What is vascular dementia?

This information sheet outlines some of the causes and symptoms of vascular dementia and offers some suggestions on how to reduce the risk of developing the condition.

What causes vascular dementia?
Vascular dementia occurs when cells in the brain are deprived of oxygen. The brain is supplied with oxygen by a network of blood vessels called the vascular system.

If there is a blockage in the vascular system or if it is diseased, blood is prevented from reaching the brain. As a result, cells in the brain die, leading to the symptoms of dementia.

What are the causes of vascular disease?
Vascular disease is caused by many factors. Our lifestyle, what we eat, how much we drink and smoke all affect whether we are likely to develop vascular disease. Some types of vascular disease are hereditary.

People with high blood pressure, a high level of fats in their blood and diabetes are at risk of developing vascular disease.

Stroke and vascular dementia
Stroke is one of the most common causes of vascular dementia. A stroke occurs when blood flow in the brain is blocked by a blood clot in an artery or when an artery bursts.

When this happens the brain cells supplied by that vessel are deprived of oxygen and die. This damage is irreversible.

People who have one large stroke will experience difficulties such as paralysis on one side of the body, speech and language problems, or difficulties with co-ordination and movement. Vascular dementia may also develop.

Multi-infarct dementia
Sometimes people may experience a series of small strokes. When these ‘min-strokes’ occur they can cause light headedness, temporary blindness and mild weakness in the arms or legs. Often the symptoms clear up quickly and do not appear to cause any long term problems. However, these mini-strokes may cause a build up of damage in the brain which can cause dementia. This is called multi-infarct dementia.

Binswanger’s disease
Binswanger’s disease is a rare form of vascular dementia that is caused by damage to blood vessels deep in the brain’s ‘white matter’. It is partly a result of high blood pressure.
Symptoms of vascular dementia
As with other forms of dementia, people with vascular dementia will experience memory loss, difficulties in communicating and, as the disease progresses, a loss of physical abilities. However, there are some unique symptoms of vascular dementia.

Because vascular dementia can affect distinct parts of the brain, particular abilities may remain relatively unaffected. This is unlike Alzheimer’s disease, for example, where the disease affects the entire brain. Some people who have vascular dementia may notice that their symptoms remain steady for a while and then suddenly decline.

In people with Alzheimer’s disease the decline is more constant. People with vascular dementia may understand what is happening to them. This may make them prone to depression.

Diagnosis
It can be difficult to diagnose whether a person has Alzheimer’s disease or vascular dementia. It is also common to have both forms of dementia. Now technology is making diagnosis easier. Brain imaging techniques can reveal if areas of the brain are damaged due to stroke which indicates vascular dementia.

However, where there is no evidence of a stroke, it is quite common for a diagnosis of Alzheimer’s disease to be made. It is important to recognize that other vascular diseases could be causing the dementia. It is very important that the type of dementia is identified because the treatments for Alzheimer’s disease and vascular dementia are quite different.

Treatment and prevention of vascular dementia
Unfortunately there is no way to reverse damage to the brain once it has occurred.

But, depending on the severity of the damage, with the right treatment it is possible to limit or delay the severity of the person’s decline. The important thing is to prevent further damage occurring.

People who have been diagnosed with vascular dementia will be treated for the disease that had led to the impairment. For example, high blood pressure can be controlled through diet and lifestyle, as well as with drugs.

People at risk of stroke may be prescribed drugs that thin the blood to prevent further blood clots forming.

Most importantly, we know that it is possible to reduce the risk of developing vascular dementia.
People who eat a diet high in saturated fats, smoke or do not take exercise are at a greater risk of stroke.

People who have high blood pressure should have it carefully monitored by their GP.

You can reduce your risk of high blood pressure, stroke and vascular dementia by:

- Not smoking
- Reduce alcohol intake to moderate amounts.
- Reducing your intake of salt and saturated fat
- Taking regular exercise
- Having a GP check your blood pressure at least once a year
- Having your blood fat levels measured by your GP.