

Wernicke-Korsakoff syndrome

This is a preventable form of dementia associated with excessive alcohol intake. It is also referred to as alcohol related dementia or alcohol related brain impairment or injury. This type of dementia particularly targets memory, often leaving other thought processes intact.

Excessive alcohol consumption is associated with a deficiency in thiamine (vitamin B1) which helps brain cells produce energy from blood sugar. When thiamine levels fall below a certain threshold, brain cells cannot produce enough energy to function properly.

The term Wernicke-Korsakoff relates to two conditions: Wernicke's encephalopathy and Korsakoff's syndrome. As these two conditions are so closely related the diagnosis is frequently referred to as Wernicke-Korsakoff syndrome.

Subtypes

- » **Wernicke's encephalopathy:** Essentially caused by lack of thiamine. Alcohol can damage the lining of the stomach, which affects the absorption of vitamins, leading to thiamine deficiency. The problem may be worse if a person is drinking alcohol in place of eating a balanced diet.
- » **Korsakoff's syndrome:** If Wernicke's encephalopathy is untreated or treated later in the illness, it can lead to Korsakoff's syndrome. Other conditions can also cause Korsakoff's syndrome such as HIV, chronic infections and poor nutrition. Initially it affects the area of the brain responsible for short term memory.

Symptoms

- » **Wernicke's encephalopathy:** Confusion, jerky eye movements, double vision and inability to coordinate voluntary movement
- » **Korsakoff's syndrome:** Short and long term memory loss, inability to form new memories or learn new information. Making up information to fill in memory gaps (known as confabulation) is a marked feature of Korsakoff's. This is not considered lying as the person believes the information is the truth.

Types of dementia: Wernicke-Korsakoff syndrome

Diagnosis

These conditions cannot be reliably diagnosed unless the person has stopped drinking alcohol for a period of time. This is because the withdrawal process can have symptoms similar to alcohol related dementia, as can intoxication.

Investigations include:

- » Medical history: You may be asked how symptoms started and their impact
- » History of alcohol use
- » Blood tests
- » Neurological tests
- » Brain scans: Often used to rule out other causes such as stroke or tumour.

Risk reduction

The most effective prevention of Wernicke-Korsakoff syndrome is to avoid the excessive intake of alcohol.

Treatment

Unlike other types of dementia, alcohol related dementia is not certain to worsen over time. It can stabilise if the person ceases to consume alcohol, is given thiamine supplements, and has a healthy diet and good intake of other vitamins. In some cases, damage may even reverse over time.

Addressing the social and psychological factors which have contributed to the alcohol abuse are essential elements of rehabilitation.

Further information

For support and information please contact us on **1300 66 77 88** or visit alzheimerswa.org.au.