



8 July 2006

Blood markers for dementia risk

Blood levels of two proteins important in Alzheimer's disease may predict pending dementia, say scientists.

High levels of one amyloid protein and low levels of another were linked with a more than 10-fold increased dementia risk among the 1,756 people studied.



The Dutch researchers from the Erasmus Medical Centre say more work is now needed to see whether the markers could be used as a dementia blood test.

Diagnosing dementia is often difficult, particularly in the early stages.

There is no simple test to make a diagnosis of dementia, and it can only be confirmed with certainty by examining someone's brain in a post mortem.

In Alzheimer's disease, plaques comprised of amyloid can be seen in the brain.

“ It is vital that there is ongoing research into tests that might help identify people who are at a high risk of developing dementia ”

Clive Ballard from The Alzheimer's Society

Past research has also shown that people with mutations that cause early-onset Alzheimer's disease can have high blood concentrations of amyloid proteins.

Dr Monique Breteler and her team set out to investigate whether increased blood concentrations of amyloid proteins might be associated with the development of dementia.

They followed 1,756 people known to be at risk for dementia. Over the eight years, 392 of the people developed dementia.

Disease marker

Increasing blood concentrations of one type of amyloid protein, A β 1-40, was associated with an increased risk of dementia, particularly when the concentration of another amyloid protein, A β 1-42, was low in the blood.

Although the researchers cannot explain why this is, they told The Lancet Neurology that the link could have "a potential role as a marker of incipient dementia".

Clive Ballard from The Alzheimer's Society said: "This is an important new piece of research.

"However, the magnitude of difference is not proficient to provide a reliable diagnostic test.

"It is vital that there is ongoing research into tests that might help identify people who are at a high risk of developing dementia.

"This research is extremely encouraging and we hope that in the future better tests and treatments will be available to help us combat this devastating disease."