Worksheet 12: Vascular disease

Cause:

Vascular disease is the second most common cause of dementia, representing approximately 17% of people with dementia in the UK.

Humans need an excellent blood supply (vascular system) to survive. Blood carries oxygen and nutrients which 'feed' different parts of our body. The brain is the most complex organ in the body and needs a large amount of oxygen to function. If the oxygen supply fails because there has been a blockage in a blood vessel or disruption of the blood flow to part of the brain, brain cells will die. This can lead to a person having a stroke. It will depend on the part of the brain affected by the stroke as to whether the person develops dementia as a result. Not everyone who has a stroke will develop Vascular disease.

How it affects the brain

There is no predictable course of where strokes will occur. A person could have one stroke which causes brain cells to die in a specific part of the brain. These brain cells cannot be repaired so the function of that part of the brain will be impaired. Some people can have a series of strokes, or Transient Ischaemic Attacks (TIAs), which cann happen all over the brain and have more wide ranging impact. Some people have 'small vessel disease' which means that the walls of the blood vessels in their brain become weak and can therefore leak blood. This causes brain cells to die in and around the affected area.

Risk factors

- A medical history of stroke, high blood pressure, high cholesterol, diabetes and heart problems
- A lack of physical activity, drinking more than recommended levels of alcohol, smoking, eating a fatty diet
- Leaving conditions such as high blood pressure or diabetes untreated
- A family history of stroke or Vascular disease
- Being male
- Being of Indian, Bangladeshi, Pakistani, Sri Lankan or African-Caribbean ethnic background

Likely signs and symptoms

The signs and symptoms will depend on the part of the brain affected but may include:

- Speech and language difficulties
- Problems with memory, reasoning, judgment, orientation
- Problems with perception
- Lability of mood this means that a person's mood can change very quickly; from happy and laughing to crying in a matter of moments. People with Vascular disease also report being more 'emotional' generally than they used to be

What can be done to help?

Aspirin is often given to people who have had strokes or are at risk of having strokes as it thins the blood. Some medications for Alzheimer's disease may be effective in the treatment of Vascular disease too.

Treatment of underlying conditions – such as reducing cholesterol, blood pressure treatment and heart care. Maintaining a healthy lifestyle – the more healthy the heart and blood vessels, the more healthy the brain will be as we reduce the risk of stroke.

Rehabilitation – once someone has had a stroke they can be supported by health and social care professionals to try to find ways of living as independent a life as possible (this may include being re-taught how to do things, provision of equipment such as walking aids or environmental adaptations).