

FACT SHEET The Effect of a Brain Tumour on Physical Function

The physical effect of a brain tumour will vary from person to person. The manner in which a brain tumour affects you will depend on location and size of the tumour.

A brain tumour may cause you to experience one or more the following symptoms:

- muscle weakness
 - visual problems

muscle tremor

altered sensation

in-coordination

fatigue

Any of the above symptoms may affect your function.

Muscle weakness usually affects one side of the body. This is usually the side opposite to that on which the tumour is located. The weakness may vary from a feeling of heaviness of limbs to that of paralysis of your arm and/or leg. This is probably the most obvious cause of impaired physical function. When one side of your body is weak you will naturally favour the stronger side. This then leads to the weaker side being used less and possibly becoming weaker. Also altered use of arms and legs can cause muscles to tighten.

Visual problems will affect how you interact with your environment. It is possible that only part of your visual field may be affected.

Sensation affects movement because your body requires feedback from the environment in order to know how much muscle activity is required. An example of this is holding a polystyrene cup. Your fingers exert pressure on the cup to hold it. Pressure sensors in you fingers send messages back to your brain letting you know whether more or less pressure is required. If you are not receiving this information then you are likely to apply too much or too little pressure, hence squashing or dropping the cup. This can be partly compensated for by watching what you are doing.

Incoordination of muscles can affect you in several ways. Most joints in your body have many muscles acting around them. In order for a smooth movement to occur these muscles must act together. If their action is not coordinated then movement will be uncoordinated. This may affect your balance or upper limb function.

Muscle tremor more commonly affects arms and hands. It usually increases with anxiety.

Fatigue can be caused directly by the effect of the tumour on the brain or it can be a secondary symptom caused by decreased fitness which results from decreased physical activity.

What Can You Do?

Any movement disorder is best managed by physiotherapy assessment so that you can be taught exercises and strategies to help maximise your function and prevent muscle shortening. This may involve assessing how you perform everyday movements such as sitting to standing, standing balance, reaching, and walking.

If your walking is a problem then the physiotherapist may consider prescribing a walking aid for you, especially if safety is a concern.

Fitness can be improved by walking. Usually a 30 minute walk, five times a week is adequate but check with your GP first to make sure there aren't any medical reasons which may affect you doing this (eg seizures).