# *Section Two:* Diagnosing a brain tumour

*Tekiona Rua* Te whakatau i tētahi puku roro

# Key points:

- If there is concern that your symptoms may be a brain tumour, further tests (investigations) will be done to check how the different parts of your brain and body are working.
- The purpose of these tests is to find out whether you have a brain tumour and the type of brain tumour you have.
- The results of any tests you have will help your treatment team to decide on the best treatment options for you.
- Common tests include:
  - neurological examination (see page 14)
  - blood tests
  - imaging tests (scans)
  - lumbar puncture
  - biopsy
  - testing for gene changes.

## Ngā korero matua:

- Mehemea ka puta he māharahara tērā pea he puku roro kē ngā tohumate, ka whāia anō he whakamātautau ake (ngā tirotirohanga) ki te arowhai e pēhea ana te mahi o tēnā wāhi, o tēnā wāhi o tō roro, o te tinana hoki.
- Ko te whāinga o ēnei whakamātautau, ko te tiro mēnā kua whai puku roro koe, me te tiro ki tōna momo.
- Ka āwhina ngā whakamātautau ka whāia e koe, i tō rōpū maimoa ki te whakatau ko tēhea te kōwhiringa maimoatanga pai rawa mōu.
- Ko te nuinga o ngā whakamātautau ka whakamahia ko ēnei:
  - arowhai ā-pūnaha iotopū
  - whakamātautau toto
  - whakamātautau ata
  - wero tuaiwi
  - unuhanga
  - whakamātautau rerekētanga ira

## Diagnosing a brain tumour

If you have noticed any symptoms of a brain tumour, you will often see your GP or whānau doctor first. It can be helpful to take a list of your symptoms, and how long you have had them, with you to your appointment. You may also be asked about your family history of cancer and any risk factors you may have.

If the doctor is concerned that your symptoms may be signs of a brain tumour, they will examine you to check how the different parts of your brain and body are working. This is called a neurological (body's nervous system) examination.

The doctor may check for any signs of raised pressure around your brain by looking into your eyes using an instrument called an ophthalmoscope. This allows the doctor to see if there is any swelling in the optic nerve, which sends information from the eyes to the brain.

The doctor will also test the following.

- Your reflexes usually by tapping your knee with a small rubber hammer
- The strength of your arms and legs
- Your balance and coordination, by watching how well you can walk
- Sensation such as your ability to feel light touch or pinpricks

They may also ask you some simple memory questions.

You may be referred to a neurologist (a specialist brain doctor) or neurosurgeon (a specialist brain and spinal-cord surgeon) for further tests (investigations).

The purpose of these tests is to find out whether you have a brain tumour and the type of brain tumour you have. The results of any tests you have will help your treatment team to decide on the best treatment options for you.

You may have some, or all, of these tests:

#### **Blood tests**

Your doctor or neurologist may suggest blood tests to check your general health and how well your body is working.

#### CT, MRI and PET-CT scans

CT, MRI and PET-CT scans are imaging tests that may be used to build a detailed picture of your brain.

#### Lumbar puncture

A doctor uses a needle to collect a sample of fluid from your spinal column, known as cerebrospinal fluid or CSF. The fluid is checked for cancer cells. This is sometimes called a spinal tap.

#### Surgical biopsy

If a scan shows an abnormal area that looks like a tumour, you may need a biopsy to remove some or all of the tissue. This is done by a neurosurgeon in one of two ways.

- During surgery (called a craniotomy) to remove the brain tumour
- Using a needle inserted through a small opening in the skull

#### Genetic testing

If you have had a biopsy or removal of part, or all, of the tumour, your doctor will send your tumour tissue for genetic testing to identify molecular markers. Molecular markers are genetic features found in the tumours' DNA.

Genetic testing of the tumour can give your doctor more specific information about the type of tumour you have. This information can be used to help guide the best course of treatment for you.



For more information on genetic testing, you may want to visit: www.braintumoursupport.org.nz