



Vascular Dementia

Dementia includes a wide range of symptoms that affect memory, thinking, behaviour and the ability to perform everyday activities.

Vascular Dementia is a type of dementia. Vascular Dementia, where it is the single type causing dementia, is less common than Alzheimer's Disease. However, more than 50% of people with Alzheimer's Disease have a coexisting pathology, which is commonly Vascular Dementia.

The brain is a person's "headquarters". Vascular Dementia is a disease that damages the brain. This brain damage leads to symptoms which fall into the general category we describe as "dementia". Dementia is progressive which means symptoms will gradually worsen. New symptoms appear as the disease spreads in the brain and damages new regions.

Symptoms

Symptoms of Vascular Dementia include slowness in thinking, problems concentrating, or difficulty planning and organizing. It is also common to experience mood changes like apathy, anxiety and depression.

The first symptoms can vary widely with Vascular Dementia. The damage is caused by a reduction in blood supply to the brain. This is usually due to one or many strokes. This can happen in various areas of the brain leading to a wide range of possible first symptoms.

Vascular Dementia often presents with physical symptoms like problems with speech, vision or weakness in a limb. With rehabilitation, these physical symptoms may get better or stabilise.

Causes

Brain cells need a constant supply of blood and nutrients to properly function. When blood cannot reach the brain cells due to a leak in blood vessels or a blockage, the brain cells die. Abilities are lost as a result of these events. Whether these events affect a person's mental abilities depends on the severity and the location of the damage.

There are many different subtypes of Vascular Dementia. The cause of the damage and the affected part of the brain differ between subtypes. One of these is Subcortical Vascular Dementia. This subtype of dementia is caused by Small Vessel Disease, a disease touching the very small vessels that are deeper in the brain. These vessels become stiff and twisted. The blood flow is then reduced like in a twisted water hose. The damage initially happens deeper in the brain. One frequent symptom is the early loss of bladder control. A person with Subcortical Vascular Dementia may also be less stable and prone to falls or clumsiness, as they may experience weakness on one side of the body.



Diagnostic

The diagnosis of Vascular Dementia requires careful evaluation to rule out other possible causes. It is important to correctly diagnose the type of dementia because some medications may be beneficial to one type but have adverse reactions for another. A correct diagnosis allows for access to treatment and future planning.

No single test can detect Vascular Dementia. Rather, experts use a combination of tests to rule out other possibilities. Generally, the assessment starts with the family physician followed by referral to a specialist.

Tests of mental abilities and brain scans play an important role in making a diagnosis. Tests of mental abilities are a way of clinically observing symptoms and their seriousness. Brain scans can show damage in specific areas of the brain.

In the case of Vascular Dementia, particular attention is given to questions regarding cardiovascular diseases in close family members as well as tests to assess cardiovascular health.

Heredity

Vascular Dementia is not hereditary. However, researchers think there are probably genetic factors that increase a person's risks of developing Small Vessel Disease or cardiovascular diseases and these can lead to Vascular Dementia.

There are many other risk factors that can contribute to cardiovascular diseases which then can lead to Vascular Dementia. These risk factors include age, heart disease, high blood pressure, diabetes, obesity, lack of

physical activity, poor diet, high cholesterol, smoking, etc.

We can act on some risk factors such as smoking, obesity and lack of physical activity. For this reason, the scientific and medical communities have put an emphasis in recent years on identifying risk factors and building prevention strategies.

Things to remember:

- Because the damage can occur in any part of the brain, the first symptoms of Vascular Dementia are particularly unpredictable.
- Establishing the correct diagnosis can take time, but this allows for access to treatment and future planning.
- Research and clinical trials are underway to identify new treatments for Vascular Dementia. Until then, we know we can improve quality of life by addressing modifiable risk factors.
- Contact the Dementia Society. . No One Should Face Dementia Alone™

References

Fernando, M. S., & Ince, P. G. (2004). Journal of the neurological sciences, 226(1), 13-17.

O'Brien, J.T., & Thomas, A. (2015). The Lancet, 386 (10004), 1698-1706