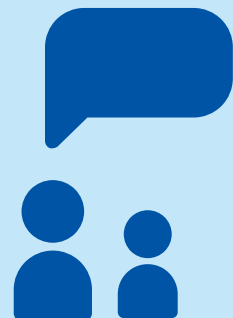
A neuropsychology assessment is often a new experience for young people and their parents. Many people wonder what to expect. Because your child's experience of coming to hospital has often been for medical checks, it's important to explain that this will be a different type of appointment, and it is not because they are sick or have done anything wrong.

Have a conversation before the appointment so your child has time to think and ask any questions. Your explanation may be something like this:

'I've noticed that while you're doing so well in (...) this year, you're finding (...) harder. I'm not sure why this is but I've found someone who might be able to help us understand. We are going to a different type of appointment at the hospital, to meet a neuropsychologist, who is a specialist in understanding thinking and learning skills. They are going to help us find out if we could be doing things differently to help your learning, by better understanding your strengths and difficulties.

They won't do any medical tests like scans or blood tests. Instead, they are going to ask us both some questions, and then do some different activities with you, like puzzles and memory games. Some things will be easy, and some things will be more challenging. There's nothing you need to do before, we'll just make sure we pack your glasses/hearing aids/regular medications. It will be a long appointment, we'll be at the hospital all morning, but we'll get lots of breaks.

Afterwards, the neuropsychologist will make a second appointment for us to talk about the best ideas to help your learning. If you have any questions, let's write them down so we remember to ask them on the day.



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