Cloze exercise: **Alzheimer's disease**

Alzheimer's disease (AD) or **(1)** *of Alzheimer's type* is a disorder or loss of mental functions resulting from brain **(2)** changes; the causes are yet to be fully elucidated (mutations in at least four genes **(3)** AD have been identified).

The diagnostic characteristic of AD is development of **(4)** in the brain, although this can only be determined *post mortem*.

The typical visible symptom is progressive and chronic memory loss. Alzheimer's disease is also manifested in behavorial changes, which may include confusion, disorientation, sudden periods of **(5), (6)** behavior, or violence, etc. in people who have no previous history of such behavior (rarely, an affected person experiences euphoria). Thus, Alzheimer's disease presents a problem in patient management, as well.

(7)

Associated **(8)** changes include loss of brain tissue cells (with a typical upward progression through memory centers such as the **(9)**)and collection of specific inclusions such as **(10)** ("tau") tangles and senile plaques. It is not yet certain whether these changes are primary (the cause of the disease) or secondary (the result of the disintegration of brain tissue), although the currently dominant hypothesis **(11)** cause to plaque.

Some research is pursuing the possibility that it is a **(12),** possibly of B vitamins, which is an underlying cause.

Whatever the mechanism, a strong **(13)** association has been shown between a diet high in fat and **(14)** and development and progress of the disease. In addition, animal feeding trials of high cholesterol and fat have demonstrated increased anatomical symptoms upon autopsied brains. This may confirm the B vitamin approach, since the hgh fat diet may be low in foods containing B vitamins.

Prevalence

Alzheimer's disease is the most frequent reason for dementia in the elderly and affects almost half of all patients with dementia.

Typically only 3% of persons aged 65 show signs of the disease while 50% of persons aged 85 have symptoms of Alzheimer's. However the proportion of persons with Alzheimer's begins to decrease after age 85 because of the increased mortality due to the disease, and relatively few people over the age of 100 have the disease.

Diagnosis

Unfortunately, a definitive diagnosis of Alzheimer's disease must await an autopsy, at present. However, many increasingly sophisticated diagnostic tests have been proposed (including: brain scans, behavioral tests and testing for genetic **(15)**).

Psychological testing generally focuses on memory, attention, abstract thinking, the ability to name objects, and other cognitive functions. However, results of psychological tests do not easily distinguish between Alzheimers Disease and other types of dementia. Psychological testing can be helpful in establishing the presence of and severity of dementia. It can also be useful in distinguishing true dementia from temporary (and more treatable) **(16)** due to depression or psychosis, which has sometimes been termed pseudodementia.

Treatment

There is no known definitive treatment, although there are drugs which reduce **(17)** degredation and delay memory loss associated with the disease. Non-steroidal anti-inflammatory drugs (including ibuprophen, acetominophen, and aspirin) seem to slow progress of the disease, according to clinical trials, but the mechanism is not understood.

There are ongoing tests of an Alzheimer's disease **(18).** Initial results in animals were promising. However when the first vaccines were used in humans, brain **(19)** resulted and the trials were stopped. It is hoped that research will provide a better formulation and that in the future it can be of use in families with history of Alzheimer's Disease.

Nutrition and Alzheimer's

Some work is being done to investigate the role of raised levels of **(20)**, and possible prevention or treatment through taking of foods high in B vitamins and antioxidants to control the levels of homocysteine. […]

Social issues

Alzheimer's is considered to be a major public health challenge since the average age of the industrialized world's population is increasing.

History

The symptoms of the disease as a distinct **(21**) entity were first identified by Emil Kraepelin, and the characteristic neuropathology was first observed by Alois Alzheimer in 1906. In this sense, the disease was co-discovered by Kraepelin and Alzheimer, who worked in Kraepelin's laboratory. Because of the overwhelming importance Kraepelin attached to finding the neuropathological basis of psychiatric disorders, Kraepelin made the generous decision that the disease would bear Alzheimer's name.

The disease was thought to be uncommon, until the 1960s when it was realized that much of what had been regarded as the normal process of aging was actually the result of this disease.

Famous Alzheimer's Sufferers: Enid Blyton, Charles Bronson, Winston Churchill, Perry Como, Alfred Deakin, Barry Goldwater, Rita Hayworth, Charlton Heston, Former Queen Juliana of the Netherlands, Iris Murdoch, Maurice Ravel, Ronald Reagan, Sugar Ray Robinson, Cyrus Vance, E.B. White, Harold Wilson

Fill in:

1) abusive **2)** amyloid plaque **3)** assigns **4)** cholesterol **5)** cognitive impairment **6)** defiance **7)** dietary deficiency **8)** entorhinal cortex and the hippocampus **9)** epidemiological **10)** Etiology **11)** homocysteine **12)** inflammation **13)** neurofibrillary **14)** neuropathologic **15)** neurotransmitter **16)** nosologic **17)** predisposing to **18)** predisposition **19)** senile dementia **20)** tissue **21)** vaccine